





Double Degree Program in International Management

Course of Managerial Decision-Making

Prof. Luigi Marengo

SUPERVISOR

Prof. Luca Vitali

CO-SUPERVISOR

Francesco Federighi ID 756971

CANDIDATE

ABSTRACT

Time Horizons in Investment Decisions: Behavioral Trends and Dynamics within

Amundi Asset Management

Francesco Federighi

In the complex domain of finance and investment, understanding time's role is critical. This research illuminates the relationship between time horizons and investment decision-making, focusing on Amundi, a prominent European Asset Management firm. With an emphasis on their mergers and acquisitions strategies, the study addresses two fundamental questions: the effect of time horizons on Amundi's investment decisions and the strategies employed to manage these time perspectives. Rooted in a qualitative design, the research employed semi-structured interviews with key decision-makers at Amundi, including Giorgio Gretter, Head of the Strategy Department. Findings reveal that time horizons, be it short, medium, or long-term, profoundly influence Amundi's investment philosophy. While short-term horizons lay a foundation for future ambitions, long-term goals guide the company's steadfast commitment. In terms of strategy, Amundi demonstrates a blended growth approach, combining organic growth with strategic acquisitions, exemplifying prudence in decision-making. Their strategies, which embrace both traditional and innovative financial paradigms, highlight the firm's strategic depth and foresight. This study contributes significantly to the realm of behavioral finance, underscoring the intricacies of time perception in investment choices, offering valuable insights for professionals and strategists in the investment sector.

Keywords: Time horizons, Managerial decision-making, Amundi Asset Management, Mergers and Acquisitions, Behavioral finance, Temporal discounting, Strategic Flexibility

AKNOWLEDGEMENTS

To Rome and Paris. To LUISS and Dauphine. To every friend and person involved in between. You have been the best chapters of my life.
To Amundi. To Mr. Gretter, to Sandrine, to Philippe, to Domenico and to the Treasury Department. Unknowingly, and even if for a short period, you made me grow more than I could have ever hoped for
To Professor Marengo. Thank you for your assistance and mentorship.
Thank you.

Thank you...

TABLE OF CONTENTS

ABSTRACT	1 -
AKNOWLEDGEMENTS	2 -
INTRODUCTION	6 -
LITERATURE REVIEW	10 -
EXPLORING TIME HORIZONS: DEFINITIONS AND IMPLICATIONS	10 -
The Concept of Temporal Orientation	11 -
Delving into Investment Horizons	11 -
The Significance of Short-Term Horizons	11 -
Venturing Beyond: The Long Horizon	12 -
INVESTMENT HORIZON: A DEEP DIVE INTO ECONOMIC THEORIES	13 -
The Agency Theory	13 -
Real Options: A Deep Dive	
Breaking Down BTOF	14 -
THE INTRICACIES OF MANAGERIAL DECISION-MAKING	15 -
Game Theory and Time:	15 -
Intertemporal Trades, Reputation, and Empirical Explorations	16 -
TRADITIONAL FINANCE: THE HEARTBEAT OF BUSINESS VALUATION	17 -
The foundation of DCF Valuation	17 -
The Dividend Discount Model	22 -
The Adjusted Present Value method	24 -
BEHAVIORAL FINANCE: EXPLORING INVESTOR PSYCHOLOGY	24 -
A Tale of Two Theories: Traditional vs. Behavioral Finance	24 -
Unveiling Behavioral Biases	25 -
STUDY METHODOLOGY	28 -
DEFINING THE RESEARCH PROBLEM	28 -
RESEARCH METHODOLOGY OVERVIEW	28 -
Research Philosophy	30 -
Research Approach	30 -
Methodological choices	31 -
Research Strategy and Time Horizon	32 -

Data Collection and Analysis	32 -
COMPANY OVERVIEW: AMUNDI	33 -
Amundi's Financial Footprint	34 -
Navigating Amundi's Future Trajectory	35 -
Amundi's Position in the Global Finance Landscape	36 -
DESIGNING THE DATA COLLECTION	38 -
Analysis of the Sample	38 -
The Interview Process	38 -
Setting the Agenda: Questions and Objectives	39 -
HYPOTHESES	44 -
Data Manipulation	45 -
RESULTS	46 -
DATA DESCRIPTION AND ANALYSIS	46 -
Importance of Time Horizons in Decision Making	46 -
Allocation of Resources to Various Horizons and Strategies	47 -
Decision-Making Criteria and Analytical Processes	48 -
Behavioral Factors and Decision Biases	51 -
Mechanisms for Rational Evaluation	53 -
DECIPHERING THE CODING PROCESS	55 -
Open Coding	55 -
Axial Coding	56 -
Selective Coding	58 -
TEST OF HYPOTHESES	- 59 -
DISCUSSION	66 -
Interpretation of Results	66 -
Key Findings	66 -
Contextualization of the Findings	67 -
IMPLICATIONS AND SIGNIFICANCE OF THE RESULTS	69 -
Theoretical Implications	69 -
Practical Implications	70 -
LIMITATIONS OF THE STUDY	71 -
Recommendations for Future Research	72 -
CONCLUSION	74 -

REFERENCES	75
APPENDIX I	. - 79
Call with Gretter Giorgio (AMUNDI)	- 79

INTRODUCTION

In the intricate world of finance and investment, decision-making often draws on a blend of theoretical models, empirical evidence, and time-tested wisdom. Among the proverbs that have been woven into the fabric of economic understanding, the saying "A bird in the hand is worth two in the bush", captures a profound concept. It emphasizes the importance of current advantages over unreliable future possibilities, a principle that extends well beyond folklore and finds substantial resonance in the complex landscape of investment decisions.

The importance of investment decisions is not limited to individual agents or corporate entities; it reverberates throughout the economy, influencing growth trajectories, wealth distribution, and even societal structures. Effective allocation of resources and capital, therefore, becomes fundamental, necessitating a profound understanding of all variables at play, including the often-elusive concept of time.

Time, in the context of financial decision-making, emerges as a multifaceted and compelling variable. It not only defines the temporal boundaries within which investments are expected to bear fruit but also encapsulates deeper psychological and behavioral considerations that may influence choices. The perception of time varies across individuals, organizations, regions, and cultures, each imbued with unique contexts, risk profiles, and expectations.

This variability in time perception significantly affects how present gains are evaluated against potential future returns. The trade-offs between immediate benefits and future possibilities become intricate calculations where the rationality of decisions is challenged by human biases, market dynamics, and unpredictable external factors. What might appear as a simple preference for the known over the unknown transforms into a complex analytical challenge, requiring meticulous examination of risks, opportunities, and the very essence of temporal valuation.

In an era marked by globalization, technological advancement, and rapidly changing economic landscapes, the role of time in investment decisions takes on an even greater significance. Understanding how time is perceived, valued, and integrated into investment decisions becomes a critical exploration into the very mechanisms that govern financial success, economic stability, and sustainable growth. It is essential to recognize that the exploration of the time horizon is a complex phenomenon that extends beyond financial calculations, delving into behavioral and psychological dimensions as well.

The consideration of time in investment decisions engages the profound intersections of cognitive and behavioral biases that can influence and sometimes distort the perception of the time horizon, thereby affecting the decision-making process. The influence of biases such as temporal discounting or time preference, myopic loss aversion, or present bias ¹, cannot be underestimated when analyzing investment decisions across various domains.

Additionally, the time horizon's impact on investment decisions is further complicated by the psychological aspects of time perception. Research findings from the fields of psychology and behavioral finance have enriched our understanding of how individuals' perceptions of time can differ based on age, cultural background, personal experiences, and other factors. These subjective dimensions introduce additional layers of complexity to investment decisions, necessitating a more nuanced and comprehensive approach to understanding the role of time in financial matters. Taking these factors into account illuminates the fact that traditional financial models, while valuable, may not fully capture the complex role that time horizon plays in investment decision making, highlighting the need for a more nuanced analysis.

The commonly referenced assumption that discounted cash flow (DCF) analysis and the Net Present Value (NPV)² rule are sufficient to encapsulate the role of the time horizon in resource allocation decisions warrants closer examination. While the standard NPV formula does integrate time by applying the discount rate over a specified period, this mathematical treatment may not fully capture the complexities associated with time horizon considerations in investment decisions, since it encompasses more than just the length of an investment; it involves a comprehensive understanding of the dynamic nature of cash flows, risk profiles, and strategic considerations that vary across different investment horizons. This extends beyond portfolios to include multifaceted scenarios where managers often face intricate decisions when allocating resources, involving trade-offs between short-term profitability and long-term sustainability.

Moreover, managers' attention to the time horizon is influenced by a wide array of contextual and subjective factors such as the organization's competitive landscape, industry dynamics, regulatory environment, and internal considerations like research and development initiatives, strategic goals, and stakeholder expectations. These aspects are not necessarily reflected within the more rigid framework of traditional NPV analysis.

It is not to say that NPV or the standard discounting methods are incorrect or without merit; rather, the argument posits that they may not consider complex cases shaped by behavioral factors, organizational nuances, market conditions, and strategic considerations that define the multifaceted nature of investments.

By focusing on the multifaceted nature of this relationship, this study embarks on a thorough exploration, incorporating not only economic theories but also cognitive biases and organizational dynamics. The case study of AMUNDI, a leading European Asset Management firm³, offers an exemplary lens through which to

examine the intricate web of factors that define time's role in investment decision-making.

¹ See paragraph "Unveiling Behavioral Biases"

² See paragraph "Traditional Finance: The Heartbeat of Business Valuation"

³ See paragraph "Company Overview: AMUNDI"

In particular, Amundi's Strategy Department's diverse operations and strategic focus, particularly in mergers and acquisitions (M&As), present a unique opportunity to delve into how time horizon influences both investment strategies and outcomes. By analyzing their practices, this research aims to address a 2 fundamental questions:

- 1. How does time horizon affect Amundi's investment decisions?
- 2. What strategies are employed to manage different time horizons in investment decision-making?

A key component of this study is to identify the principal biases associated with Amundi's time-horizon-related investments. By interrogating members of the Strategy Department on how these biases may influence decisions on M&As, this research endeavors to uncover patterns that could hold significant implications for both academia and industry. To this end, the collaboration with them will be instrumental in accessing relevant data, conducting interviews, and analyzing strategies.

Furthermore, an in-depth exploration of Amundi's approach to managing time horizon in investment decisions, encompassing acquisitions, joint ventures, fundraising, and divestments across different areas, will shed light on how the firm aligns its resource allocation strategies to foster sustainable value creation. These insights will contribute to a broader understanding of how time horizon shapes investment decisions and can be harnessed effectively.

The interplay between time, investment decisions, and financial outcomes presents a multifaceted and complex dynamic that remains an area ripe for exploration and understanding. The overarching objective of this thesis is not merely to illuminate these connections but to delve deeply into their nuanced relationships, probing the theoretical considerations, practical applications, and potential biases that shape investment decision-making. Moreover, this research contributes to the growing body of knowledge surrounding time horizon considerations in investments. It challenges and extends conventional wisdom, introducing novel perspectives that recognize the complexities introduced by psychological aspects, organizational dynamics, and market conditions. These layers of complexity demand a more sophisticated and tailored approach to understanding the role of time in financial matters.

The subsequent literature review will expand on foundational concepts related to time, delve into relevant managerial decision-making theories, and explore the intersections between traditional finance, behavioral finance, and the cognitive biases that influence investment choices. Following this part, the research will meticulously define its core problem, rooted in the realms of time and managerial decision-making. Using a structured methodology, the study will adopt a multi-layered approach, akin to the Research Methodology Onion. This ensures a clear strategy for data collection from a representative sample, leading to the formation

of tangible hypotheses. The results section then employs systematic coding to dissect the data, analyzing patterns and testing the initial hypotheses. Each finding, whether affirming or contrasting the pre-existing knowledge, feeds directly into the subsequent discussion. Here, the research interprets these results in the broader context of finance, identifying their practical and theoretical implications. Recognizing its own limitations, the discussion also proposes areas for further inquiry.

Concluding, the research succinctly ties together the findings, their relevance, and the prospective paths for future exploration in finance and decision-making.

LITERATURE REVIEW

Resource allocation, as Fiegenbaum (1996) argue, is profoundly influenced by temporal references, be they retrospectives of past endeavors or anticipations of future aspirations. Such a perspective underscores the indispensable nature of the temporal dimension in understanding the allocation of resources. A noteworthy theoretical avenue in this context is the 'Real Options' approach. This theory accentuates the significance of timely decisions and the inherent value of maintaining flexibility in investment strategies. Similarly, the Behavioral Theory of the Firm (BTOF) offers another lens, suggesting that, while time may not be its primary focus, it undeniably plays a role in shaping managerial decision trajectories.

Levinthal and March's work in 1993 (p.101) brings attention to an innate dilemma for decision-makers: the balancing act between immediate necessities and long-term imperatives. They poignantly remark that short-term survivability strategies might inadvertently lay the groundwork for long-term failures, and vice versa. Such paradoxes are especially pronounced when managers grapple with the choice of valuing exploitation over exploration.

Diving deeper into the time-oriented facets of resource allocation, the challenges are manifold. The progression of time augments elements of risk and uncertainty. Longer temporal spans amplify the intricacies, as decision-makers confront the Herculean task of crafting precise future expectations (Maritan, 2001). Additionally, the inherent unpredictability concerning both the scale and temporal alignment of investment returns further complicates matters.

Das's research in 1987 sheds light on another layer of complexity: the heterogeneity in chief executives' time-based orientations and inclinations. Supplementing this, Laverty (1996) underscores the ripple effects of short-term catalysts that can significantly steer decision trajectories.

This literature review endeavors to weave insights from a spectrum of scholarly works, with an unwavering emphasis on the intricate interplay of time in the decision-making processes.

Exploring Time Horizons: Definitions and Implications

To begin, it's paramount to first delineate what precisely constitutes the *time horizon* and its multifarious types. Recognizing their interrelatedness is equally essential.

The Concept of Temporal Orientation

Temporal orientation, as explored in scholarly literature, can also be construed as a 'future time perspective'. It is characterized by the cognitive distinctions that individuals make between the immediacy and the distant facets of the future (Das, 1987: 203). Das further elaborates that an individual's overarching perception of the nature and progression of future time can significantly delineate choices related to planning cycles or stipulated planning horizons. Thus, temporal orientation emerges not merely as an individual predilection but also as an organizational stance, influenced by managerial inclinations and informed by entrenched decision-making paradigms within the corporation.

Delving into Investment Horizons

Diverging from the subjective realm of temporal orientation, the concept of 'Investment Horizon' veers more towards an objective decision-making spectrum. While temporal orientation delves into individual-based temporal perceptions within an enterprise, investment horizon pertains specifically to the anticipatory decision-making process. It is best described as managers' preliminary expectations about the temporal milestones at which an investment is forecasted to yield returns (Connelly, Tihanyi, Certo, & Hitt, 2010). This concept is instrumental in the resource allocation discourse. For instance, product-related decisions can be influenced by meticulously assessing the expected payoff timeline (Choi & Shepherd, 2004), or by discerning the benefits accrued from the first-mover advantage (Souder & Shaver, 2010). A noteworthy paradox, however, emerges in this context: managers often proclaim their allegiance to the long-term value creation, yet, simultaneously, their actions might betray a proclivity towards short-term gain prioritization.

The Significance of Short-Term Horizons

Laverty (1996) articulates 'short-termism' as a prioritization of immediate outcomes, often overshadowing and compromising long-term goals and interests. Such a perspective on the investment horizon, while acknowledged, seems to capture only a fragment of its comprehensive implications. Many scholars and practitioners, in fact, attribute a significant portion of the global financial crisis's adverse outcomes to rampant short-termism. This narrow focus has been criticized for underpinning some of the more egregious financial oversights and for exacerbating negative societal externalities like environmental degradation – repercussions that aren't always transparent in financial ledgers (Lees & Malone, 2011: 1). Emerging research suggests that organizations might carve out a competitive edge by cultivating and demonstrating a more forward-looking management ethos.

This discourse on short-termism intersects with other scholarly concepts such as *present bias*⁴ (Cojuharenco, Patient, & Bashshur, 2011), *hyperbolic discounting*⁵ (Dasgupta & Maskin, 2005; Plambeck & Wang, 2013), and notably, *temporal myopia* (Levinthal & March, 1993). The latter concept is examined in-depth by Levinthal and March, who characterize it as a "proclivity to overlook longer-term implications" (101). They elucidate the intricate dance between immediate and extended objectives, emphasizing the inherent challenges in reconciling the two. By synthesizing decision-making theories with the principles of real options, they present an insightful lens to understand potential managerial missteps. Levinthal and March observe that organizations often adopt a reactive stance, diagnosing and resolving issues as they emerge, rather than proactive planning. This approach, while pragmatic, could lead to solutions that may seem beneficial in the short term but might not align with long-term strategic goals (102).

Venturing Beyond: The Long Horizon

In the realm of temporal myopia, Levinthal and March (1993) suggest that companies might make mistakes by overly focusing on either the short-term or the long-term. Instances of such 'long-termism' are rarely documented in real-world scenarios, and this phenomenon has remained largely unexplored in empirical research. Expanding this view to a broader temporal spectrum, an extensive body of literature underscores the importance of long-term orientation, primarily at the organizational level. This inclination towards long-term thinking is often considered characteristic of family-owned enterprises, reflecting a commitment to sustainable growth and continuity over generations (Chua, Chrisman, & Bergiel, 2009; Lumpkin & Brigham, 2011).

As this research delves deeper into the myriad studies on the concept of time, it becomes evident that two primary conclusions can be drawn. Firstly, it is clear that managers have an intrinsic desire to ascertain the timing of returns when comparing various investment options. They aim to have a clear roadmap of when their investments will start yielding dividends, thereby enabling them to strategize their financial decisions effectively.

Secondly, there's a palpable skepticism surrounding long-term projects. The extended time frames introduce elements of unpredictability and volatility, leading many managers to view them as being fraught with increased uncertainty. This hesitance is underscored by the challenges in forecasting market dynamics, economic shifts, and other external factors over a more extended period.

⁴ See paragraph "Unveiling Behavioral Biases"

⁵ Hyperbolic discounting is a behavioral concept that highlights how individuals often prefer immediate, albeit smaller, rewards over larger rewards that are delayed or set to be received in the distant future (Frederick, Loewenstein& O'Donoghue, 2002).

However, one significant observation made by scholars is the overwhelming abundance of concepts related to time in literature. This plethora of time-centric ideas, while rich in information, may inadvertently cloud the clarity of the discourse, potentially hindering the establishment of connections with other seminal works in the field.

Investment Horizon: A Deep Dive into Economic Theories

The intricacy of the *investment horizon* comes to the fore when evaluating how resources are allocated within an organization. As Bower (1970) insightfully notes, managers are often caught in a tug of war between fulfilling immediate, short-term objectives and aligning their strategies with the broader, long-term goals established by the company. This creates a multifaceted dichotomy that demands delicate balancing and keen foresight.

The complex relationship between short and long-term considerations is further complicated by varying expectations concerning the timing of returns on investments. These expectations are not only instrumental in shaping investment strategies but are also intertwined with diverse economic and managerial theories. To elucidate the nuanced interplay between these expectations and theoretical frameworks, it will be explored the role of investment horizons in several theories.

First, *agency theory* is examined to understand how investment horizons influence the relationship between principals and agents, emphasizing the potential conflicts that may arise between their varying time preferences. Second, *real options* analysis is explored, shedding light on how the flexibility and timing of investment decisions can be valued, taking into consideration the uncertainty and volatility inherent in market dynamics. Lastly, the *Behavioral Theory of the Firm* is examined, delving into how organizational routines, cognitive limitations, and internal conflicts can influence perceptions of time, consequently affecting investment decisions.

The juxtaposition of these theories reveals the multifaceted nature of the investment horizon and its centrality in the strategic decision-making process, affirming its importance in both practical management and theoretical discourse.

The Agency Theory

Agency theory postulates that managerial decisions are often influenced by personal objectives and agendas. Yet, as the priorities of both managers and shareholders can shift over time, integrating the temporal dimension

becomes paramount when furthering our understanding of this theory. Notably, the incorporation of stock option compensations has been identified as a strategic measure to synchronize the long-term interests of managers with those of shareholders (Jensen & Murphy, 1990).

Another significant component that provides insight into the agency theory is the construct of board structure. Studies, such as the one by Arthurs et al. (2008), underscore that a board geared towards long-term objectives can instill and promote a similar long-term approach throughout the organization. In this vein, family-owned enterprises often stand out for their prospective orientation, largely attributed to the diminished conflicts arising from a limited pool of stakeholders. Chua et al. (2009) posited that such companies, despite being vulnerable to subjective performance assessments, usually place a heightened emphasis on non-financial goals, driving strategic decisions rooted in long-term considerations.

Furthermore, a noteworthy tension in investment horizons emerges when contrasting the perspectives of managers and investors. While managers typically harbor long-term aspirations, investors, more often than not, exhibit a tilt towards short-term gains (Stein, 1988, 1989).

Real Options: A Deep Dive

Real options theory emerges as a solution to a prevalent challenge in capital budgeting, wherein long-term initiatives frequently face devaluation due to their delayed payoffs (Graham et al., 2005). This propensity can inadvertently sideline projects with positive Net Present Value (NPV) in the long run, causing firms to gravitate towards ventures with immediate, albeit occasionally diminished, returns. At its core, real options theory elucidates that, in situations marked by pronounced uncertainties surrounding strategic goals, companies have the latitude to commit to a modest initial investment. This "tentative entry" strategy, underscored by a "wait and observe" stance, allows them to collate data over time, subsequently guiding decisions on more substantive, long-haul investments (as highlighted by works of Bowman & Hurry, 1993; Chatterjee, Lubatkin, & Schulze, 1999; McGrath, 1999; Trigeorgis, 1995).

Contrastingly, traditional valuation techniques like NPV, while valuable, often fall short in recognizing the inherent agility and adaptability that real options bestow upon decision-makers.

Breaking Down BTOF

In various theoretical constructs, modeling time horizon within the resource allocation process presents an intricate challenge. A salient perspective that bridges this gap is the *Behavioral Theory of the Firm (BTOF)*. This framework offers a nuanced understanding of investment horizons by elucidating the underlying

mechanisms through which managers negotiate the interplay between immediate and extended objectives. In the managerial realm, there's a noted predisposition towards prioritizing instantaneous feedback and responses over forecasting distant, uncertain eventualities. This tendency propels managers to address pressing issues rather than meticulously sculpting long-haul strategies (Cyert & March, 1992: 167).

The BTOF further elucidates a fascinating dynamic: those trailing in performance often exhibit a proclivity for short-term, high-risk investments. For these low-performing entities, the stakes are comparatively lower, and this approach presents a quicker potential conduit to level the playing field with industry frontrunners, as opposed to more protracted strategies (Souder & Shaver, 2010).

Transitioning to the broader expanse of behavioral finance, an expansive corpus of research delves into the cognitive processes guiding managerial estimates of future cash flows and the determination of fitting planning horizons (Bower, 1970; Bromiley, 1986). Central to these considerations are heuristics. These cognitive shortcuts underscore the managerial strategy of crafting intuitive guidelines to adeptly traverse the labyrinthine challenges associated with appraising investment prospects, each characterized by distinct return expectations, risk profiles, timelines, and an array of other determinants (Simon, 1947).

The Intricacies of Managerial Decision-Making

Game Theory and Time:

Game theory, at its core, is the study of mathematical models of strategic interaction among rational decision-makers. It serves as a tool to understand the multifaceted dynamics present in situations where an individual's success in making choices depends on the choices of others (Von Neumann & Morgenstern, 2007). Ever since its inception in the early 20th century, game theory has transformed from a mere academic interest to an essential tool that provides insights across various fields including economics, political science, biology, and computer science.

One of the captivating areas in game theory is the domain of repeated interactions. Unlike one-shot games where players interact once and the game ends, repeated games involve a series of interactions, which allows for strategy modifications based on past experiences. This creates a landscape where trust, punishment, and cooperation become fundamental. For instance, in business, a company might uphold a contract not merely because of the immediate benefits but because failing to do so could harm its reputation and deter future collaborations.

A central premise in repeated games is the way players value payoffs now and in the future. This introduces the concept of *discount factors* (Koopmans, 1960; Samuelson, 1937). In a simple context, a discount factor reflects how much a player values future rewards compared to immediate ones. For instance, a discount factor of 0.9 would mean that receiving \$100 next year is equivalent to receiving \$90 now.

However, the real world is not always simple. Players, be it individuals or entities, often have diverse motivations, limitations, and perspectives, leading to *non-homogeneous discount factors*. This means that in a strategic scenario, Player A might heavily prioritize immediate payoffs, while Player B might be more willing to wait for a potentially bigger reward in the future.

The non-homogeneity in discount factors adds a layer of complexity to the game. Strategies that might be optimal for one player may not necessarily be the best for another. For instance, in international diplomacy, one nation might prefer immediate peace treaties due to pressing domestic issues, whereas another might be willing to negotiate longer for more favorable terms, banking on its economic or military resilience.

The presence of varied discount factors among players creates a mosaic of strategic behaviors. Strategies aren't uniform or predictable. Players continuously recalibrate their moves, considering not only the game's inherent payoffs but also the perceived strategies and discount factors of their opponents.

Intertemporal Trades, Reputation, and Empirical Explorations

One of the pioneering studies in this domain was conducted by Lehrer and Pauzner in 1999. They ventured into the arena of two-player games that were infinitely repeated, and where players had full information at their disposal. What set their research apart was the emphasis on situations where the players had differing discount factors. Lehrer and Pauzner not only detailed the nature of equilibrium payoffs from the perspectives of both Nash and sub-game perfection but also highlighted a fascinating finding: players, when faced with unequal discount factors, have the capacity to engage in intertemporal trades of payoffs. Such trades can propel the range of achievable outcomes in a repeated game to go beyond what is traditionally expected based on single-stage game payoffs. This profound insight provided by Lehrer and Pauzner was not confined to two-player games. Later studies by Guéron et al. (2011), as well as Chen's and Takahashi's (2012), expanded upon this foundation to encompass games involving more than just two players.

But the journey of exploring differential discounting doesn't end here. It intertwines beautifully with the wider context of reputation within game theory. This intersection was notably addressed in seminal works by scholars like Kreps and Wilson in 1982 and Milgrom and Roberts in the same year. Their discussions orbit around scenarios characterized by incomplete information about a player's inherent "type", often focusing on the more patient player. Here, the literature seeks to decipher the conditions fostering the emergence of a player's "reputation" for being of a discernible type, culminating in a stable equilibrium. Contrary to the

discussions on intertemporal trades, reputation-centric literature doesn't centralize intertemporal trades as their focal point.

Moving from theoretical advancements to empirical validation, there's been a substantial influx of experimental literature aiming to bring the predictions of repeated game theory to the testing bench. An extensive survey by Dal Bó and Fréchette (2018) reveals that a majority of these experimental studies are confined to games with complete information where players share identical discount factors. Highlighting a few notable studies in this context, Cason et al. in 2013 delved into coordination within repeated assignment games, unearthing prevalent turn-taking strategies characterized by minimal conflict. This observation finds parallels in other studies, such as those by Kuzmics et al. in 2014 and Romero and Zhang in 2018, especially in repeated and symmetric "battle of the sexes" scenarios.

But the landscape of game theory doesn't just limit itself to these dynamics. There's an interesting tangent that inspects the motives behind building a reputation, rooted in the foundational framework by Milgrom and Roberts in 1982. An illustrative example is the work by Tingley and Walter in 2011. They designed an intriguing reputation-building scenario where a long-term player, termed the "defender", engages with a series of short-lived "entrants".

Traditional Finance: The Heartbeat of Business Valuation

In today's dynamic financial landscape, each theoretical and practical framework brings its distinct set of economic metrics and evaluative parameters. These frameworks require specific sets of data and information tailored to assess a business, keeping in view the assessment's objective and the prevailing conditions of its application.

The foundation of DCF Valuation

Prominent among business valuation methodologies are the *Discounted Cash Flow (DCF)* techniques (Fisher, 1930; Williams, 1938), particularly the *Free Cash Flow to the Firm (FCFF)* and the *Free Cash Flow to Equity (FCFE)* models. These methodologies are favored tools among corporate finance professionals and investment analysts. Their preference stems from the methods' ability to effectively represent stakeholders and investors' expectations regarding a company's prospective profitability and expansion avenues. Notably, the DCF technique integrates the dimension of time, allowing the derived outcomes to inform investors and existing shareholders about their prospective involvement in the business's expansion trajectory. The DCF stands out

due to its rigorous assessment procedure, encapsulating a company's operational, financial, and investment actions, coupled with market studies and analysis of financial statements. Collectively, these elements play a huge role in shaping the company's trajectory and are reflected in the predicted cash flow streams.

At the heart of the DCF method lie two foundational theories: the *Time Value of Money* and the *Net Present Value (NPV)* theory. In alignment with these principles, the present worth of an organization is calculated for ensuing periods, and investment feasibility is determined, grounded on anticipated financial gains and investor outlooks.

Within the framework of the Time Value of Money, the DCF model posits that a company's estimated present valuation or an investment will inevitably differ in future value and buying power. This variation is attributed to factors like inflation and the predicted profitability of the company in the face of inherent risks. Thus, for the valuation of a company, the forecasted value of future cash flows (FCF) and the discounting rate or cost of capital (expected returns from investors) are leveraged. The formulas for these calculations are as follows:

$$PV = \frac{FV}{(1+r)^{t}}, \text{(representing the Time Value of Money)},$$
 and
$$PV(CF) = \frac{FCF_{t}}{(1+r)^{t}}, \text{(in line with the DCF methodology)}^{6}$$

The Net Present Value (NPV) rule offers a fundamental framework for investors to gauge the viability of potential investments. In essence, NPV is the difference between the discounted future cash flows and the initial capital outlay. Within this scope, a prevalent measure for company evaluation is the *economic value* added (EVA), formulated as:

$$NPV = \frac{FCF_t}{(1+r)^t}$$

According to NPV principles, an investment is deemed feasible if the derived cash flows surpass the initial expenditure within the forecasted period, accounting for the discount factor and other inherent risks. Such an investment ensures the company can meet investor commitments, augment its market value via stock appreciation, enhance its appeal to potential investors, and bolster its overall financial and economic standing. Business valuation through the DCF approach is underpinned by these tenets. The firm's worth is derived from the anticipated net cash flows generated from its manifold operations. This value accounts for temporal

⁶ Here, PV and PV(CF) denote the present values of money and cash flows, respectively. FV and FCFt correspond to the future monetary value and the projected value of cash flows in the t-period. 'r' is the discounting rate (or the Weighted Average Cost of Capital - WACC), and 't' represents the forecasting duration.

considerations (time discounting) and the myriad systematic and idiosyncratic risks prevalent in the business milieu, quantified via the discount rate or the *Weighted Average Cost of Capital (WACC)*:

Value of firm =
$$\frac{FCFF_t}{(1 + WACC)^t}$$
⁷

However, the DCF model presents inherent challenges, primarily in the accurate forecasting and quantification of the Free Cash Flow (FCF) the company is anticipated to generate over the discounting horizon ('t'). This requires an in-depth analysis encompassing the firm's operational dynamics, financial maneuvers, investment pursuits, and the spectrum of risks it faces. Additionally, a holistic understanding of the corporate strategy is imperative to forecast alterations in dividend disbursements and debt strategies. Typically, the process of cash flow forecasting integrates several elements, including:

- The forecast duration, which directly impacts the precision and magnitude of the calculations. It's crucial for defining the terminal value (TV), needed for assessing the company's worth post the forecasted period.
- The company's strategic growth ambitions.
- The scale of the business operations.
- Current expansion trajectories juxtaposed against the company's life cycle phase.
- The presence or absence of a competitive edge combined with the firm's market presence.

The estimation of a company's future cash flow growth rate during the projected timeline often leans on diverse methodologies. A prevalent approach involves juxtaposing historical data with the firm's growth strategies for the forthcoming period, ensuring external influences are considered. While insights from the company's leadership can inform these predictions, their worth hinges on their objective basis. To bolster the robustness of these projections, the scenario-based approach is often employed. This method contemplates various potential outcomes, ranging from moderate and conservative estimates to more optimistic ones.

The endeavor to gauge and forecast prospective cash flows is intricate, demanding both time and expertise. It necessitates a profound grasp of the immediate business context and strategic outlook, aligning them with a host of internal and external variables. For heightened precision, it's sometimes prudent to delve into detailed forecasts for specific facets. This might span from capital investments, shifts in production paradigms, adjustments in dividend disbursement or borrowing strategies, to fluctuations in market valuations and stock prices.

⁷ Here, FCFFt denotes the projected free cash flows to the company during the t-period, while WACC signifies the weighted average cost of capital, and 't' indicates the forecasted span.

Depending on the specific goals of valuation, a company's worth is ascertained through two distinct models: the arithmetic or geometric evaluations of net value, operational earnings, and total revenue. Such computations hinge on the firm's forward-looking strategies and exogenous variables like macroeconomic growth trajectories, inflationary projections, and political uncertainties. While managerial insights can inform these estimations, their applicability is contingent upon their empirical basis. For more granularity, it might be apt to utilize scenario-based analyses, which span from restrained to upbeat forecasts. This intricate exercise demands an in-depth grasp of the firm's immediate and long-term contexts, factoring in myriad internal and external determinants. Such an evaluation could delve deep into areas like capital allocation, production modulations, dividend and borrowing strategies, and market valuations.

Within the framework of the Discounted Cash Flow (DCF) technique, two other models dictate company valuation: FCFF (Free Cash Flow to the Firm) and FCFE (Free Cash Flow to Equity). The FCFF provides a holistic snapshot of cash flows, encapsulating both short-lived and enduring obligations, coupled with the company's cumulative debt. This index is pivotal for investors as it unveils cash originating from core operations and the potential for dividend distributions. FCFF is delineated as:

FCFF = EBIT
$$\times$$
 (1-T) + Depreciation - CAPEX - Δ NCWC 8 .

Conversely, FCFE sheds light on cash flows available to shareholders post accounting for capital allocation, investments, debt redemptions, and taxation. Its formula is:

FCFE = NI - (CAPEX - Depreciation) -
$$\Delta$$
NCWC + Debt - Debt Payments 9.

Thus, a reframed expression for FCFE is:

$$FCFE = FCFF - Interest Expenditures + \Delta Debt.$$

A firm's capital architecture is crucial in the valuation process, influencing the discount rate, whether it's drawn from the Weighted Average Cost of Capital (WACC) or the standalone Equity Cost. Integrating this aspect with the concept of the time value of money yields:

- 20 -

⁸ Where EBIT refers to the earnings before deducting interest and income tax expenses. T represents the rate of income tax, expressed as a percentage. CAPEX stands for the expenses related to the acquisition of capital assets. The increase in NCWC indicates a rise in non-cash working capital, which encompasses assets like inventory, raw materials, and semi-finished products.

⁹ NI is epitomizing net earnings.

$$V_{\text{firm}} = \frac{FCFF_t}{(1+WACC)^t}$$
 or $V_{\text{equity}} = \frac{FCFE_t}{(1+CE)^t}$ 10,

Lastly, for an exhaustive valuation, it's essential to contemplate the value post the forecasted interval. This encompasses determining the terminal value, which mirrors the present worth of prospective cash flows expected in this extended timeframe, integrated with a designated growth rate.

Determining a company's terminal value can be achieved using the following primary methods:

- 1. *Residual Value Method*: This approach is applied when the company or its assets are expected to be liquidated. The value in the post-forecasted period is deduced from the book value of assets adjusted for expected inflation or the asset's ability to generate profit.
- 2. Steady Growth Method: This method posits that the company will continue to grow at its current trend even after the forecasted period. The growth rate, represented by coefficient gg, should not exceed industry or economy averages. Using this approach, the terminal value is given by:

$$TV_n = \frac{FCFF_n (or FCFE_n)}{(WACC (or CE)-g)}$$

Incorporating the terminal value into the valuation gives:

$$v_{firm} = \frac{FCFF_t}{(1+WACC)^t} + TV_n^{12}$$

The above pertains to a DCF model that assumes a consistent growth rate (gg). However, businesses often don't grow at a constant rate due to various factors, including the cyclical nature of operations. This has led to the development of more nuanced models, such as:

• *Two-stage DCF Model*: This is employed when a company experiences an initial rapid growth (higher than industry average), which eventually stabilizes after achieving market maturity. The valuation formula for this model is:

¹⁰ Where the notations signify respective business and equity values, and CE encapsulates the cost attributed to equity.

¹¹ Where TVn is the terminal value at the current period and FCFFn and FCFEn are the expected free cash flows to the firm and to equity, respectively, for the last year of forecast.

¹² Where TVn is the terminal value at the current period and FCFFn and FCFEn are the expected free cash flows to the firm and to equity, respectively, for the last year of forecast.

$$V_{firm} = \frac{FCFF_t}{(1+WACC_{hg})^t} + \frac{FCFF_t}{(1+WACC_{sg})^t} + PV(TV)^{13}$$

• The *three-stage DCF model* is tailored for businesses that undergo three distinct phases: high growth, a brief decline, and then steady growth. The formula for this valuation is:

$$V_{firm} = \frac{FCFF_t}{(1 + WACC_{hg})^t} + \frac{FCFF_n}{(1 + WACC_{lg})^t} + \frac{FCFF_k}{(1 + WACC_{sg})^t} + PV(TV)^{14}$$

Selecting the most fitting business valuation method necessitates consideration of various factors, including the company's life cycle stage, competitive advantages, and both macro and microeconomic influences on its operations.

DCF models are highly regarded for their practical importance due to their comprehensive nature. They capture a broad spectrum of a company's operations, financial activities, and investments. These calculations call for defining the forecast period and growth rates clearly, and using academically-backed approaches for determining the company's cost of capital, often with the WACC and CAPM models. Additionally, the method is based on actual interests of stakeholders, future strategies, reinvestment rates, and required capital investments for planned business actions like acquisitions and diversifications.

However, DCF models have their complexities, pushing some to consider alternative models like the *APV* (*Adjusted Present Value*) and the *DDM (Dividend Discount Model*).

The Dividend Discount Model

The DDM specifically values a company based on its expected dividend payments. Its formula is:

$$V_{firm} = \frac{DPS_t}{(1+CC)^t}$$
¹⁵

The *Dividend Discount Model (DDM)* provides a framework for business valuation, and it can incorporate various stages based on the economic development of the enterprise, much like the DCF models. While the

¹³ Where: FCFFt and FCFFk are free cash flows during periods of high and stable growth rates respectively; WACChg and WACCsg represent the weighted average cost of capital during the high growth and stable growth periods, respectively; PV(TV) is the present value of the terminal value.

¹⁴ Where FCFFn represents free cash flow during the period of decline and WACClg is the weighted average cost of capital during this decline.

¹⁵ Where DPSt is the expected dividend per share and CC is the cost of equity.

DDM simplifies calculations by avoiding intricate forecasts of capital changes, operating costs, and debts, it does require predictions concerning a multitude of factors, such as the company's cash flows, to anticipate its dividend policy. The practical application of the DDM in corporate finance can be challenging, especially if a company's dividend policy isn't transparent or publicly disclosed, which is often the case.

The Adjusted Present Value (APV) method is another tool for business valuation. Despite its utility, it hasn't gained wide acceptance among valuation professionals. Introduced by Myers in 1974, the APV method values an enterprise by summing the cash flows produced by various business activities in several steps:

1. Basic Value Determination

This step focuses on the enterprise's value without considering its debt's market value. It uses free cash flow (FCFF) and the cost of capital without leverage:

$$V_{firm} = \frac{FCFF_t}{(1 + CE_u)^{t^{16}}}$$

2. Value from Financial Instruments

This stage captures the effects of financial instruments, such as the market value of debt and tax impacts. While debt can offer tax benefits due to tax shields:

Value of tax benefits = $T \times Debt$

It also poses risks due to potential financial instability, increasing the threat of bankruptcy.

3. Bankruptcy Value Estimation

This is the trickiest part as determining a company's bankruptcy probability is nuanced. Practically, factors like Eurobond ratings, default risk levels, and industry benchmarking might be used. The cost associated with bankruptcy is given by:

$$PV(EBC) = B_{probability} \times PV(BC)$$
 17

Combining these steps, the enterprise's value via the APV method is:

¹⁶ Where CEu represents the cost of equity capital without any leverage.

¹⁷ Where: PV EBC stands for the present value of expected bankruptcy costs; Bprobability denotes the likelihood of bankruptcy; PV BC is the present value of bankruptcy costs based on residual company and asset values.

 $V_{firm} = \frac{FCFF_t}{(1+CE_{II})^t} + T \times Debt - B_{probability} \times PV(BC)$

The Adjusted Present Value method

The Adjusted Present Value (APV) method, while sharing some similarities with the DCF model (most notably

in the basic value determination phase), has its own set of challenges that affect its broad practical application.

A significant hurdle is the incorporation of bankruptcy costs and the probability of bankruptcy for the

enterprise. Determining these values is a complex endeavor both theoretically and practically.

Another limitation of the APV method is its assumption of a constant enterprise income tax rate (T) and a

steady growth rate (g) for both the forecasted and "post forecasted" periods. Given the dynamic nature of

businesses and economies, these assumptions can render results that might not reflect the true value or

potential of a business.

In essence, while traditional financial methods provide structured frameworks for business valuation, they are

grounded on certain assumptions that may not always hold true. As this discussion on traditional finance in

business valuation gets closed, it paves the way for the next exploration: behavioral finance. This domain

delves deep into cognitive biases related to time perceptions in investment decisions, offering a nuanced

understanding of how human psychology influences financial decision-making processes

Behavioral Finance: Exploring Investor Psychology

A Tale of Two Theories: Traditional vs. Behavioral Finance

In theory, according to economic theorists, investors are assumed to think and act rationally, using all available

information to form rational expectations for determining the values of investments or companies in the future.

This implies that stock prices accurately reflect fundamental values and only fluctuate in response to

unexpected news. Consequently, economists argue that financial markets are stable and efficient, with stock

prices following a "random walk" and the overall economy moving towards "general equilibrium."

However, in reality, according to Shiller (1999), investors do not always think and behave rationally. Driven

by greed and fear, investors often engage in speculative behavior, causing stock prices to oscillate between

unrealistic highs and lows. In other words, investors are influenced by extreme emotions, subjective thinking,

and crowd behavior, leading to irrational expectations regarding the future performance of companies and the

- 24 -

overall economy. This results in stock prices deviating from fundamental values and following a somewhat predictable, wave-like pattern.

The study of investors' behavior and the influence of emotions and cognitive errors on decision-making processes is encompassed within the academic discipline known as "behavioral finance".

Behavioral finance delves into the psychology behind market behavior, seeking to understand why individuals make certain financial investments (Maheran & Muhammad, 2009).

There is extensive literature in psychology documenting that individuals exhibit systematic errors *biases* in their thinking. These errors include the use of decision-making shortcuts (heuristics), overconfidence, excessive reliance on recent experiences (representativeness), treating decisions separately instead of considering them together (mental accounting), framing decisions in a way that distorts their perception (framing), being slow to incorporate new information (conservatism), and the influence of preferences that lead to avoiding paper losses and seeking paper gains (disposition effect).

Many fundamental principles in behavioral finance revolve around the concept of "bounded rationality," a term popularized by Herbert Simon (1947, 1983), which refers to cognitive limitations affecting decision-making. Consequently, human behavior often relies on simplified procedures or heuristics, as proposed by Tversky and Kahneman (1974). This aligns with Slovic's (1972) research on investment risk-taking behavior, where he discovered that individuals have information processing limitations and exhibit judgmental biases that cause them to overvalue certain information. Additionally, people tend to overreact to information, as observed by De Bondt and Thaler (1985, 1987).

Kahneman (1974) highlighted that individuals are susceptible to "cognitive illusions," leading them to harbor unrealistic beliefs, such as envisioning becoming wealthy and renowned or having the ability to exit the market just before a bubble burst. Moreover, people tend to overstate their level of skill and downplay the role of chance in their decision-making process. They often remain unaware of the risks they are exposed to. When coupled with loss aversion, it is not surprising that the average investor reacts with panic during a market downturn, even though it might be a favorable time to make purchases instead of selling. According to Kahneman, human beings are inherently optimists, which explains why casinos are bustling with luck-seekers at all hours of the day.

Unveiling Behavioral Biases

1. *Confirmation bias*: Described by Dickens (1978), confirmation bias refers to the tendency of individuals to favor information that aligns with their preexisting beliefs. As a result, they may ignore contradictory information, leading to irrational decisions based on their preconceived notions.

- 2. Conservatism bias: Originated by Edwards (1982), this bias reflects individuals' reluctance to adjust their beliefs and forecasts based on new information, leading them to stick to their existing views and potentially missing valuable decision-making insights.
- 3. *Framing*: Presented by Tversky and Kahneman (1981), framing bias occurs when investors react differently to the same information presented in different ways. The presentation of information in a positive or negative frame can significantly influence their opinions and decisions.
- 4. *Hindsight bias*: This bias, presented by Fischhoff and Beyth (1975), occurs when investors believe they can reasonably predict certain events. However, such beliefs can be misleading, as individuals may mistakenly perceive cause-and-effect relationships between unrelated events, leading to irrational decision-making.
- 5. *House money effect*: Given by Thaler and Johnson (1990), this effect suggests that when investors are making profits, they become less averse to losses and more willing to take risks. Conversely, when facing losses, investors tend to become more risk adverse.
- 6. Loss aversion: Introduced by Benartzi and Thaler (1995), loss aversion refers to the differential response of individuals to potential losses and gains. People are more averse to losses and willing to take more risks to avoid them, valuing the certainty of losses over the uncertainty of gains.
- 7. *Mental accounting*: First proposed by Thaler (1985), this theory suggests that investors divide their investments into separate mental accounts based on various categories. Each account has specific objectives, aiming to maximize returns while minimizing risk. However, this approach may lead to the selection of less profitable portfolios that satisfy emotional preferences.
- 8. Overconfidence: This phenomenon arises when individuals display a high level of optimism regarding their trading outcomes and believe that the information they possess is sufficient for making sound investment decisions. However, they tend to overlook the potential risks and overestimate their own capabilities, which can lead to substantial losses in the future.
- 9. *Present Bias*: This concept, as described by O'Donoghue & Rabin (1999), pertains to the inclination among individuals to place a greater emphasis or value on outcomes or benefits that are imminent or closer in time, as opposed to those that are further into the future.
- 10. *Recency*: Investors' decisions are influenced more by recent events in the news, while they may neglect older information that could be relevant for their decision-making process.
- 11. Regret aversion: Introduced in various papers by Loomes and Sugden (1982), Bell (1982), and Fishburn (2013), regret aversion refers to the significant impact of regret about past decisions on future decision-making. Investors may become more risk-seeking or risk-averse to avoid potential future regrets.

- 12. *Self-attribution bias*: Developed by Bem (1967, 1972), this bias describes the tendency of individuals to attribute their success to their own abilities and efforts while blaming failure on external factors or the actions of others.
- 13. *Temporal Anchoring*: Introduced by Tversky and Kahneman (1981), anchoring bias describes how individuals anchor their judgments and subsequent decisions to initial information they receive. This can lead to a biased decision-making process based on past information.

STUDY METHODOLOGY

Defining the Research Problem

The essence of scholarly work lies in identifying a clear research problem. This chapter is crucial in the thesis because it outlines the specific challenge under study, forming relevant questions and selecting the appropriate research methods.

This study focuses investment decision-making at *Amundi Asset Management*, a leading player in the financial world. Amundi constantly refines its investment strategies for consistent growth, even though investment decisions are complex and influenced by many factors, including mental shortcuts. The study will investigate the time perspectives used by Amundi and its main decision-makers, as time is crucial in investment decisions. A case study approach will be utilized a case study approach, focusing on Amundi's investment strategies, particularly in Mergers and Acquisitions (M&A). A qualitative design will allow for an in-depth analysis of decision-making processes and instances where time perception biases might occur. This method seeks to understand the perspectives and decision-making routes of key players at Amundi. Through collecting detailed and contextual data, the goal is to discover insights beyond just statistical findings. The main data collection will come from semi-structured interviews with *Giorgio Gretter* (Head of the Strategy Department) and two other Analysts, all of whom are central to investment decisions¹⁸.

The research aims to enhance knowledge in behavioral finance, emphasizing the role of time perception in investment choices. The results will be valuable for investment professionals, corporate strategists, and key decision-makers, acting as a guide to address biases and make informed investment decisions.

Research Methodology Overview

Kothari (2004) offers a nuanced perspective on *research methodology*, describing it as the distinct combination of techniques and procedures tailored to address specific research challenges in a designated domain. This perspective differentiates between individual research methods, which focus on data analysis techniques, and research methodology, which adopts a more holistic view. The broader scope of research methodology isn't limited to the methods but delves into the rationale behind employing these specific strategies for the research problem.

Building upon this, Kothari underscores the differences between research methods and research methodology. He highlights that while the former pertains to specific instruments and procedures, the latter delves into the

¹⁸ See paragraph "Analysis of the Sample"

logical reasoning supporting these techniques. Methodology bridges the gap between the method's practical application and the underlying philosophical prerequisites that inform method selection. It is a bridge that links the techniques to their objectives, ensuring they are both apt and in sync with the research's foundational goals and principles.

For a more structured approach to choosing relevant strategies to address the research concern, one can look towards the *research onion model* proposed by Mark Saunders, Philip Lewis, and Adrian Thornhill (2015). Illustrated in Figure 1, this model offers a layered blueprint for research design. Each segment of the onion denotes a specific facet of the research process that requires careful consideration and decision-making. This framework assists researchers in systematically evaluating diverse aspects of research design, such as research philosophy, approaches, strategies, choices, timeframes, and data collection methods.

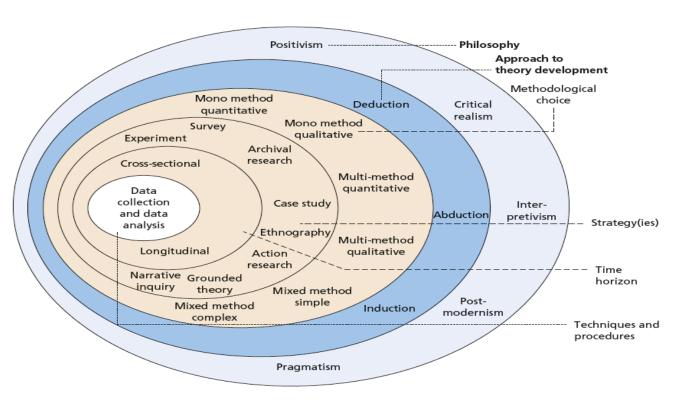


Figure 1: The Research 'Onion' Model (Saunders, Lewis, and Thornhill, 2015)

The research onion acts as a structured framework, guiding researchers in addressing predefined research inquiries. This model emphasizes thorough consideration of each facet of the research process. Utilizing the research onion ensures an in-depth comprehension of the research methodology, adapted to the intricacies and specificities of the research concern. Each segment of the onion will be methodically explored, paving the way for a comprehensive research design that promises credible and nuanced outcomes.

Research Philosophy

Saunders and his colleagues described research philosophy as a foundational system of beliefs and principles that a researcher adopts to further knowledge. Drawing from Burrell and Morgan's insights (2016), the authors stress that researchers inevitably make assumptions at various phases of their projects, and these guide the research's trajectory.

The authors highlight three assumptions for researchers:

- 1. Ontological Assumption: This relates to the research's contextual reality. It challenges the understanding of what is real and how this reality is perceived.
- 2. Epistemological Assumption: Concerning knowledge's nature and its conveyance, this assumption evaluates the nature of legitimate knowledge and how it's relayed to an audience.
- 3. Axiological Assumption: This delves into the place of values and ethics in research, scrutinizing how researchers' personal beliefs play into their studies, and whether they opt for impartiality or embed their predispositions.

Heron (1996) emphasized the important role of human values, suggesting that values influence every action, inclusive of research activities. Thus, values not only shape the research trajectory but are intrinsic to all human undertakings.

Building on these foundational assumptions, for this specific research, the chosen philosophy is *Interpretivism*. As delineated by Saunders et al., Interpretivism stresses the importance of discerning socially crafted interpretations by individuals. It endeavors to understand the milieu of human interrelations. This viewpoint is optimal for assessing individual perspectives, beliefs, and actions within a defined context. Unlike methodologies focusing on objectivity or broad principles, Interpretivism acknowledges the distinctive and intricate nature of human experiences. It promotes a profound comprehension of people's interpretations of their surroundings. Given this study's focus on time perception in investments, this approach offers intricate insights, capturing the intricacies of human thought processes and actions. It understands that individual perceptions are influenced by societal norms and contexts and aims to interpret these insights accordingly. Thus, selecting Interpretivism complements the research's aim to delve into time's perception in the investment landscape.

Research Approach

Delving deeper into the research onion, it's now the moment to analyze the research approach. Ragab and Arisha (2018) highlight two primary research strategies: Deductive and Inductive. For the purposes of this study, the *Inductive* approach has been chosen.

As the authors describe, the inductive method, sometimes known as the "bottom-up" strategy, begins by immersing oneself in the foundational details derived from observation, leading to subsequent theoretical development. Instead of commencing with a predetermined hypothesis or theory, this method dives straight into an intricate examination of the data, often sourced from interviews.

In this investigation's framework, the Inductive method involves an in-depth analysis of interview-based data without the constraints of any pre-set theories or hypotheses. This flexibility facilitates the spontaneous emergence of insights, capturing the genuine sentiments and views of the participants.

Furthermore, the inductive approach shines when a study is committed to deeply probing a singular case, bypassing the need to extrapolate findings to a wider group. This approach aligns seamlessly with the research's objective, which emphasizes capturing intricate perceptions of time in investments from a select group of respondents. Recognizing the distinctiveness of each participant's experience, the approach endeavors to faithfully capture and represent these idiosyncratic perspectives, offering profound insights into the subject at hand.

Methodological choices

Advancing through the research onion, there is a transition to the realm of methodological decisions. As Kothari (2004) elucidates, research methods are the distinct techniques and strategies implemented in the research journey, acting as vital components of the overarching research methodology. Ragab and Arisha (2018) advocate for the harmony between the choice of research methods and the foundational beliefs, philosophies, and strategies that steer the research.

Three broad categories encapsulate research methods: quantitative, qualitative, and mixed. For the purposes of this investigation, it has been decided to employ *Qualitative* methods. This choice stems from the natural alignment of qualitative techniques with both the interpretivism philosophy and the inductive approach, which are pivotal to the study.

Williams (2011) provides insights into qualitative methods, highlighting their emphasis on personal narratives over numerical evaluations. By prioritizing interpretive analysis and a deep dive into the data, qualitative techniques aspire to deliver a more layered and intricate understanding of the topic under consideration.

Moreover, the preference for qualitative methods resonates with the study's exploratory spirit. Distinct from the quantitative counterparts that might limit perspectives to statistical data, qualitative techniques champion the uncovering of fresh perspectives and the cultivation of original theories. Such a choice facilitates an agile and reflexive interaction with data, deepening the grasp on inherent patterns and themes present within.

At its core, the adoption of qualitative methods dovetails with the prime directive of this research—to decode and construe individual narratives and viewpoints. By spotlighting individual stories and steering clear of

stringent numerical evaluations, the research is primed to navigate the intricacies of the topic, promising richer insights. This methodological route complements the interpretivism philosophy and ensures the research remains receptive and attuned to the distinctiveness of the data, magnifying the depth and veracity of the ensuing analysis.

Research Strategy and Time Horizon

Venturing deeper into the layers of the research onion, it's now the turn of the research strategy. Lewis et al. (2015) define research strategy as a structured, progressive blueprint directing the resolution of the research quandary. Within the purview of this specific inquiry, the *case study* technique has been chosen as the optimal strategy.

The gravitation towards a case study resonates with the aspiration to intensely probe the strategic investment dynamics of Amundi Asset Management. Contrary to other strategies that might offer a panoramic perspective, the case study method zooms in on a solitary entity, dissecting the subject in its authentic, real-life milieu. Such an approach is primed to meticulously unpack the investment rationale and temporal insights intrinsic to the firm, rendering a holistic and profound comprehension of the research topic.

Employing a case study empowers the researcher to immerse deeply into the nuanced intricacies of the focal entity, in this scenario, Amundi Asset Management. This lens facilitates a dual vision: capturing overarching themes while simultaneously spotlighting intricate details. This technique is architectured for probing, interpretative scrutiny and boasts inherent versatility, acclimatizing seamlessly to the idiosyncrasies of the case.

Moreover, it's pertinent to highlight that the inquiry adopts a *cross-sectional* temporal lens, steered by time-related considerations. Cross-sectional studies concentrate their exploration on a singular temporal juncture, sidestepping the extended duration inherent in longitudinal analyses. While this might curtail the scope to trace evolutionary trajectories over time, it dovetails with the logistical contours of the research. This approach is synchronized with the ambition to furnish a detailed portrayal of the contemporary landscape of strategic investment undertakings within the organization.

Data Collection and Analysis

At the heart of the Research Onion, data collection and interpretation stand out as essential steps to derive insightful conclusions and tackle the research question. For this purpose, the study will involve in-depth

interviews with Mr. Giorgio Gretter and other analysts from Amundi Asset Management's Strategy

Department.

The interviews will be conducted in a *semi-structured* setting, creating an environment conducive to a deep

exploration of views and experiences, especially regarding the influence of time biases in investment

decisions. The qualitative nature of these interviews ensures the capture of nuanced insights, enhancing the

understanding of decision-making processes. During the analysis stage, the research will employ thematic

analysis. This approach emphasizes the identification of recurring themes and emerging stories within the

interview data. To achieve this, a rigorous data coding and organization will be done, shedding light on the

influence of time perceptions on investment choices.

Thematic analysis aligns well with in-depth qualitative data. This method requires a deep dive into the content

and context of the information, allowing for a better understanding of the research topic. Through this

approach, the analysis aims to capture the complexity of the conversations, highlighting the role of time-related

factors in Amundi Asset Management's decision-making.

In essence, the research framework guides this study, from overarching philosophical principles to detailed

data collection and analysis methods. The blend of interpretive approach, qualitative focus, case study method,

and thematic tools has been carefully chosen to meet the research goals. Within this framework, the goal is to

uncover the intricacies of time considerations in strategic investment decisions at Amundi, aiming for results

that are both insightful and relevant.

Having clarified the research methodology, the next section will offer an overview of Amundi Asset

Management, setting the stage as the research delves further into its journey.

Company Overview: AMUNDI

Amundi has earned a solid reputation as a reliable partner for its clients, based on its strong beliefs and the

way it operates. Founded in 2010, Amundi, now managing an impressive 1904 billion euros worth of assets¹⁹,

has changed the investment world by always putting its clients first. A closer look at this key value shows the

smart tactics and strategies that helped it become Europe's leading asset manager and ranks among the world's

top 10^{20} .

¹⁹ Amundi data as at 31/12/2022.

²⁰ Source: IPE "Top 500 Asset Managers" published in June 2022, based on assets under management as at 31/12/2021.

- 33 -

Amundi's Financial Footprint

In 2022, Amundi showed impressive financial results, even when faced with tough market conditions. When taken a closer look, several important successes and promising future plans become evident.

Amundi managed assets worth 1904 billion euros, with 800 billion euros aimed at responsible investments. These big numbers not only show their market presence but also their commitment to trust, long-lasting relationships, and responsible investing.

Even when the global market saw more money leaving than coming in, Amundi had a positive inflow of 7 billion euros in 2022²¹. They saw impressive growth in areas like Retail (an increase of 10 billion euros) and medium- to long-term assets (an increase of 8 billion euros). This shows that their specific strategies worked well, even when the larger industry faced difficulties.

The company's profits remained strong, with a net income of 1.2 billion euros, almost the same as 2021. In fact, ignoring the one-time high-performance fees from the previous year, it's clear that the basic business is doing well. Keeping steady in a tricky market environment shows their smart strategy and aligns with their 'Ambitions 2025' plan.

Adding Lyxor to the group was another big win, finished in under nine months. This quick and smooth addition shows how well Amundi can bring in new companies to add value. Their ability to merge well and quickly shows they're nimble and smart in their decisions.

In terms of share prices, Amundi's resilience stood out (Figure 2). While the share price dropped to €53 by the end of the year, a 26.9% decrease from 2021, it was similar to what other companies in the industry experienced. The year saw prices drop and then bounce back, much like the overall economy. Their reactions to slower rises in interest rates and lesser worries about a recession show their ability to adjust to bigger economic shifts.

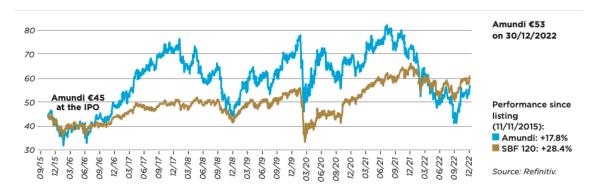


Figure 2: Change in Amundi's Share Price²²

²¹ Adjusted data: exclude the amortisation of the intangible assets, the integration costs related to Lyxor and, for 2021, the impact of Affrancamento.

²² Comparison with the SBF 120 index (recalculated on the basis of the share price)

Looking forward, the plan for 2025 aims to strengthen their leading position in asset management. They'll focus on natural growth, varied expertise, the latest technology, service abilities, and looking for more acquisition chances. The plan to generate an extra €2 billion in capital over this time frame shows a future-oriented strategy focused on good returns for shareholders.

Navigating Amundi's Future Trajectory

Amundi's future plans are clear from their recent announcements. These plans are a roadmap to continue the company's success and expand its lead, especially when it comes to joining with other companies and forming partnerships, with a keen eye on Asia.

There are four main themes in Amundi's strategy:

- 1. Strengthening Leadership in Asset Management: The aim here is to grow across all customer groups, using all their knowledge and skills. A key goal is to make a stronger mark in the U.S. and be among the top in Asia. Their focus on Asia is important because it's a growing market with a lot of different economies. They're setting a target to manage €500 billion in assets there, showing they're seriously committed to this region.
- 2. *Leading in Responsible Investment*: Amundi has always been dedicated to doing business responsibly. Their modern approach links financial success with doing good in society. They're lining up with big global goals, like the Net Zero 2050 target, and making this a part of everything they do.
- 3. *Becoming a Top Tech and Services Provider*: With the finance world changing, Amundi wants to be at the forefront of technology. By aiming to grow their tech side and looking at new trends in how products are sold, they're showing they're thinking about the future.
- 4. Focusing on Mergers and Acquisitions (M&As): Joining with other companies is a key part of their strategy, and they've done well with this in the past, like with Lyxor. They're looking for more opportunities to grow, use more expertise, and speed up their use of technology and services. They're careful with this, making sure any new deals will give them a good return on their investment.

What's more, M&As tie in with how they approach partnerships. They understand that in today's world, working together is essential. By forming partnerships, especially in places like Asia, they can better understand local needs, work with regional goals, and offer products that local customers will like.

Amundi's Position in the Global Finance Landscape

Amundi, being one of the top asset managers globally, finds itself influenced by various factors that play a role in the investment world. Looking at Amundi through a *SWOT* (Strengths, Weaknesses, Opportunities, and Threats) analysis helps understand its standing in the intricate world of global finance.

- Strengths: Amundi's vast reach in major markets like Europe, Asia, and North America is a big plus. Their global network isn't just about being everywhere; it's also about truly understanding the unique nature of each region, which boosts their trustworthiness. A track record of responsible investment emphasizes their reliability. Furthermore, having different lines of business reduces their risks and ensures several ways to earn. The acquisition of Lyxor was more than just a business move; it strategically boosted their efficiency and widened their offerings.
- Weaknesses: Every company has areas to improve, and for Amundi, market volatility is one. The financial market's natural ups and downs can significantly affect their results, which is a challenge for many in the asset management field. Additionally, while they have a broad global presence, they still have a high exposure to Europe. This means regional economic issues could affect them more than if they were more spread out.
- *Opportunities*: The future looks bright with emerging trends. People's increasing interest in responsible and sustainable investments is an area Amundi can thrive in, especially with their existing range of ESG offerings. Moreover, expanding to newer markets, especially in Asia and North America, can be a growth booster. With the help of technology, they can potentially reshape their customer interactions and service delivery, meeting the changing demands of today's investors.
- Threats: But challenges are also present. The asset management field is competitive, regulations could get tighter, and market shifts can affect results. Strong competition pushes the need for ongoing innovation and better marketing approaches. Changes in regulatory standards might mean higher costs and a tighter watch on risk and compliance. The ever-present market changes can shift the financial landscape in unpredictable ways.

In essence, this SWOT analysis isn't just a simple breakdown; it provides a dynamic view of Amundi's position in a world that's always in flux. It's a balanced look at the company's strong points, areas of caution, potential growth spots, and challenges. It's about understanding that Amundi's journey ahead will be influenced both by its internal decisions and the outside world.

Diving deeper than the earlier SWOT exploration, *Porter's five forces* provide a closer look at Amundi's position amidst its competition. This systematic method paints a vivid picture of the pressures and potentialities in the asset management sector.

- 1. Threat of New Entrants: While Amundi enjoys a strong foothold in the asset management arena, fortified by their longstanding expertise and reputation, new competitors can still make their mark. Entry barriers, including significant capital needs, niche skills, and robust distribution channels, deter many. But the shifting sands of innovation, technology, and appealing products can birth new adversaries. Regulatory landscapes also play their part in shaping this threat. While Amundi's reputation and reach certainly mitigate the risks, complacency is not an option.
- 2. Bargaining Power of Suppliers: A multitude of suppliers, like tech solutions, market data, and liquidity services, pepper Amundi's operational landscape. Their leverage with these suppliers isn't black and white. Amundi's stature allows for some clout, but reliance on specific suppliers can become Achilles' heels, especially if market dynamics take unexpected turns. It's a balancing act between power and dependency.
- 3. Bargaining Power of Customers: Amundi's clientele is as diverse as it gets—from private banks to pension funds. Their bargaining strength oscillates based on size, strategic value, and available market options. But the asset management realm has an inherent stickiness to it, with customers finding it cumbersome and costly to hop between managers. This, coupled with trust and long-standing partnerships, puts Amundi in a somewhat comfortable spot, ensuring customer retention.
- 4. *Threat of Substitute Products*: The asset management sector doesn't face high product substitution risks. Yes, investments come in various forms, but the sector's distinct expertise and consistent performance over time make it hard to replace. But, the sector demands vigilant eyes, always on the lookout for emerging market shifts.
- 5. *Intensity of Rivalry Among Competitors*: The asset management sphere is no stranger to intense competition. With a myriad of global and regional players battling for market share, the industry remains on its toes. Performance, reputation, and innovation are just a few of the many variables in play. The industry's squeezed margins, due to external pressures like low-interest rates and rising tech and regulatory costs, only intensify the rivalry. Standing out in such a climate requires not just differentiation but also rapid adaptation to changing needs.

Wrapping Up, Amundi navigates a world rife with intricate dynamics, shaped by these powerful forces. Their renowned status offers certain protections, but the volatile nature of the industry demands an unyielding drive to innovate and evolve. For Amundi, the road ahead is paved with both challenges and opportunities; their resilience and adaptability will determine their journey's success.

Designing the Data Collection

Analysis of the Sample

In selecting interviewees for this study on Amundi Asset Management, particularly focusing on the influence of time on their decision-making and the associated biases, it was crucial to involve individuals with in-depth understanding and firsthand experience. *Giorgio Gretter*, with his role as the Head of Strategy at Amundi Asset Management for over ten years, naturally emerged as a key participant. His tenure has granted him extensive experience and insights about the organization's strategic direction and growth initiatives.

Gretter's department comprises a total of five individuals, including him. While he is at the helm of strategy, the other members include an intern and three analysts. One analyst chose not to participate, and the remaining two analysts, who wished to remain anonymous, will be referred to as *Analyst 1* and *Analyst 2* throughout the study. Both analysts have offered substantial contributions to the strategic functions of Amundi Asset Management.

In his role, Giorgio Gretter has been at the forefront of Amundi's external growth strategies, managing vital aspects such as acquisitions, partnerships, and joint ventures. His leadership has been instrumental in guiding the company's growth. Moreover, he has played a vital role in shaping and maintaining Amundi's overall strategy, ensuring its consistency and pertinence during various market fluctuations. His influence has been foundational in navigating the company through the multifaceted dynamics of the financial industry.

On the other hand, Analyst 1 and Analyst 2 have provided valuable input and support throughout various projects under Gretter's leadership. Their involvement has been particularly noteworthy in Amundi's internal strategic projects, demonstrating their extensive understanding of the company's operations. Both have a capability to interlink different strategic components of the organization, providing insights that are both comprehensive and nuanced.

Given the focus of this study, the participation of Gretter and the two analysts is invaluable. Their collective experience in both external and internal strategic facets of Amundi, coupled with their awareness of the temporal biases in investment decisions, presents a diverse and profound viewpoint. Their combined inputs promise to enhance the richness of this study, offering a multifaceted examination of strategic investment processes within Amundi Asset Management. By interviewing this trio, the aim is to capture a comprehensive yet concise perspective, elevating the overall quality and direction of this research.

The Interview Process

The interview session commenced with a brief introduction to the study for Mr. Gretter, Analyst 1, and Analyst 2. To encourage more open and comprehensive responses, certain specifics were intentionally omitted from

the introduction. Given Mr. Gretter's extensive role as Head of Strategy and the analysts' hands-on experience with various projects, they provided diverse viewpoints. These insights illuminated aspects such as external growth operations, acquisitions, and the evolution of Amundi's strategy over time.

By recording the conversations, the future access to their insights got facilitated, streamlining also the transcription process. This precaution not only acted as a data preservation measure but also fostered a deeper interaction, leading to a multifaceted understanding of the factors influencing investment choices and time-related biases within Amundi Asset Management.

The inquiries were designed to probe into their perceptions of the company's culture, guiding principles, and strategic orientations. Their detailed answers revealed the alignment between investment approaches, time perspectives, and existing biases, offering insight into the underlying investment philosophies.

The semi-structured format of the interviews allowed for spontaneous exchanges. Often, Mr. Gretter, Analyst 1, and Analyst 2 would provide insights even before certain subjects were specifically raised. Their collective experiences added depth to the discourse, shedding light on both particular events and broader strategies pursued by the Strategy department.

Opting for a qualitative interview style ensured a comprehensive exploration of the core themes, producing a nuanced account that resonated with the research objectives. Utilizing a thematic analysis approach, consistent themes and narratives were discerned, presenting a well-rounded understanding of time perspectives, biases, and strategic investment decisions at Amundi Asset Management. The gleaned insights set a robust foundation for a more in-depth exploration into the complex relationship between time perceptions and investment strategies, underscoring the robustness of the chosen research methodologies.

Setting the Agenda: Questions and Objectives

Below are the interview questions, accompanied by a short description detailing the objective behind each one:

- 1. Good morning and thank you for taking the time to be a part of this interview. To start, could you briefly describe your role at Amundi and share the primary objectives of the Strategy department?
 - Building a connection and providing context: By starting with a warm greeting and expressing gratitude, the aim is to create a welcoming atmosphere. This approach encourages an open dialogue, ensuring that the interviewee feels recognized and at ease throughout the discussion.
 - Obtaining foundational knowledge: By inviting the interviewee to elucidate his role and the key aims of the Strategy department, the aim is to grasp a preliminary understanding of his specific role in Amundi and the overarching objectives of his department. This fundamental

understanding will pave the way for more in-depth exploration of Amundi's strategies and future directions.

- 2. I'd like to begin by discussing the various time horizons in investment. How important is it to factor in the time horizon when making investment decisions, and how does this impact the strategies implemented by Amundi?
 - Delving into technical expertise: This query delves into the more intricate aspects of investment strategy, enabling the interviewee to showcase his knowledge about a central principle in finance: the significance of time horizons.
 - Understanding strategic rationale: This isn't merely a question about grasping time horizons but also an exploration of how these horizons shape strategies at Amundi. It offers an opportunity to discern the strategic factors Amundi prioritizes when formulating its investment choices, giving a glimpse into the organization's internal decision-making dynamics.
- 3. Can you briefly describe how Amundi approaches short-term, medium-term, and long-term investment management? What are the main distinctions in the strategies and methods applied for each time frame? What criteria are taken into account when evaluating long-term investment opportunities?
 - Breaking Down Investment Strategies by Duration: This query aims to comprehend how
 Amundi segments its investment approaches based on distinct time durations.
 - Clarifying Varied Risk Profiles: Each investment horizon, whether short, medium, or long-term, often comes with its specific set of risks. Through this question, the intent is to grasp how Amundi adjusts its risk-to-reward assessments depending on the chosen timeframe.
 - Uncovering the Decision-making Framework: Fundamentally, this question delves into the
 decision-making realm. It seeks insights on the criteria and considerations Amundi emphasizes
 when choosing its investments and how it manages varying priorities and threats when plotting
 its course.
- 4. The real options theory suggests that when a company faces significant uncertainties concerning its strategic goals, it might make a small short-term investment, adopting a "wait-and-see" stance, allowing them to adapt and adjust over time. How can this theory be applied to Amundi's investment decisions across different time horizons? And what are its implications?
 - Highlighting Flexibility in Strategy: The essence of the real options theory is to champion a
 responsive investment approach, especially amidst uncertainties. By bringing up this theory,

- this research wishes to understand if and how Amundi incorporates such flexibility in its varied investment strategies, particularly when navigating uncertain market landscapes.
- Shedding Light on Immediate vs. Distant Planning: The real options theory often requires weighing up short-term investments against potential prolonged commitments. Through this inquiry, the interviewer seeks to decipher how Amundi harmonizes its immediate actions with broader, longer-term goals, and how it might adjust its strategies based on changing market data or conditions.
- 5. How does Amundi tackle potential agency issues (meaning ensuring two types of interests are respected) in the context of acquisitions? What mechanisms and incentives are implemented to ensure that the interests of shareholders and investors are safeguarded during the acquisition process?
 - Emphasizing Governance and Integrity: By raising the issue of agency conflicts, the interviewer is pinpointing the possible divergences in interests that might surface between shareholders, managers, and other parties during acquisitions. The answer would unveil Amundi's dedication to ethical practices and its stance on corporate governance.
 - Diving into Acquisition Approaches and Ideologies: A company's method in addressing potential agency dilemmas during acquisitions can shed light on its overarching acquisition ideology. Is there a pronounced leaning towards safeguarding existing shareholders? Is the main focus on realizing the potential value an acquisition could usher in for its investors, even if that necessitates certain trade-offs? The answer might provide glimpses into the company's holistic strategy mindset.
 - Weighing Immediate Gains vs. Long-Term Vision: Agency issues often stem from conflicting timelines. While the management might angle for immediate rewards post-acquisition, shareholders may harbor a vision anchored in long-term prosperity. This inquiry subtly delves into Amundi's approach in harmonizing immediate rewards with enduring value.
- 6. How can investor expectations be shaped by the time horizon during the acquisition process? How does Amundi manage these expectations and effectively convey the potential short-term and long-term ramifications of acquisitions?
 - O Harmonizing Immediate Implications vs. Future Outcomes: Acquisitions can catalyze instant changes, like fluctuations in share prices, and protracted effects such as challenges in integrating or the realization of synergies. Through this line of questioning, the interviewer seeks to gauge how Amundi delineates and conveys this range of possible outcomes to its stakeholders.

- O Understanding Strategy Fluidity: Given that investor expectations are multifaceted and can morph over varying timeframes, it's insightful to discern how malleable and responsive Amundi's strategy is, especially in the mercurial setting of an acquisition.
- Deciphering Comprehensive Risk Management: Gleaning insights into how Amundi briefs its stakeholders on potential near-term and distant consequences can allow to infer how the firm recognizes, appraises, and addresses associated perils. This highlights the firm's holistic risk management ethos, particularly during events like mergers and acquisitions.
- 7. How does Amundi specifically define and measure the time horizon in resource allocation decisions, given that the discounted cash flow analysis and the net present value (NPV) rule might not fully capture the influence of the time horizon on such decisions? In other words, does Amundi employ specific indicators or metrics to more accurately gauge the impact of the time horizon on investment decisions?
 - Delving Deeper than Standard Techniques: The basis of this inquiry underscores the possible limitations of conventional financial instruments, such as the discounted cash flow (DCF) analysis and the net present value (NPV) rule. The interviewer is keen to discern if, and how, Amundi transcends these methods to accommodate the intricacies presented by different investment durations.
 - Balancing Academic Insights with Practical Execution: While academic finance provides a gamut of tools and methodologies, their tangible application often mandates tweaks and alterations. The interviewer is curious about how Amundi melds academic principles with real-world dynamics, ensuring that its investment actions are both theoretically robust and practically efficacious.
- 8. What are the primary behavioral factors that might influence Amundi's investment decisions during the acquisition process, considering the given time horizon? How might these behavioral elements sway the evaluations and choices concerning acquisitions made by Amundi?
 - Understanding Vulnerabilities: Every organization, no matter how data-driven, is susceptible to behavioral biases. By asking this, the interviewer wants to understand which biases might be more prevalent in Amundi's acquisition process and how they are managed or mitigated.
 - Assessing Long-Term Strategy Alignment: Different time horizons might be more prone to different behavioral biases. The question, by linking behavioral factors with time horizons, aims to understand how Amundi ensures that its long-term and short-term strategies are not adversely affected by these biases.

- Evaluating Self-awareness and Continuous Improvement: An organization's acknowledgment of its potential behavioral pitfalls is a testament to its self-awareness. The interviewer seeks to gauge Amundi's level of self-awareness and its commitment to continuous improvement by understanding, acknowledging, and managing these biases.
- 9. Now talking about biases. I will name a few biases that can develop in relation to investment choices over time, and I would like to ask you briefly to tell me if these can influence Amundi's decisions regarding, for example, acquisitions, and what strategies or measures are adopted in order for there to be impartiality and objectivity: Overconfidence; Confirmation bias; Anchoring; Temporal myopia
 - O Identification of Specific Biases: The question presents a list of biases, from overconfidence to time-related biases, to pinpoint the psychological pitfalls that may sway Amundi's decisions. This specificity provides a structured framework for the interviewee to address each bias, giving clear insights into Amundi's awareness and management of these cognitive pitfalls.
 - Unveiling Amundi's Cognitive Guardrails: By asking how Amundi counters these biases to
 ensure impartiality and objectivity, seeking therefore to uncover the mechanisms, tools, or
 strategies that Amundi employs. This gives a window into Amundi's commitment to evidencebased, rational decision-making.
 - Exploring Time Perception: With biases like temporal anchoring and temporal myopia mentioned, the question also touches upon how Amundi perceives and incorporates time into its decision-making process. This is crucial in investments where different time horizons can significantly influence outcomes.
- 10. Finally, could you share some concrete examples of how Amundi has successfully managed investments over different time horizons? What were the challenges faced and what were the strategies adopted to optimise short- and long-term returns?
 - O Demonstration of Practical Application: By seeking concrete examples, the interviewer wants to move beyond theoretical or generalized responses. This question aims to gauge how Amundi's investment strategies have been put into actual practice over different time horizons.
 - O Judging Foresight and Planning: Asking about the strategies that optimized both short-term and long-term returns lets the interviewer assess Amundi's foresight, planning, and strategic execution. It indicates whether Amundi can balance immediate rewards with sustained, long-term growth.
 - o Exploring Reflective Abilities: The way Amundi reviews its past actions, both in terms of successes and challenges, can provide a glimpse into its organizational learning culture.

Companies that reflect on and learn from their past are often better positioned to innovate and adapt in the future.

Hypotheses

In the quest to understand the nuances of investment decisions related to time, the research questions were outlined to guide this exploration. For now, the focus is on the hypotheses that shape this investigation.

- Research Question 1: How do Time Horizons influence investment decisions?
 - Hypothesis 1A: Longer time horizons in investment decisions are likely to be associated with a
 greater acceptance of short-term volatility and lower immediate returns, anticipating more
 significant long-term gains.
 - Companies often view long-term investments as an avenue to yield substantial rewards over time. Recognizing that immediate returns might be subdued, they diversify portfolios to find an equilibrium between current profitability and potential future growth. The principle is rooted in the idea that patience in the face of short-term fluctuations can pave the way for more extensive gains in the future.
 - Hypothesis 1B: Shorter time horizons might drive companies to favor investments that promise swift returns, possibly compromising future sustainability or growth.
 - The urgency attached to shorter timeframes may steer companies toward ensuring immediate success. This is frequently influenced by pressures to satisfy shareholders, manage operating expenses efficiently, and secure immediate profitability, often at the expense of future prospects.
- Research Question 2: What strategies are deployed to manage the variable of Time Horizons?
 - Hypothesis 2A: Companies might employ a blend of organic growth strategies and external acquisitions to create a well-rounded investment portfolio.
 - Organic growth, due to its inherent gradual pace, is often perceived as more apt for long-term horizons. It allows companies to steadily build and expand over time. In contrast, acquisitions present an avenue for swift expansion or profitability, catering to immediate needs and shorter horizons.

Hypothesis 2B: To handle biases and promote objective investment decisions across varied time horizons, companies might incorporate diverse teams into the decision-making process.
 A varied set of perspectives can challenge pre-existing notions or biases. By inviting multiple viewpoints into the conversation, companies aim to ensure decisions are not only rational but also aligned with overarching strategic objectives.

As this study progresses, the expectation is that the interactions with industry experts could provide deeper insights into these conjectures. These discussions will help elucidate how real-world decision-making correlates with the initial hypotheses. Through this endeavor, the goal is to present a comprehensive insight into the complex interplay between time horizons and investment strategies.

Data Manipulation

To achieve a holistic grasp of the information present in the data, specific modifications were considered essential. Initially, this modification process involved filtering out commonplace verbal fillers and colloquialisms like "umm" and "yeah." These verbal elements, while natural in spoken language, can introduce noise and ambiguity into the dataset. Additionally, the data underwent rigorous pruning to eliminate any repetitious or superfluous information that did not add substantive value to the overall analysis.

These meticulous preparatory measures ensured that the dataset was not only clear and succinct but also primed for more intensive exploration and analysis. By stripping away the extraneous elements, the data was distilled to its most pertinent components, enabling researchers to delve deeper and with greater precision. This streamlined dataset allowed for a more focused and efficient examination, ensuring that the analysis was grounded in the most relevant and valuable information. Consequently, this paved the way for the extraction of significant insights and discernible patterns, ultimately facilitating more robust conclusions and enabling well-informed decision-making processes.

RESULTS

In the journey of this thesis, another important stage has now been reached: presenting the results. This chapter unveils the findings gathered from the in-depth interviews and discussions.

Data Description and Analysis

Amundi's strategy department, led by Mr. Gretter, plays a huge role in orchestrating the company's growth through external operations like acquisitions, partnerships, and joint ventures. Interestingly, while the primary focus is on such external growth ventures, a minor yet consistent part of their role centers on outlining Amundi's strategy, which has remained "largely consistent over the years", as stated by Analyst 2. In addition, their more recent endeavors include overseeing Amundi's significant internal strategic projects.

Importance of Time Horizons in Decision Making

At the core of investment management, different time horizons are always under study. Short-term horizons satisfy the company's immediate profitability while feeding crucial areas such as employees' remuneration, shareholder dividends, and generating resources for future investments. An interesting point raised during the interview is the sequential link of these horizons: short-term profitability often sets the stage for medium to long-term investments, ensuring the continuous growth and cash flow generation of the company.

Mr. Gretter and Analyst 1 introduce an interesting concept while discussing medium to long-term investments, noting that they often depict a "J" curve. This essentially means such investments might initially exhibit negative or very low profitability, but if well-executed, they promise substantial future returns. The underlying theory behind this observation is the classic risk-return tradeoff. Higher risk, as represented by the initial potential dip in returns, is often associated with the possibility of receiving higher future returns.

But the challenges for a mature company like Amundi don't stop there. The interview reveals the inherent difficulties mature companies face, especially those with portfolios reliant on traditional business models. Mr. Gretter sheds light on this when mentioning the declining margins in Amundi's traditional Asset Management activities, necessitating the pursuit of newer growth avenues like technology, ETFs, and private assets. He states, "... our traditional asset management activity has been witnessing margin erosion for years."

While these new growth areas demand resources, they might not offer immediate profitability, underscoring the importance of strategic diversification. Drawing upon theoretical knowledge, diversified portfolios, especially in mature companies, help strike a balance between immediate cash flow-generating activities and futuristic investments.

Allocation of Resources to Various Horizons and Strategies

At this point the interviewees categorically differentiate between organic investments and acquisition investments, emphasizing their distinct financial and accounting implications. Elucidating the realm of organic investments, Mr. Gretter delineates, "Organic growth investments involve incurring costs" for hiring personnel, IT developments, consultations, etc. These expenses reflect in the company's profit and loss statement. In theoretical terms, organic investments typically involve channeling resources internally to expand existing operations or introduce new operational facets, rather than acquiring external ventures or assets.

One profound insight offered by Mr. Gretter is the lifecycle of such organic investments. They begin with initial costs, accompanied by expectations of future revenue growth. These investments aim to eventually attain a 'break-even' point, after which they should ideally yield medium to long-term profitability at least at the same value, if not surpassing, with current levels. The objective is straightforward: to ensure that the initial investment is repaid over time through the generated profits.

But, as Gretter mentions, it's not just about pouring resources into investments. There's a keen art and science to it: " Of course, the management of these costs must be measured". Adding more costs without strategy impacts short-term profitability. This sentiment resonates with the classic investment theory that emphasizes the delicate balance between risk and return. Every investment decision is a weighing scale of potential returns against the risks and costs associated.

Amundi's approach to such decisions is methodical. They analyze all available investment opportunities, define a budget for future growth initiatives, and allocate resources accordingly. Subsequently, based on performance metrics, they might continue investing, reduce investments, or in some instances, deem an initiative a mistake, close it, and bear the costs. This decision-making approach underscores a quintessential investment principle: diversification. By exploring various investment avenues, they mitigate the risk of putting all their eggs in one basket. As Analyst 1 explains, decisions revolve around analyzing available options, gauging return prospects, assessing success probabilities, prioritizing projects, and adjusting the course as future developments unfold.

Continuing the exploration of Amundi's intricate investment strategies, Mr. Gretter introduced their second approach towards external growth. As he articulated, "External growth means immediate investment of available or unavailable funds." The dynamics of such investments differ considerably from organic growth. From a theoretical perspective, external growth often relates to mergers and acquisitions where firms seek to expand their scale, diversify risks, or access new markets through the acquisition of other companies.

One striking feature of external growth is its immediate impact on profitability. As mentioned by all the 3 of the interviewees mentions, this impact is "more visible than organic growth". It's an essential distinction, because the direct visibility of external growth decisions on profitability underscores the importance of the price paid for the acquisition in relation to expected profitability. From a theoretical standpoint, this echoes the fundamental principle of investment: ensuring the price paid is less than the intrinsic value of the asset acquired to generate positive returns.

For Amundi, their financial position has endowed them with a strategic advantage. Mr. Gretter highlights their cash reserves, "we currently have a lot of cash that has a low yield because it is invested in government bonds and otherwise in money market funds. The firm's financial prudence can be understood when considering that any good investment opportunity yielding, for instance, an 8% return, would mean immediate value creation, capitalizing on the difference between the low return on their cash reserves and the higher yield from the new investment.

However, external growth isn't always funded from cash reserves. Sometimes, companies might need to raise capital or incur debt for acquisitions. Here, both Mr. Gretter and Analyst 1 bring forth the importance of comparing the investment's return with the profitability of the capital or debt acquired. It's a nod to the concept of the cost of capital in financial theory, which underlines the minimum return an investment must generate to cover the cost of funding.

Mr. Gretter encapsulates this discourse by highlighting the basic yet essential task of financial projections, emphasizing the balance between short and long-term initiatives to maintain consistent and ideally increasing profitability over time. In Analyst 1's words, "In the end these are pretty basic things."

Lastly, when probed about the probability calculations for their investments, Mr. Gretter's response provides a peek into Amundi's intuitive approach. He admits, "there is no model that tells us this project yes, because there is a 60% or 80% probability", suggesting that instead of purely quantitative metrics, Amundi relies on a blend of data analysis and management intuition – a feeling of the management based on comprehensive risk and opportunity assessments.

Decision-Making Criteria and Analytical Processes

Building upon the understanding of Amundi's investment philosophy, the conversation moved into the theoretical territory of real options. Real options theory posits that in an environment rife with strategic uncertainties, firms might choose to invest modestly in the short-term, adopting a "wait-and-see" approach, which allows them to adjust and alter their strategies progressively. At this point the inquiry centered on the integration of this theory in Amundi's decision-making, especially concerning their multi-temporal investment horizon.

Mr. Gretter's response provided an insightful look into Amundi's modus operandi. He acknowledged, "This is a philosophy that is very much applied at Amundi," implying the firm's natural inclination towards the real options approach. Matching their method with that of their bolder American counterparts, Analyst 2 in fact characterizes their competitors as the "High risk, high returns" type. Such contrasts help illustrate the spectrum of investment philosophies, with companies like Amundi at one end, characterized by incremental investments and caution, and their American counterparts at the other, exemplified by their audacious investment patterns. The reference to American competitors also sheds light on cultural and regional differences in investment behaviors. From a theoretical perspective, risk appetite is known to be influenced not just by business imperatives but also by cultural norms, regional market dynamics, and historical contexts. The "risk adverse" nature of Amundi, as described by Mr. Gretter and his colleagues, thus becomes emblematic of their prudent risk management strategy. This strategy appears to favor gradual investments, modulating them based on outcomes. As Mr. Analyst 2 puts it, they'd "we prefer to start with some resources, and if results come we add more, if not we go back." Such an approach seems pervasive, applying across different domains like technology and Greenfield projects.

Yet, with every investment strategy comes inherent implications. At this point, the note done in Mr. Gretter's interview, is that a cautious approach might lead to slower results, to which he responded: "The results in general are proportional to the level of investment made" Herein lies a universal truth of finance: risk and reward are intertwined. There's no magic formula; outcomes generally align with the level of commitment and risk undertaken. In the end, it all boils down to balancing risks against benefits.

Amundi's strategy is undeniably tied to the promise of delivering consistent profitability to its shareholders. As Mr. Gretter and Analyst 1 emphasize, the investments they pursue, even in unfavorable conditions, are meant to "continue to generate this profitability". This unwavering commitment to profitability stands as a testament to the firm's fiduciary responsibility and its adept application of real options theory.

In the continued dialogue, the focus shifted to the delicate issue of agency problems within the acquisition process. Agency problems, as posited in finance literature, arise from conflicts of interest between stakeholders, typically between shareholders (principals) and company executives (agents). This topic becomes particularly pertinent when dealing with acquisitions, where the interests of the acquiring and acquired entities might diverge.

Responding to this, Mr. Gretter outlines two general scenarios in Amundi's acquisition approach. He states, "We buy businesses and integrate them immediately" emphasizing Amundi's fast integration strategy for businesses like Lixor, Pioneer, and Sabadell. By quickly merging entities, legal frameworks, staff, and technological infrastructures, Amundi eliminates dual-entity complexities, paving the way for a unified "new

Amundi". This strategy not only simplifies operations but arguably addresses potential agency issues headon, as it allows for a seamless consolidation of interests and objectives under a single corporate banner.

Yet, not all acquisitions follow this template. Some, as Analyst 1 points out, might involve minority investments or distinct management teams left to operate autonomously. In such instances, "the way of managing relations with the company is purely contractual". By relying on clearly defined shareholder agreements and financial incentives for management, Amundi ensures that "the rules of the game " are set from the outset. Such preemptive measures, grounded in contractual obligations, serve as tools to align interests and mitigate potential agency conflicts.

Navigating from agency concerns, the interview then touches on the aspect of investor expectations. Within the realm of corporate finance, managing investor expectations during acquisitions is vital. The temporal horizon of the acquisition can significantly influence these expectations, as short-term disruptions might be perceived differently from long-term strategic gains.

Mr. Gretter's response underscores Amundi's proactive communication strategy. Being a publicly-traded company necessitates timely communication, and as he points out. By transparently sharing key metrics and acquisition details, such as the expected returns from the Lixor acquisition, Amundi affirms its commitment to transparency. This continuous engagement with stakeholders, apprising them of the company's progress and addressing potential challenges, exemplifies effective investor relations management. And as Gretter also admits, should there be any deviations, they would face the scrutiny of shareholders and analysts. This acknowledgment resonates with the broader understanding that in the modern corporate landscape, transparency isn't just an ethical imperative; it's a strategic necessity.

Delving deeper into Amundi's acquisition strategy, the next question concerns how the company specifically delineates and assesses the time horizon for acquisition decisions. The implication here is that traditional valuation methods, such as the Discounted Cash Flow (DCF) and Net Present Value (NPV), might not holistically capture the influence of the time horizon on acquisition decisions. This inquiry challenges the overarching assumption in finance that NPV, which represents the difference between an investment's market value and its cost, suffices as the sole barometer for investment choices.

Mr. Gretter's response provides a nuanced view of Amundi's approach. He delineates two scenarios: one concerning organic investments and the other related to capitalistic ones. As he mentions, "What we look at is the impact on the P&L", underscoring Amundi's primary focus on profit and loss impact for organic investments. Unlike companies that meticulously compute the return for each investment, Amundi leans towards a flexible and iterative approach. By commencing with an initial investment and subsequently adjusting based on its profitability impact, the firm harnesses a pragmatic and adaptive strategy. This methodology, as Gretter and Analyst 1 elaborates, is derived from the company's highly integrated nature

where investments, though having specific costs, invariably tap into resources widely shared across the group. Consequently, "in the end what we care about is revenues and direct costs, whether we are earning money or not", as stated by Analyst 1, becomes Amundi's mantra.

Switching gears to the financial or capitalistic investment sphere, the approach exhibits some parallels but with distinct nuances. Internal committees conduct "post mortem" evaluations, aiming to gauge the Return on Investment (ROI). The interviewees clarify this by stating, "We have a goal when we make a capitalistic investment, to have a 10% ROI within three years". ROI, a pivotal metric in finance, measures the return of an investment relative to its cost. Setting an ambitious benchmark of a 10% ROI within three years, Amundi acknowledges the inherent growth curve of acquisitions, typically experiencing a subdued ROI in the initial two years owing to yet-to-be-realized synergies.

This conversation provides a revealing glimpse into Amundi's distinctive approach, melding traditional finance concepts with the practicalities of business operations. By embracing a flexible, outcome-focused strategy, Amundi seems to be positioning itself for sustainable growth, cognizant of both immediate profitability and long-term value creation.

Behavioral Factors and Decision Biases

Navigating further into the intricacies of Amundi's acquisition dynamics, a query was introduced highlighting behavioral elements, a realm often considered the intersection of psychology and finance. Specifically, the interview probes into the predominant behavioral factors that might sway Amundi's investment decisions during acquisition, emphasizing the importance of the investment horizon.

Analyst 2's response sheds light on the multidimensionality of Amundi's decision-making. "Beyond the numbers of a business, the market context matters", he points out, emphasizing that beyond mere numerical evaluations, market context plays a vital role. Theorists in behavioral finance often highlight how market sentiment and broader macroeconomic climates can influence investor decisions, sometimes leading them to deviate from purely rational choices based on intrinsic value. In essence, Analyst 2 echoes this sentiment by emphasizing the impact of market context on risk perception when making an investment.

Another profound insight from the discussion revolves around the significance of human factors. Mr. Gretter elucidates, "The second very important thing is the people we have to work with". He underscores the importance of the management of the company they're acquiring, the potential for integration, and cultural differences. Here, he touches upon an elemental facet of M&A: organizational culture. As experts note, while financials form the skeletal structure of an acquisition, the real heartbeat lies in ensuring seamless cultural integration, as this often determines the success or failure of the entire endeavor.

Furthermore, Mr. Gretter provides a glimpse into the internal dynamics at Amundi. Recognizing the perception of their primary shareholder, Credit Agricole, and its foundational values, Amundi's strategy becomes a balancing act of aligning financial elements with inherent organizational values. This observation reinforces the significance of stakeholder management in mergers and acquisitions.

Lastly, referencing the role of Amundi's management, Mr. Gretter reflects on their capacity to integrate and develop the business, a nod to their strategic adaptability. "The human element is always taken into account," he concludes, encapsulating the essence of Amundi's holistic approach that synergistically melds financial acumen with behavioral insights.

In a continued exploration of Amundi's decision-making, the interview moved from general behavioral factors to specific cognitive biases that might influence investment choices. Behavioral finance scholars identify these biases as systematic patterns of deviation from norm or rationality in judgment, leading investors to make illogical decisions. The conversation with the Strategy Department offered valuable insights into how these biases manifest (or don't) within Amundi's acquisition strategies.

When the topic of Overconfidence was brought up, which is the undue belief in one's cognitive abilities or access to information, Gretter and both the Analysts promptly clarify: "This is definitely a bias that does not apply much to Amundi". Mr. Gretter paints a picture of Amundi as an organization that leans more towards excessive caution, which might lead them to miss out on potential opportunities. This cautious approach contrasts significantly with the overconfidence, often responsible for decisions grounded more in belief than empirical evidence.

Next, the Confirmation Bias is addressed, which is the tendency to seek, interpret, and remember information that confirms one's pre-existing beliefs. The interviewees all acknowledge the human element in such biases, noting that there might be an inclination to emphasize positive signals or downplay negative ones, especially when there's a strong desire to clinch a deal. However, Gretter assures that Amundi's checks and balances, especially their intrinsic prudence, act as a counterbalance.

As for Temporal Anchoring – relying on past valuations or specific time reference points for investment decisions – they admit this is a natural inclination. Historically, investors have often looked at past performance as a yardstick, even though it's no surefire predictor of future results. Gretter's remark, "no one has a crystal ball" encapsulates perfectly the uncertainty that defines investment landscapes.

The interview also touches upon Temporal Myopia Bias, the propensity to focus on short-term outcomes at the expense of long-term implications. The interviewees all conceded the presence of this bias, given the emphasis on achieving a 10% ROI within three years. In addition to this, Analyst 2 alludes to challenges in investing in high-growth businesses, especially in Tech, where longer horizons are essential given the distinct nature of tech investments compared to Asset Management.

Finally, a comprehensive understanding of how Amundi ensures rationality in its investment evaluations was studied. Mr. Gretter's assertion, "Well, our role is to try to do as much factual analysis as possible and have as little bias as possible" underlines the firm's commitment to factual analysis. He portrays Amundi as an entity striving for utmost rationality, challenging and keeping in check any potential biases from influencing investment decisions.

In essence, while Gretter recognizes the presence and potential pitfalls of certain biases, he emphasizes the countermeasures, processes, and culture within Amundi that act as bulwarks against irrational decision-making. This dialogue offers a nuanced look into the delicate interplay between human psychology and financial pragmatism within the realm of acquisitions at Amundi.

Mechanisms for Rational Evaluation

In this segment of Mr. Gretter's interview, the discourse turns towards a topic that is trending in the modern digital age: Artificial Intelligence (AI). With the permeation of AI in various sectors, the interview probes into its integration within Amundi's operations, highlighting the potential of AI as a tool for more objective analysis. This line of questioning underscores the ongoing debate in the financial world about human intuition versus machine precision.

Gretter breaks down his response into two components. On one hand, he acknowledges ongoing AI initiatives, noting, "I know IT is working on a test on artificial intelligence", but he emphasizes that these are oriented towards Amundi's core business, including third-party investments.

Delving deeper into AI's mechanics, he underscores the foundation of AI on statistics and patterns. "I know that it is based on statistics, so that the more data-points there are, the more a pattern is drawn" he explains. In simple terms, AI thrives on vast amounts of data from which it discerns patterns, thereby enhancing its decision-making capabilities. This statistical approach is in contrast to Amundi's bespoke strategy where every deal and analysis is unique. Gretter elaborates, " every deal and every analysis is ad hoc ", hinting at the importance of individualized evaluations for investments.

The focus of Mr. Gretter's argument lies in the non-repetitive nature of Amundi's operations. Unlike AI, which learns and evolves from historical data and repeated patterns, Amundi's decision-making demands a fresh perspective for each potential investment. As he puts it, "we must not repeat what we have done in the past". Such a strategy entails that each company, each potential deal, warrants a tailor-made analysis, far from the statistical generalizations that AI offers.

Highlighting the scale of operations at Amundi, he points out that they do not engage in thousands of acquisitions annually, but rather, "there are like 1 or 2 projects a year launched." This low volume further amplifies the challenge of applying AI in their particular context.

In essence, while the age of digital transformation brings AI to the forefront, its application in sectors like that of Amundi remains nuanced. Gretter's insights provide a candid view of the balance between technological advancements and the need for human intuition in financial decision-making.

In the concluding section, the interview dived deep into Amundi's investment strategies, particularly how they've handled various investments across different time frames. The Analyst's insights provide a revealing look into the complexities of investment decision-making.

Analyst 1 shared that Amundi's portfolio has a mix of different kinds of investments: big ones that are fully integrated, medium ones that are somewhat separate, and small test investments. He pointed out that the larger, integrated investments have been more predictable. They typically run for "12, 18 months", and due to synergies and successful integrations, they've seen good returns both in the short and medium-term. As he expressed, these fully integrated investments have generally been "good short-term and medium-term investments".

However, not all investments follow this smooth path. Some of their smaller 'test' investments have been riskier and less certain. Some of these didn't pan out, leading to the company having to pull the plug and close them down. Analyst 2 openly admits, "In some cases they really went wrong". The strategy in these cases seems to align with the concept of 'stop-loss' in finance – cutting losses to prevent further financial drain.

Additionally, Analyst 1 also shed light on another strategy where Amundi took minority stakes in companies. They hoped to market these companies' products. But if the commercial interests faded, Amundi would sell off its stake, sometimes even at a profit. Gretter highlights a fascinating distinction: an investment can be financially successful (yielding a profit) while the underlying business project fails. This resonates with the idea in investment theory that return on investment (ROI) and the success of the underlying asset can be two different things.

Ultimately, Mr. Gretter shares a pragmatic view on investments. They don't always go as expected. The real challenge, as he puts it, is recognizing when to say enough is enough and cut one's losses. Decisions hinge on a mix of initial expectations, market conditions, personnel factors, and more.

To sum up, the interviewees' insights underline the multifaceted nature of investment decisions. While theoretical knowledge provides a foundation, real-world decisions often involve navigating a maze of uncertainties, requiring both acumen and adaptability.

Deciphering the Coding Process

It's essential to understand that this approach to decipher these results is qualitative, which means the focus is on understanding patterns, themes, and narratives rather than crunching numbers. In the subsequent sections, the research will delve into the process of coding, a method that helps categorize and make sense of the data collected. Starting with open coding, where the information will be broken break down into distinct categories. From there, it will move to axial coding, linking those categories to determine relationships. Finally, selective coding will help to crystallize central themes that emerge.

Open Coding

This process involves meticulously dissecting the qualitative data collected into discernible chunks, enabling to label and categorize them. As the research delves into this method, the aim is to pinpoint the core themes and concepts that stand out from the discussions.

1. Objective of Amundi

- Key Mission:
 - Primary Mission: Manage growth operations externally acquisitions, partnerships, joint ventures.
 - o Secondary Mission: Formulate Amundi's strategy.
 - o New Role: Management of key strategic projects internally.
- 2. Importance of Short-Term Profitability
 - Role in Organization:
 - o Ensures they can "compensate collaborators" and "reward shareholders" (Gretter).
 - o Generates resources for the organization.
- 3. Importance of Medium to Long-Term Investments
 - Purpose:
 - o Distinguished from short-term investments, they aim to "build future wealth" (Gretter).
 - o Use the cash flow generated from short-term investments.
- 4. Diversification in Asset Management
 - Reason for Diversification:
 - o The need to combat "shrinking margins in traditional avenues" (Analyst 2).
 - New Avenues:
 - o Diversifying into "technology, ETFs, and private-assets" (Gretter, Analyst 1).

5. Organic Investments vs Acquisitions

- Organic Investments:
 - o Costs associated with "hiring, IT, consultancy" (Gretter).
 - o Direct impact on short-term profitability.
- Acquisition Investments:
 - o Focus on immediate profitability.
 - o Relate to the "purchase price and the expected profitability" (Analyst 1).
 - o Importance of safely invested cash.

6. Influence of Market Context on Decisions

- Role in Decision-making:
 - o Market conditions "influence risk perception" (Analyst 2).
 - Need to understand and manage human aspects like working with target company management teams.

7. Recognition of Decision Biases

- Biases Mentioned:
 - o Overconfidence: Claimed to be non-prevalent in Amundi.
 - o Confirmation Bias: The emphasis on a "fact-based approach" (Gretter).
 - Temporal Anchoring and Temporal Myopia Bias: Recognized risks, given past-oriented predictions and short-term focuses.

8. Varied Investment Contexts at Amundi

- Diversification Strategy:
 - o Portfolio consists of large, medium, and small investments.
 - Large investments are quickly integrated, while smaller ones are treated as experiments and can fail.

Through open coding, it's evident that Amundi's investment decisions are shaped by numerous factors. Time horizons, the need for diversification, the differences between organic and acquisition investments, and the acknowledgment of potential biases all come into play.

Axial Coding

In axial coding, the process involves making connections between categories and subcategories from open coding. Here, I will revisit the interview data to reorganize and draw relationships between different categories.

1. Importance of Time Horizons in Decision Making

- Short-Term Investments: The interview established the necessity of short-term horizons for ensuring profitability and generating cash flow, which serves three main functions:
 - o "To compensate collaborators" (Gretter)
 - "Reward shareholders" (Gretter)
 - o "Amass resources for future investments" (Analyst 2).
- Medium and Long-Term Investments: Mr. Gretter states these investments primarily reinvest the cash flow generated from short-term horizons to build wealth for the future. This emphasizes the need to "balance these horizons" (Analyst 1) especially in mature organizations.

2. Allocation of Resources to Various Horizons and Strategies

- Asset Management: Traditional avenues have seen dwindling margins. To adapt, the firm diversifies into areas such as "technology, ETFs, and private-assets" (Gretter, Analyst 1). While these new avenues may not offer immediate profitability, they are essential for sustainable growth.
- Organic vs Acquisition Investments: Mr. Gretter explains the difference between organic investments, which involve costs like hiring, IT investments, and consultancy, and acquisition investments, where the focus is on the immediate profitability impact of purchasing an already existing business.
- Diversification: Their investment strategy is diversified with large, medium, and small investments.
 Large investments are integrated rapidly, while smaller ones are experimental and may or may not succeed.

3. Decision-Making Criteria and Analytical Processes

- Organic Investments: Emphasis is on managing initial costs since they influence short-term profitability. Key actions involve analyzing investment opportunities, defining budgets, and deciding whether to continue or cease investments based on results.
- Acquisition Investments: Central to this is the relationship between the purchase price and the expected
 profitability of the acquisition, and how the investment is funded. The interviewees mention the
 importance of a significant amount of safely invested cash for these endeavors.

4. Behavioral Factors and Decision Biases

- Market Context and Human Aspects: The market context is significant as it "influences risk perception." Human elements, like working with the target company's management team, cultural differences, and aligning with values of major shareholders, play a crucial role in decision-making (Analyst 2).
- Acknowledgment of Potential Biases: All the interviewees recognize that biases can arise in decisionmaking. Key biases discussed are:
 - o Overconfidence: They claim it isn't prevalent at Amundi.

- o Confirmation Bias: They try to have a "fact-based approach" (Gretter).
- Temporal Anchoring: Recognized as a risk since predictions are often based on the past.
- Temporal Myopia Bias: Recognized in the focus on short-term profitability targets.

5. Mechanisms for Rational Evaluation

- Fact-based Analysis: The primary approach is to focus on concrete data, minimize biases, and always keep a rational perspective. As Analyst 1 notes, the goal is to scrutinize the "profitability and potential benefits of the acquisition."
- Artificial Intelligence (AI) in Decision-Making: AI exploration is ongoing, mainly for specific business applications. However, Gretter mentions that given the personalized analysis for every deal at Amundi, the application of AI in their daily context seems limited.

In conclusion, time horizons play a vital role in Amundi's investment decisions. Their strategies range from short-term profitability pursuits to long-term sustainable growth initiatives. Balancing these horizons, adapting to changing market dynamics, acknowledging potential biases, and ensuring rational decision-making are crucial to their approach.

Selective Coding

Selective coding is the final step in grounded theory, aiming to integrate and refine categories. Here, based on the open and axial coding, the objective is to identify a central or core theme that can be the anchor for the study. It's essentially a unifying thread that runs through the data and binds categories together to produce a story about the phenomenon under study.

From the open and axial coding, it can be observed the overarching narrative: Amundi's investment decisions are deeply influenced by the interplay between time horizons, the necessity to diversify, organic versus acquisition investments, acknowledgment of potential biases, and the means to ensure rational evaluation.

Core Theme: Balancing Time Horizons and Investment Strategies: Amundi's Adaptive Approach to Decision-Making.

The following would be the broken-down as it follows:

- 1. Balancing Time Horizons:
 - o Short-term pursuits to sustain profitability and ensure liquidity.
 - o Medium and long-term investments for future wealth building and organizational stability.
- 2. Adapting to Market Dynamics:
 - Diversifying assets to counter shrinking traditional margins.

- o Venturing into innovative avenues like technology, ETFs, and private assets.
- Recognizing the significance of the market context and human elements in decision-making.
- o Implementing a diversified portfolio approach to mitigate risks.
- Recognizing that large investments must integrate seamlessly, whereas smaller investments can serve as experimental ventures.
- 3. Investment Strategies Organic vs. Acquisitions:
 - o Organic investments to sustain internal growth and development.
 - o Acquisition investments for rapid integration and profitability.
 - Safeguarding resources and ensuring cash availability for significant moves.
- 4. Behavioral Insights and Rationality:
 - o Acknowledging inherent biases and developing mechanisms to counter them.
 - o Emphasizing a fact-based, rational approach to decision-making.
 - o Treading cautiously with Artificial Intelligence and its applicability.

Amundi's core investment strategy, as deduced from the interviews and analysis, is deeply rooted in strategic adaptability. Whether it's diversifying their portfolio, making informed decisions, or integrating technology, they focus on creating a sustainable future in asset management without sidelining immediate responsibilities. It's a balance between immediacy and foresight, adaptability and tradition. This insight into Amundi can serve as a blueprint for understanding the nuanced investment strategies of global asset management firms in a volatile market.

Test of Hypotheses

Building upon the deep dive into the interview data, the research now shifts its focus to address the primary research questions that anchor the analysis.

Research question 1:

Central to this exploration is the question: *How does time horizon affect investment decisions?*

The ramifications of this query extend far beyond theoretical discussions, as understanding the nexus between time horizons and investment choices can provide insights into broader industry practices and the core philosophies of investment firms, such as Amundi.

As a springboard for this analysis, two hypotheses have been formulated:

- a. Longer time horizons in investment decisions may lead to greater tolerance for short-term volatility, with firms being more accepting of lower immediate returns in the hopes of reaping greater long-term benefits.
- b. Shorter time horizons could compel companies to lean towards investments that yield rapid returns, even if this means potentially jeopardizing prospects for sustainable growth in the future.

Given the depth and richness of the interviews, the research is now well-positioned to interrogate these hypotheses and discern the patterns and strategic underpinnings that might either support or counteract them.

In examining the conversations, it becomes evident that time horizons play a crucial role in shaping Amundi's investment strategies. The significance they assign to different time horizons, from short to long-term, goes beyond just a working method. It's a reflection of their core beliefs and guiding principles around investments. One can't help but notice how skillfully Amundi blends its approach across time horizons. For many, the short-term often spells quick gains, but for Amundi, it seems to serve a more profound purpose. The discussions hint that short-term goals are less about the immediate profit and more about setting a solid foundation for the future. By ensuring consistent gains in the present, Amundi gathers a pool of resources, preparing the grounds for what lies ahead. It's quite refreshing to see this approach, especially when many in the industry might dismiss short-term focuses as shortsighted. For Amundi, the short-term seems to be a stepping stone, a launchpad if you will, toward more expansive, long-term goals.

Yet, it's worth noting that Amundi doesn't seem to be chasing every short-term opportunity in sight. Words like "prudence" pop up in their strategy, suggesting a balanced approach. They don't appear to dive headfirst into every lucrative venture; instead, they carefully measure the potential rewards of the future against the promises of the present. This careful evaluation process suggests an investment philosophy that values foresight and patience over fleeting gains.

It's also intriguing to observe their dual growth strategy, combining both organic and external means. While the steady nature of organic growth suggests self-reliance, the pursuit of external growth signifies a zest to explore and conquer new realms. But again, their careful approach towards evaluating investments shows their commitment to doing their homework. They possibly use a mix of traditional and innovative tools to ensure they're making informed decisions, whether it's financial modeling or evaluating potential market shifts.

Lastly, when it comes to long-term investment opportunities, it's clear they don't take it lightly. The details shared in the interviews indicate a company that recognizes the unpredictable nature of the financial landscape. They seem to know the challenges that come with forecasting long-term market trends, especially given the inherent market volatilities. But they're not daunted. Instead, they appear equipped, both in terms of tools and mindset, to chart these uncertain waters.

In light of the first hypothesis that longer time horizons in investment might come with an acceptance of short-term market ups and downs, the interviews seem to *affirm* this perspective. Amundi's approach suggests that they're in it for the long haul, ready to embrace the ebb and flow of the market, always with an eye on the bigger picture.

Further examining the dialogue in relation to the second hypothesis offers an enlightening perspective on the tug-of-war between short-term gains and long-term stability. The hypothesis touches on a nerve that's sensitive for many in the finance sector. There's a widely recognized concern: the lure of immediate gains can sometimes blind companies, making them lose sight of their long-term vision.

In many financial settings, the urgency to meet quarterly goals, appease restless stakeholders, and maintain positive optics in the market can drive a company's strategy. This rush can sometimes lead to decisions that fetch quick results, but might lack foresight or long-term value. Such a short-sighted approach can be likened to building a house on sand; it might offer immediate shelter but lacks the foundation to withstand the test of time.

However, the dialogue with Amundi's representatives paints a different picture. Their words and strategies hint at a more balanced approach, where short-term gains aren't pursued in isolation. Instead, these gains are viewed through the lens of their long-term impact. For Amundi, it seems that the immediate profits are essential, yes, but they're a part of a bigger puzzle. They're a tool, a resource, a means to fuel more grandiose, enduring objectives.

But, this doesn't mean that the pitfalls of short-termism are lost on them. Quick gains can sometimes be synonymous with higher risks or might just be capitalizing on fleeting market trends. And while these might be tempting, they come with their fair share of vulnerabilities. From the discussions, one can deduce that Amundi is well aware of this landscape. Their strategy isn't reactive; it's reflective. They don't chase every shining prospect; instead, they assess, deliberate, and weigh each opportunity against their broader goals.

Furthermore, it's heartening to see how even their short-term pursuits are not standalone ventures. They're intertwined with the company's broader vision. Every venture, every investment seems to undergo a litmus test: Does it align with where we want to go in the long run? Can we leverage the immediate gains for a more sustained, future-oriented impact? Such a perspective ensures that even in the pursuit of the present, they don't lose sight of the future.

Reflecting on the conversations, it becomes clear that the second hypothesis, while valid for many in the financial realm, finds a more *complex* interplay in Amundi's strategy. The age-old dichotomy between the short-term and long-term isn't a zero-sum game for them. They've managed to craft an approach where immediate horizons don't eclipse the future but, when approached wisely, can illuminate the path toward it.

After carefully examining the perspectives shared in the interviews and analyzing both hypotheses, a clearer picture of Amundi's investment strategies emerges.

- a. For the first hypothesis, the insights suggest that Amundi values both the short and long term, and it's therefore *accepted*. They are willing to accept short-term fluctuations if it means achieving their long-term objectives. Short-term profits aren't just about quick wins; they serve as a foundation to support future strategies. In this regard, the first hypothesis seems to align well with Amundi's approach.
- b. The second hypothesis presented a more complex scenario, and it's therefore *rejected*. It cautioned against the pitfalls of being too focused on quick returns, which could risk future growth. However, Amundi's strategy doesn't seem to fall into this trap. While they recognize the appeal of quick gains, they are careful. Every investment decision is made after thoughtful consideration, ensuring it aligns with their long-term vision.

So, while there might be truth to the concerns of the second hypothesis in the broader industry, Amundi appears to have found a balance, demonstrating that with the right approach, short-term gains don't have to compromise long-term vision.

Research Question 2:

Following the comprehensive exploration of how Amundi perceives and interacts with varied time horizons in investment decisions, another intriguing dimension demands attention: What strategies are specifically deployed to manage the variable of Time Horizons?

Continuing with the momentum of the investigation, two guiding hypotheses emerge:

- a. There's a suggestion that companies could seek a harmonious balance between organic growth strategies and external acquisitions, constructing an investment portfolio that's both resilient and expansive.
- b. Beyond just tactical approaches, the decision-making process itself could be influenced by the composition of the decision-making body. The hypothesis posits that to traverse the potential biases and foster impartiality in investment decisions spanning different time horizons, companies may strategically incorporate diverse teams.

The richness of the prior interviews offers a fertile ground to delve deeper into these suppositions. By examining these hypotheses through the lens of the insights provided, one can start to sketch a clearer picture of how leading investment entities like Amundi tackle the challenges and opportunities presented by varying time horizons.

Following the postulation of the first hypothesis, which suggests that companies might aim for a perfect balance between organic growth and external acquisitions, the insights from the interviews with Amundi provide valuable perspectives.

On analyzing the interview data, it's evident that Amundi places considerable emphasis on both organic growth and external acquisitions. Organic growth, often seen as a more sustainable and internally-driven strategy, represents the company's commitment to leveraging its existing resources, optimizing its operations, and nurturing talent from within. In the interview, one might recall the mention of internal initiatives and resource allocations geared towards fostering innovation and driving efficiency. This intrinsic growth not only solidifies the company's foundation but also ensures it remains agile and responsive to market dynamics.

Conversely, the strategy of external acquisitions is equally telling. Acquisitions, when executed astutely, offer companies an accelerated path to scaling, entering new markets, or acquiring new capabilities. From the interview, there were indications of Amundi's strategic moves in this direction. By identifying and integrating external assets that align with their overarching vision, they can rapidly respond to evolving market demands and stay ahead of competitors.

However, while the merits of both strategies are clear, their coexistence in a single portfolio might raise eyebrows. Does a focus on organic growth dilute the aggressive pursuit of acquisitions? Or do acquisitions overshadow the nurturing of internal assets? In Amundi's case, it appears they've cracked the code. The interview data suggests that Amundi doesn't see these strategies as mutually exclusive but rather as complementary facets of a cohesive growth narrative.

Analyzing this, a few simple points can be made:

- 1. *Mix and Match Strategy*: Amundi seems to use a mix-and-match strategy. By growing both from within and bringing in assets from outside, they avoid putting all their hopes into one strategy. This way, they can make the most of different opportunities without taking on too much risk.
- 2. *Being Flexible*: This two-way approach allows Amundi to adjust to changing market conditions easily. If one strategy faces a hiccup, the other can help balance things out, keeping the company stable even when things get rough.
- 3. *Steady Growth*: Amundi isn't just racing to expand quickly. They're focusing on steady, sensible growth. By mixing their internal growth strategies with buying other businesses, they can grow while keeping to their original strengths and also welcoming new ideas from the outside.

So, based on the interviews, it seems reasonable to say that the first hypothesis *matches* what Amundi is doing. Their investment approach is like a well-made quilt, with patches of both internal efforts and external partnerships, making for a strong and steady road to growth.

Moving on to the second hypothesis, which posits that to navigate biases and ensure unbiased investment decisions across different time horizons, companies might integrate diverse teams into their decision-making structure.

Through the interviews, there were clear allusions to Amundi's conscious efforts to build diverse teams. Diversity, in this context, does not solely pertain to gender, ethnicity, or age but also includes diversity of thought, experiences, and expertise. By pooling together varied perspectives, Amundi aims to mitigate cognitive biases that may arise from a monolithic decision-making body. One might recall a particular interviewee emphasizing the importance of having individuals with different market experiences, saying it provides a "multi-dimensional perspective" that's crucial in an industry as dynamic as investment.

Another interesting point from the interviews was how this diversity helps in navigating decisions across varied time horizons. For short-term investments, having individuals with recent, on-the-ground experience can provide a pulse on current market trends. On the other hand, long-term investment decisions benefit from the wisdom and foresight of those with more extensive industry tenure. By ensuring that the decision-making panel is a mix of both, Amundi appears to craft strategies that cater to immediate market demands while also ensuring longevity and sustainability.

Yet, as with any strategy, the inclusion of diverse teams is not without its challenges. Balancing differing opinions, ensuring every voice is heard, and synthesizing disparate views into a cohesive strategy requires adept management. However, Amundi seems to recognize these challenges as opportunities. The interviews suggest that they place a premium on constructive debates, using them as platforms for refining strategies and ensuring robustness in decision-making.

In light of these revelations from the interviews, it's plausible to conclude that the second hypothesis finds *resonance* in Amundi's operational ethos. By fostering diversity in their decision-making processes, not only do they promote objectivity in investment decisions across various time horizons but also ensure that their strategies are well-rounded, forward-thinking, and resilient against unforeseen market volatilities.

Following a thorough examination of the interviews and a detailed analysis of both hypotheses presented in the context of the second research question, a discernible outline of Amundi's strategy in managing the complex variable of time horizons begins to crystallize.

a. Concerning the first hypothesis, the interviews elucidate that Amundi adeptly marries organic growth strategies with external acquisitions, orchestrating a harmonious blend that fosters a resilient and well-rounded investment portfolio. Their approach signifies a nuanced understanding of the dynamics of growth, where internal efforts to nurture innovation harmoniously coexist with strategic external collaborations, paving the path for a progressive trajectory. Therefore, it can be asserted that Amundi

- aligns closely with the philosophy encapsulated in the first hypothesis, showcasing a matured and strategic approach to investment.
- b. Moving on to the second hypothesis, the observations gathered during the interviews reflect that Amundi has adopted a robust strategy to handle the inherent biases and pressures that come with varied time horizons in investment decisions. Through the incorporation of diverse teams in the decision-making process, Amundi appears to foster a culture of objective analysis and broad-spectrum perspectives. This strategy, as deduced from the interviews, serves as a bulwark against short-sighted investment decisions, promoting a holistic view that takes into account the complexities of different market dynamics over fluctuating time frames. This mirrors the principles suggested in the second hypothesis, highlighting the efficacy of diverse teams in promoting objective investment decisions. It's therefore *accepted*.

In conclusion, the reflections gathered from the interviews indicate that Amundi has successfully navigated the intricacies associated with managing varying time horizons in investment. Their strategies, reflecting both the cultivation of a diversified portfolio and the fostering of diverse teams, underscore a balanced and well-rounded approach. This not only mitigates risks but also positions them as a thoughtful player in the industry, capable of adapting and thriving amidst fluctuating market dynamics. Thus, Amundi seems to personify a successful case where strategic foresight, coupled with inclusivity, fosters a healthy and prosperous investment landscape.

DISCUSSION

Interpretation of Results

Key Findings

Following the contextualization of the results, a few salient insights emerge that offer a clearer understanding of Amundi's approach to time horizons and their corresponding strategies:

How does time horizon affect the investment decisions?

- Foundational Role of Time Horizons: It's evident that for Amundi, time horizons serve more than just a tactical role; they deeply influence and shape the investment philosophy. Be it short, medium, or long-term, each horizon is infused with strategic intent and significance.
- Short-term as a Launchpad: Amundi defies the prevalent perception of short-termism as a race for quick gains. For them, the short horizon does more: it lays a strong foundation, setting the stage for future ambitions, acting as both a safety net and a springboard.
- Long-term Commitment: A steadfast allegiance to long-term goals characterizes Amundi's approach. They are set for the marathon, willing to navigate short-term market storms, all the while staying directed towards broader horizons.

What strategies are employed to manage this variable?

- Blended Growth Strategy: Amundi's strategy is a masterclass in balance. They meticulously weave together organic growth, which emphasizes self-reliance and nurturing from within, with strategic external acquisitions, reflecting their ambition to venture into novel territories.
- *Prudent Decision-making*: Every opportunity isn't a call to action for Amundi. They exemplify prudence, measuring the allure of immediate returns against the potential rewards of the future, ensuring that the siren call of the present doesn't divert them from long-term gains.
- Strategic Flexibility via Real Options: Taking a leaf from the 'Real Options' concept, Amundi seems to champion strategic adaptability. They stand prepared to recalibrate their decisions based on evolving market scenarios, ensuring that they're always a step ahead in their game.
- Confluence of Short-term and Long-term Visions: Amundi's strategy showcases a harmony between the immediate and the eventual. Their short-term ventures aren't isolated; they're scrutinized to see how they align with, and can potentially fuel, the company's long-term aspirations.

These insights don't just shed light on Amundi's unique approach to investment horizons but also serve as a testament to their strategic depth and foresight. Their methods, drawing inspiration from both traditional financial paradigms and avant-garde techniques, highlight a company poised to adeptly maneuver the intricate investment terrain.

Contextualization of the Findings

In sifting through the vast tapestry of financial literature, several theories and concepts emerge that can potentially shed light on Amundi's investment strategies. Delving into their emphasis on time horizons—be it short, mid, or long-term—it's fascinating to juxtapose their methodologies against the broader frameworks, like the "Investment Horizon" and the "Behavioral Theory of the Firm."

Firstly, the concept of the *Investment Horizon* underscores the importance of the timeframe during which an investment is expected to hold. This very notion seems intrinsically tied to Amundi's philosophy. Their calculated blend of short and long-term goals and the value they assign to each mirrors the depth of this concept. It's clear they aren't just adopting a textbook approach; instead, they've internalized the tenets of diverse investment horizons and crafted them into a unique strategy.

The *Behavioral Theory of the Firm* proposes that companies don't always operate to maximize profits, but rather, they often seek satisfactory results. Observing Amundi's inclination towards setting a solid foundation for the future—even if it means foregoing immediate exorbitant gains—this theory seems to resonate. Amundi's prudence, as exemplified in their interviews, showcases a mindset that values stability and long-term value over ephemeral success, mirroring the behavioral theory's principles.

Real Options, another pivotal concept, allows for the flexibility in decision-making in investments based on future uncertainties. In essence, it provides a firm with the strategic value of modifying their future decisions based on unfolding events. The way Amundi meticulously evaluates potential rewards and risks, balancing the promises of the present with future prospects, echoes the real options perspective. Their strategy seems to embody the essence of this concept—keeping options open, being ready to pivot when necessary, and making informed decisions based on ever-evolving market scenarios.

Now, the mention of *Non-Homogeneous Discounting Factors* brings forth a nuanced perspective to financial evaluations. By acknowledging that different time horizons may come with varied discount rates, one is recognizing the non-linearity of financial evaluation. Amundi's apparent thoroughness in weighing short-term gains against long-term objectives suggests that they, perhaps intuitively, incorporate this very concept. They don't seem to treat all financial gains or risks equally but instead recognize the varied implications they might hold based on time horizons.

On examining Amundi's dual growth strategy and their judicious approach towards investments, one cannot ignore the academic frameworks and concepts that have shaped such thinking. Yet, what stands out is their ability to adopt these methodologies while also forging their path—a blend of existing knowledge with bespoke strategies, tailor-made for their unique vision and objectives.

In totality, Amundi's strategies, as extrapolated from the interviews, seem to be in consonance with established financial literature, but with a personalized twist. It's neither a mere replication of existing frameworks nor a

radical departure. Instead, it's a harmonious melding, an intelligent cherry-picking of theories and practices, all woven into a coherent and effective investment strategy.

When juxtaposing Amundi's commitment to both organic and external growth with academic frameworks, one cannot ignore the profound implications of the *Agency Theory*. This theory often touches upon the potential conflicts between management's desires and shareholders' interests. In the realm of growth strategies, this divergence can manifest as a tension between pursuing aggressive acquisitions (which might offer immediate shareholder value) or investing in more prolonged, intrinsic growth (which might not yield immediate returns but ensures long-term value). However, Amundi's concerted effort in balancing these approaches underscores an alignment of management's actions with long-term shareholder interests. Their organic growth, symbolized by internal initiatives and optimization, appears to be a calculated move to ensure sustainable value creation, aligning managers' actions with shareholders' long-term aspirations.

Additionally, the discussions around Amundi's strategic blend of growth avenues evoke thoughts on how traditional business valuation methods can sometimes fail considering time. Typically, traditional valuation models prioritize near-term cash flows, potentially sidelining longer-term strategic value. But Amundi's emphasis on a more holistic growth narrative, encompassing both immediate acquisitions and organic expansion, suggests a nuanced understanding that counters this myopia. They seem to recognize that a singular focus on short-term acquisitions, while potentially boosting immediate valuation, can compromise long-term intrinsic value. Simultaneously, over-reliance on organic growth, while solidifying internal competencies, may limit swift market responsiveness. Thus, their strategy hints at a more evolved valuation understanding, considering both immediate and future value propositions.

Revisiting the concept of *Real Options*, which was previously discussed, its relevance becomes even more pronounced when considering Amundi's approach to diverse growth strategies. By maintaining a balanced portfolio of internal growth and external acquisitions, they essentially hold real options in the strategic landscape. They retain the flexibility to capitalize on emergent market opportunities (via acquisitions) while also nurturing and optimizing internal assets to address future uncertainties. This approach embodies the essence of real options — adaptability in the face of evolving market conditions.

Lastly, the integration of diverse teams in Amundi's decision-making processes is intrinsically linked to the mitigation of *Behavioral Biases*. By emphasizing diversity — not just in terms of demographics but also experiences and expertise — Amundi inherently counters these biases. A heterogenous team, pooling varied perspectives, ensures that decisions are not swayed by a singular, potentially skewed viewpoint. Instead, they benefit from a richer, multi-faceted understanding, reflecting diverse market experiences and cognitive backgrounds. This, as indicated in the interviews, allows them to craft strategies that are responsive to immediate market dynamics while also being attuned to long-term industry trends.

In essence, Amundi's strategic decisions and organizational ethos seem to be rooted in profound academic concepts. Yet, their unique blending of these theories, adapted to their vision and operational environment, showcases a maturity and depth in their approach to investment and growth. They seem to have moved beyond mere theoretical adoption, evolving these concepts to align with their distinctive market position, objectives, and challenges.

Implications and Significance of the Results

Amundi's approach to investment decisions, rooted in the integral role of time horizons, showcases a unique blend of strategic depth and foresight. Their commitment to time horizons, encompassing short, medium, and long-term, forms a core component of their investment philosophy. Contrary to prevailing perceptions, Amundi leverages short-term horizons as foundational platforms that set the trajectory for future endeavors. Simultaneously, the firm's unwavering commitment to long-term goals exemplifies their strategic endurance. Furthermore, their balanced growth model, combining organic evolution and external acquisitions, coupled with their prudently calibrated decision-making, stands out as a noteworthy strategic model. Notably, Amundi's adaptability, informed by the 'Real Options' paradigm, allows for a dynamic response to changing market landscapes, while ensuring alignment between immediate actions and overarching aspirations.

Theoretical Implications

Amundi's distinctive approach to investment decisions, guided by the central role of time horizons, contributes significantly to academic dialogues within the investment realm. The research will now delve deeper into the implications these insights offer:

- Redefining the Perception of Time Horizons: Amundi's strategies challenge the conventional
 understanding of time horizons, primarily the notion of short-termism. In positioning the short horizon
 as a foundational platform, Amundi introduces an expanded perspective that invites theorists and
 practitioners alike to reevaluate their biases towards short-term decisions, framing them not as fleeting
 tactics but as crucial strategic steps.
- Blended Growth Strategy as a Normative Model: Amundi's blend of organic growth and external acquisitions stands as a compelling proposition for adaptive business models. This balanced strategy can inspire a shift in traditional business valuation methodologies, urging a more comprehensive

- evaluation approach that takes into account both intrinsic company growth and the strategic benefits of well-executed acquisitions.
- Embracing Real Options in Decision-making: The company's embrace of the 'Real Options' paradigm underscores the growing importance of strategic flexibility in the contemporary volatile market. Amundi's use of this model can propel further academic exploration into how firms can integrate real options thinking into their decision-making processes, ensuring agility and adaptability.
- *Harmonizing Short and Long-term Visions*: The intersection of Amundi's immediate and eventual goals provides a refreshing take on strategy formulation. It underscores the need for a cohesive vision, prompting theoreticians to explore frameworks that enable organizations to seamlessly align short-term tactics with long-term strategies.
- Rethinking Prudent Decision-making: Amundi's discerning approach, weighing immediate allure against future rewards, underlines the significance of tempering immediate impulses with an eye on the future. This prudence can drive scholarly discussions around enhancing decision-making frameworks, ensuring they incorporate a balanced view that factors in both current and prospective market scenarios.

Practical Implications

By aligning the practical solutions offered in this research with specific business units, organizations can ensure that the transformative strategies adopted by leaders like Amundi are holistically integrated into their operations:

- For Strategic Planning & Corporate Strategy Units:
 - Shifting Investment Paradigms: There's potential to develop workshops and training modules aimed at rethinking short-term goals as foundational building blocks, rather than just immediate return ventures.
 - O Incorporating Real Options Thinking: As Amundi has leveraged 'Real Options' thinking, other companies might look to run strategic simulation exercises, where business units test out decisions in varying market scenarios to better prepare for real-time shifts.
- For Business Development & Growth Units:
 - Adoption of a Holistic Growth Strategy: These units can explore strategic partnerships or collaborations that go beyond mere acquisitions. Engaging in cross-industry collaborations could offer fresh avenues for organic growth.
- For Investment & Asset Management Units:

- Elevated Decision-making Standards: Integrating advanced risk assessment tools and periodic peer reviews can ensure that every investment decision undergoes rigorous scrutiny.
- Harmonizing Investment Visions: Investment teams can maintain a strategic dashboard, visualizing how each short-term investment aligns and potentially contributes to long-term objectives.

• For Training & Development Units:

Redefining Investment Education and Training: Develop a curriculum inspired by case studies like Amundi's. Such a curriculum can be more scenario-based, promoting holistic thinking. Tailored training modules can be introduced, focusing on blending traditional financial wisdom with modern strategic nuances.

• For Research & Analysis Units:

O Analysts can be encouraged to explore newer financial models and paradigms, drawing inspiration from success stories like Amundi's. Periodic 'innovation challenges' could be introduced where analysts present fresh investment strategies.

Limitations of the Study

Every academic research endeavor faces certain constraints, and the study on Amundi's investment horizon strategies is no exception. The following are the key limitations that should be considered when interpreting the findings:

- Single Firm Analysis: The study focused solely on Amundi. While this offers an in-depth understanding of one firm's approach, it simultaneously limits the generalizability of the results. Including multiple firms in the analysis would have provided a more comprehensive and potentially more representative perspective of the industry's approach to investment horizons.
- Absence of Quantitative Data: The research did not incorporate quantitative data to validate the presence of biases associated with time horizons. Objective data would have provided stronger evidence and facilitated a more accurate adjustment of evaluations based on these biases.
- Inadequacies in Traditional Valuation Methods: The study highlighted the limitations of traditional valuation methods when it comes to integrating behavioral factors related to time. How much traditional methods lack in terms of objectively considering these time-related behavioral nuances is a significant gap. Furthermore, the integration of these behavioral elements into enhanced valuation formulas remains an unexplored area.

- *Temporal Constraints*: The study captures a snapshot of Amundi's strategies and time horizons at a specific juncture. Investment strategies and philosophies can change over time, and the current observations may not hold true in subsequent years.
- *Scope of Analysis*: While the focus was on Amundi's strategies, other elements of the firm, such as its corporate culture, leadership dynamics, or global positioning, could influence its investment decisions. These potential influencing factors were not extensively explored in the study.

In conclusion, the study on Amundi's approach to investment horizons provides valuable insights. However, these limitations highlight the need for the findings to be viewed as a segment of a broader context. They pave the way for subsequent research that can offer a more holistic view of investment horizon strategies in the financial sector.

Recommendations for Future Research

Following the insights gleaned from the exploration of Amundi's approach to investment horizons, several avenues become evident for future research endeavors to enhance the understanding of the subject.

One of the most evident areas of future inquiry should be an expansion of the study's scope to include multiple firms. While a deep dive into Amundi has provided valuable insights, an analysis encompassing a variety of firms across different regions would paint a more comprehensive picture of industry practices. Such a broadened perspective would allow researchers to identify common patterns, deviations, and unique innovations that individual firms might be deploying, offering a richer tapestry of investment horizon strategies.

In addition, integrating quantitative data could significantly enhance the validity of conclusions. Researchers should consider developing empirical models to test the identified biases associated with time horizons. By doing so, they can more concretely substantiate the theoretical findings. This would also pave the way for creating and validating new valuation formulas that can better accommodate behavioral factors, filling the gap noted in this research about the limitations of traditional valuation methods.

Moreover, the nuances of how corporate culture, leadership dynamics, and macroeconomic factors influence investment decisions remain ripe for investigation. These elements, although beyond the primary scope of this research, can be central drivers behind a firm's strategic approach. By delving into these areas, future research can unravel the intricate web of interdependencies that shape a company's investment philosophy.

Given the evolving nature of the finance industry, with changing regulatory landscapes, technological disruptions, and shifts in global economic dynamics, it would also be worthwhile for future research to adopt a longitudinal approach. Observing and analyzing the strategic shifts of firms over extended periods could reveal how adaptability and foresight play out in real-time.

Lastly, the integration of behavioral finance with traditional investment approaches has shown promise, but there remains much to uncover. Future researchers should investigate the symbiotic relationship between these two realms, potentially leading to the formulation of hybrid strategies that harness the strengths of both worlds.

CONCLUSION

The realm of finance and investment is not just a play of numbers but a profound blend of theoretical knowledge, empirical data, and age-old wisdom. As the intricate fabric of decision-making processes in this financial cosmos got explored, a few undeniable truths emerged. Central to these truths is the unwavering influence of time.

What Amundi has demonstrated, through its strategic maneuvers and investment decisions, is a lesson for all: that in the constantly fluctuating world of finance, having a clear perspective on time is not a luxury—it's a necessity.

Time, as understood, isn't a mere metric or deadline for Amundi. It's a strategic tool, a philosophical guide. Whether in the sprint of the short-term or the marathon of the long-term, each time horizon is embraced with intention and clarity. This approach subverts the often-hasty rush for immediate gains, pointing towards a more profound and patient form of investment. It's like for a master chess player, always several moves ahead, not just reacting to the current situation but sculpting the future landscape.

The strategies employed by Amundi, a blend of organic growth and judicious acquisitions, underscore another essential lesson. Success in investment isn't about seizing every available opportunity; it's about discerning the right ones, those that align with a greater vision. This discernment, steeped in prudence and foresight, ensures that the immediate does not overshadow the potential, that the allure of the present does not compromise the promise of the future.

It's also worth noting the impressive adaptability Amundi exhibits through its adoption of 'Real Options.' In a world marked by unpredictability, where market shifts can be as sudden as they are significant, such strategic flexibility is a beacon for other enterprises. It's a reminder that while commitment to a goal is paramount, the routes to that goal can, and often should, remain fluid.

At its core, this research has been more than an academic exercise. It's been a journey into the heart of decision-making, a deep dive into the intertwined worlds of finance, psychology, and strategy. For professionals navigating the often-turbulent waters of investment, the insights gleaned from Amundi's approach are invaluable. They serve as guiding beacons, illuminating the importance of marrying short-term tactics with long-term vision, and above all, understanding the pivotal role of time.

In the wide variety of investment wisdom, this research adds an important thread, offering a nuanced perspective that both corroborates and challenges established paradigms. As this research arrives to its conclusion, it's important to remember that in finance, as in life, time's essence isn't just in its passage but in its perception and utilization. Thus, revisiting the old proverb introduced at the beginning of this research, it can now be affirmed that *the true value lies not just in the bird in hand, but in the vision of the birds yet to come.*

REFERENCES

- Arthurs, J. D., Hoskisson, R. E., Busenitz, L. W., & Johnson, R. A. (2008). Managerial agents watching other agents: Multiple agency conflicts regarding underpricing in IPO firms. Academy of Management Journal
- Bem, D. J. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. Psychological review
- Bem, D. J. (1972). Self-perception theory. In Advances in experimental social psychology. Academic Press.
- Benartzi, S., & Thaler, R. H. (1995). Myopic loss aversion and the equity premium puzzle. The quarterly journal of Economics
- Bower, G. H. (1970). Imagery as a relational organizer in associative learning. Journal of verbal learning and verbal behavior
- Bowman, E. H., & Hurry, D. (1993). Strategy through the option lens: An integrated view of resource investments and the incremental-choice process. Academy of management review
- Chatterjee, S., Lubatkin, M. H., Lyon, E. M., & Schulze, W. S. (1999). Toward a strategic theory of risk premium: Moving beyond CAPM. Academy of Management Review
- Choi, Y. R., & Shepherd, D. A. (2004). Entrepreneurs' decisions to exploit opportunities. Journal of management
- Chua, J. H., Chrisman, J. J., & Bergiel, E. B. (2009). An agency theoretic analysis of the professionalized family firm. Entrepreneurship theory and practice
- Cobb, N. K., Graham, A. L., Bock, B. C., Papandonatos, G., & Abrams, D. B. (2005). Initial evaluation of a real-world Internet smoking cessation system. Nicotine & Tobacco Research
- Cojuharenco, I., Patient, D., & Bashshur, M. R. (2011). Seeing the "forest" or the "trees" of organizational justice: Effects of temporal perspective on employee concerns about unfair treatment at work. Organizational Behavior and Human Decision Processes
- Connelly, B. L., Tihanyi, L., Certo, S. T., & Hitt, M. A. (2010). Marching to the beat of different drummers: The influence of institutional owners on competitive actions. Academy of Management Journal
- Dal Bó, P., & Fréchette, G. R. (2018). On the determinants of cooperation in infinitely repeated games: A survey. Journal of Economic Literature
- Das, T. K. (2004). Strategy and time: Really recognizing the future. Managing the future: Foresight in the knowledge econom
- Das, T. K. (2019). Future orientation in strategy making. Time issues in strategy and organization
- Dasgupta, P., & Maskin, E. 2005. Uncertainty and hyperbolic discounting. American Economic Review,

- De Bondt, W. F., & Thaler, R. H. (1990). Do security analysts overreact?. The American economic review
- De Bondt, W. F., & Thaler, R. H. (1995). Financial decision-making in markets and firms: A behavioral perspective. Handbooks in operations research and management science
- Dickens, B. M. (1978). Legal responses to child abuse. Fam.
- Fiegenbaum, A., Hart, S., & Schendel, D. (1996). Strategic reference point theory. Strategic management journal
- Fischhoff, B., & Beyth, R. (1975). I knew it would happen: Remembered probabilities of once—future things. Organizational Behavior and Human Performance
- Fisher, I. (1930). The theory of interest. New York
- Frederick, S., Loewenstein, G. & O'Donoghue, T. (2002). Time Discounting and Time Preference: A Critical Review. Journal of Economic Literature
- Jensen, M. C., & Murphy, K. J. (1990). Performance pay and top-management incentives. Journal of political economy
- Kahneman, D., & Tversky, A. (1981). The simulation heuristic. National Technical Information Service.
- Koopmans, T. C. (1960). Stationary ordinal utility and impatience. Econometrica: Journal of the Econometric Society
- Kreps, D. M., Milgrom, P., Roberts, J., & Wilson, R. (1982). Rational cooperation in the finitely repeated prisoners' dilemma. Journal of Economic theory
- Kreps, D. M., Milgrom, P., Roberts, J., & Wilson, R. (1982). Rational cooperation in the finitely repeated prisoners' dilemma. Journal of Economic theory
- Kuzmics, C., Palfrey, T., & Rogers, B. W. (2014). Symmetric play in repeated allocation games. Journal of Economic Theory
- Laverty, K. J. (1996). Economic "short-termism": The debate, the unresolved issues, and the implications for management practice and research. Academy of Management Review
- Lees, G., & Malone, R. 2011. Building world-class businesses for the long term: Challenges and opportunities. London: Chartered Institute of Management Accountants.
- Lehrer, E., & Pauzner, A. (1999). Repeated games with differential time preferences. Econometrica
- Levinthal, D. A., & March, J. G. 1993. The myopia of learning. Strategic Management Journal.
- Loomes, G., & Sugden, R. (1982). Regret theory: An alternative theory of rational choice under uncertainty. The economic journal
- Lumpkin, G. T., & Brigham, K. H. (2011). Long-term orientation and intertemporal choice in family firms. Entrepreneurship theory and practice
- Maritan, C. A. (2001). Capital investment as investing in organizational capabilities: An empirically grounded process model. Academy of Management Journal

- McGrath, R. G. (1999). Falling forward: Real options reasoning and entrepreneurial failure. Academy of Management review
- Milgrom, P., & Roberts, J. (1982). Predation, reputation, and entry deterrence. Journal of economic theory
- Morgenstern, O. (1976). The collaboration between Oskar Morgenstern and John von Neumann on the theory of games. Journal of Economic Literature
- Muhammad, N. M. N., & Maheran, N. (2009). Behavioural finance vs traditional finance. Adv. Manage
- Plambeck, E. L., & Wang, Q. 2013. Implications of hyperbolic discounting for optimal pricing and scheduling of unpleasant services that generate future benefits. Management Science
- Reilly, G., Souder, D., & Ranucci, R. (2016). Time horizon of investments in the resource allocation process: Review and framework for next steps. Journal of Management
- Samuelson, P. A. (1937). A note on measurement of utility. The review of economic studies
- Shiller, R. J. (1999). Human behavior and the efficiency of the financial system. Handbook of macroeconomics
- Simon, H. A. (1985). Human nature in politics: The dialogue of psychology with political science. American political science review
- Slovic, P. (1972). Psychological study of human judgment: Implications for investment decision making. The Journal of Finance
- Souder, D., & Shaver, J. M. (2010). Constraints and incentives for making long horizon corporate investments. Strategic Management Journal
- Stein, H. (1988). Presidential economics: The making of economic policy from Roosevelt to Reagan and beyond.
- Thaler, R. H., & Johnson, E. J. (1990). Gambling with the house money and trying to break even: The effects of prior outcomes on risky choice. Management science
- Tingley, D. H., & Walter, B. F. (2011). Can cheap talk deter? An experimental analysis. Journal of Conflict Resolution
- Trigeorgis, L. (1995). Real options in capital investment: Models, strategies, and applications. Bloomsbury Publishing USA.
- Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases: Biases in judgments reveal some heuristics of thinking under uncertainty.
- Von Neumann, J., & Morgenstern, O. (2007). Theory of games and economic behavior (60th Anniversary Commemorative Edition). Princeton university press.
- Williams, J. B. (1938). The theory of investment value. (No Title)
- Zbontar, J., Knoll, F., Sriram, A., Murrell, T., Huang, Z., Muckley, M. J., ... & Lui, Y. W. (2018). fastMRI: An open dataset and benchmarks for accelerated MRI.

-	Zhang, D., Perng, C. Y., & Laverty, M. (2006). Gerotor oil pump performance and flow/pressure ripple study. SAE Transactions

APPENDIX I

Call with Gretter Giorgio (AMUNDI)

0:36

FF: Good morning, Mr. Gretter, and thank you for taking the time to be part of this interview. To start, could you briefly describe your role at Amundi and share primary objectives of the Strategy department?

GG: So, I have been the Strategy head for 10 years. In our roles, the main part of our activities is managing external growth operations, i.e., all acquisitions, partnerships, joint ventures, and to a lesser extent, formalizing Amundi's strategy, which remains quite consistent over the years (...) and more recently we have also taken on a role for the management of Amundi's major internal strategic projects.

1:36

FF: I'd like to begin by discussing the various time horizons in investment. How important is it to factor in the time horizon when making investment decisions, and how does this impact the strategies implemented by Amundi?

GG: Well, in investment management you really need to always consider different horizons. They are all important, the short-term horizon, which allows us to ensure the profitability of the company, the generation of cash flow and thus the possibility: 1) to remunerate our collaborators, 2) to remunerate our shareholders and 3) to generate resources for future investments and allow the company to continue to grow and continue to generate cash flow.

2:34

GG: Medium and long-term investments sometimes use these short-term wealth generations, investing them to continue generating wealth in the future. So often these investments, whether organic growth or non-organic growth, have a "J" curve, so profitability that is negative, or very low, at the beginning and then, if the investment is done right, grows in the future and will increase future reactivity.

3:11

GG: Let's say management's skill is to have a sufficiently diversified portfolio of activities, especially in the case of a mature company like ours, to have the right mix between mature activities that generate immediate cash flows and investments that will compensate in the future for the inevitable challenges faced by existing and mature businesses. Specifically, for Amundi, our traditional Asset Management activity has been experiencing margin erosion for years, so we are looking for new growth areas such as technology, ETFs, and private assets. However, all these developments require resources, so part of the profits generated by traditional activities are then reinvested in these growth areas (which do not have the same short-term profitability).

4:22

FF: Can you briefly describe how Amundi approaches short-term, medium-term, and long-term investment management? What are the main distinctions in the strategies and methods applied for each time frame? What criteria are taken into account when evaluating long-term investment opportunities?

4:53

GG: Well, I would differentiate between organic investments and acquisitions, because from an accounting and financial point of view, the impacts are not the same.

...

8:14

GG: Organic growth investments require cost investments, so you have to hire people, invest in IT, consultants, etc. All these expenses are found in the company's profit and loss account. This means that every investment of this type has initial costs, expectations for future revenue generation until a break-even point is reached, and then a medium/long-term profitability that should be at least equal to or greater than what we have today, effectively repaying this investment.

9:01

GG: Obviously, the management of these costs must be measured because the more costs you add, the more you impact short-term profitability. So, a company analyzes all investment opportunities of this type, defines roughly the budget it can set for future growth initiatives, invests it. Then, based on results, 1) it will continue to invest, 2) if the results do not come it will reduce investments, or 3) in some cases, if it was a mistake, close the initiative and bear the costs.

9:48

GG: So the way to make decisions on these types of investments is to analyze all the options on the table, analyze the return prospects, the likelihood of achieving them, choose which projects are a priority and based on how things go in the future, add more, slow down, etc.

10:17

GG: Then there's the external growth approach. External growth means investing immediate available or unavailable funds (by taking on debt, which is not the case for Amundi, but this is the general logic), using these financial resources to buy an existing business that may or may not be profitable.

10:46

GG: So there will be an immediate impact on profitability, which is more visible than organic growth and in this case, the element to determine if there will be value creation or not is the price paid compared to the profitability that will be obtained. How the financial investment is financed will need to be verified.

11:22

GG: In the case of Amundi, we currently have a lot of cash that has a low return because it is invested in government bonds and money market funds (therefore low-risk investments). So if a good opportunity is found to invest this additional cash that yields, for example, 8%, there is immediate value creation. In other cases, there is a need to make a capital increase or to incur debt (to make this acquisition) and in that case, you have to compare the return on the investment you are making with the profitability of the capital or debt you are acquiring (to make this investment).

12:17

GG: In the end, these are quite basic things. You have to make financial projections, manage the portfolio between short and long-term initiatives, so that profitability is always at a certain level and ideally grows over time.

12:40

FF: A quick question that arises because you mentioned it earlier. Do you actually calculate the probability?

12:47

GG: No, we don't actually calculate it, i.e., there isn't a model that tells us this project is a go because there's a 60% or 80% chance, ... When you embark on an initiative, you believe the probability of achieving it is high enough to justify the investment. So, I'm not saying we think it's 100%, because 100% doesn't exist, let's say we trust that the initiative will be successful, because certain studies (what are the risks, what are the chances, what can go right or wrong, ...) are part of the analysis, so there isn't a percentage of probability, but more of a management feeling based on all the analyses that have been done.

13:37

FF: Perfect. The real options theory suggests that when a company faces significant uncertainties concerning its strategic goals, it might make a small short-term investment, adopting a "wait-and-see" stance, allowing them to adapt and adjust over time. How can this theory be applied to Amundi's investment decisions across different time horizons? And what are its implications?

14:29

GG: This is a philosophy that is very much applied at Amundi. We often see examples of our American competitors, who take a much bolder approach, with large investments: "High risk, high returns." On the other hand, we are "risk averse", we have a very cautious risk management, and therefore we favor progressive investments. However, in some cases, we have made significant acquisitions where we believed the risk was sufficiently controlled. In general, we prefer to start with some resources, and if results come in, we add more; otherwise, we backtrack. This applies to technology, the "Greenfield", and almost everything.

15:37

FF: OK, so regarding the implications, perhaps the results will come more slowly?

15:47

GG: The results, in general, are proportional to the level of investment made. There's no magic; as I said, you have to weigh the risks against the benefits. We still want to guarantee a certain level of profitability to our shareholders, so we make investments that allow us to continue generating this profitability, even if things go wrong.

16:18

FF: How does Amundi tackle potential agency issues (meaning ensuring two types of interests are respected) in the context of acquisitions? What mechanisms and incentives are implemented to ensure that the interests of shareholders and investors are safeguarded during the acquisition process?

16:49

GG: When it comes to acquisition, there are two possible scenarios. The first is the one that generally applies to Amundi. We buy businesses and integrate them immediately (Lixor, Pioneer, Sabadell). So this question doesn't apply much to Amundi; once we buy the company, we have a rapid process of merging legal entities, staff, IT migration, and so there aren't two entities but only one: a new Amundi.

17:38

GG: In some cases, whether because they are minority investments or because we've left the management team standalone (i.e., with a separate company), the way we manage relationships with the company is merely contractual. So there's a shareholders' pact, financial incentives for management, etc. The rules are set in advance, and both parties must "play" by these rules.

18:17

FF: How can investor expectations be shaped by the time horizon during the acquisition process? How does Amundi manage these expectations and effectively convey the potential short-term and long-term ramifications of acquisitions?

18:49

GG: Well, we are a publicly traded company, so we have to report our results quarterly. During these communications, if there are new significant investments, either in terms of capital or organic investment, we discuss them, and over time, we provide visibility on the results. When we bought Lixor, we said: it costs x euros, we expect a return of more than 10%, 60 million in operational synergies, 30 million in revenue synergies, etc. We regularly update on our progress and

if we foresee any changes. If things went wrong, we would face challenges from shareholders, analysts, etc. – it's part of the game.

19:50

FF: How does Amundi specifically define and measure the time horizon in resource allocation decisions, given that the discounted cash flow analysis and the net present value (NPV) rule might not fully capture the influence of the time horizon on such decisions? In other words, does Amundi employ specific indicators or metrics to more accurately gauge the impact of the time horizon on investment decisions?

20:24

GG: There are two answers here, one for organic investments and one for capital investments. For the former, we don't calculate IRR, ROI, etc. We look at the impact on P&L. As I mentioned earlier, we make an initial investment, see how it works, and adjust based on profitability impact. If things go well, we continue to invest; otherwise, we start to cut losses and put in a stop-loss.

20:55

GG: There are companies organized differently, which calculate specific profitability for each investment. Still, we don't do that, not because it's not a good idea, but because all these investments have specific costs, yet they also use shared resources from the group, so the value of the calculation is relative. What interests us are revenues, direct costs, and whether we're profiting.

21:54

GG: For financial or capital investments, it's similar, but in these cases, there are internal committees that conduct "post mortem" analyses of these investments. They ask for an ROI calculation after 12, 18, or 24 months, which is the main indicator used by the Credit Agricole group. Our goal when making a capital investment is to achieve a 10% ROI within three years. Typically, the first two years are somewhat below this, as we haven't yet realized all the synergies and growth. Hence, the real goal is at least 10% after three years, and so after 18, 24 months, we conduct a "post mortem" to assess our position relative to this goal.

22:57

FF: So, I'd like to start with some more behavioral questions now. are the primary behavioral factors that might influence Amundi's investment decisions during the acquisition process, considering the given time horizon? How might these behavioral elements sway the evaluations and choices concerning acquisitions made by Amundi?

23:27

GG: I'm not sure what you mean by behavioral factors, but beyond the numbers of a business, the market context matters. It affects the perception of risk when making an investment at a particular time. The second very important thing is the people we have to work with, so I don't know if it's a behavioral factor, but in any case, during the investment analysis, we consider the management of the company we're buying, integration capacity, cultural differences, etc. We also manage the perception of our main shareholder, the Credit Agricole group, which has specific values, so we also consider these elements beyond financial ones. And then there's our management: what's their capacity to integrate the business, develop the business, considering the local market context, etc. So the human element is always taken into account.

24:56

FF: Ok, thank you. We're almost at the end of the interview. Now talking about biases. I will name a few biases that can develop in relation to investment choices over time, and I would like to ask you briefly to tell me if these can influence Amundi's decisions regarding, for example, acquisitions, and what strategies or measures are adopted in order for there to be impartiality and objectivity.

FF: 1) Overconfidence: excessive self-confidence.

25:27

GG: Well, this is certainly a bias that doesn't apply much to Amundi, rather the opposite. As we're always very cautious, the bias is actually the opposite. It's the fact that we often have an excess of caution when analyzing development prospects and so, in some cases, we might miss out on opportunities. Because obviously, especially when there are new businesses launching or requiring significant investments, the tendency is to choose the least risky option, and so we risk missing opportunities. So, overconfidence never occurs, it never happens.

26:21

FF: 2) Confirmation bias: the tendency to interpret information to confirm pre-existing beliefs.

26:34

GG: Again, I'd say no, because we try to have a very factual approach. But indeed, human nature plays a significant role. When there's a strong desire to close a deal, one might tend to minimize negative signals or give more value to positive ones. However, even in this case (though we might have this bias because it's human nature), in the end, during the quality-check, there's always this return to caution that helps us.

26:34

FF: 3) Temporal anchoring: the tendency to base investment decisions on past assessments or specific reference points in time.

27:36

GG: Well, this is also quite natural. In fact, this is clearly a risk that exists, because nobody knows what the future will hold, so the best way to predict the future is generally to look at what happened in the past. So this is one of the main risks, as no one has a crystal ball.

28:00

FF: 4) Temporal myopia bias: the tendency to evaluate investments only based on immediate consequences and not deeply consider long-term effects.

28:33

GG: Yes, there's a bit of this bias, but always because of caution. Meaning, when setting a 10% ROI target over three years, it somehow prioritizes short-term profitability over long-term. In fact, we always have some difficulty making investments in businesses with strong growth rates, especially when acquisition multiples are very high and therefore achieving a 10% ROI in three years is challenging. So for now, we're somewhat tied to this KPI, especially if we want to start investing in Tech where longer horizons are required. This is because, in Tech, investments often go into loss-making companies (which is never the case with Asset Management), but they have very high growth rates.

29:51

FF: So, to summarize about biases, how does the company promote (or if it promotes) greater awareness to rationally evaluate investment decisions?

29:51

GG: Well, our role is to try and conduct the most factual analyses possible and have as few biases as possible. Because every acquisition project involves both the business line and finance, and all can have biases. Our role is to bring all the arguments to a level of rationality without personal interest in doing a deal, simply trying to determine if it might be profitable, whether it will help us tomorrow or not,... So from a certain point of view, it's really us who challenge all those who might have all these biases.

31:15

FF: Second to last question, which is a bit off-script but I find necessary at this point: AI.

Are you developing anything in terms of artificial intelligence? Because as we've said, human rationality seems partial, since even the discourse on probability, despite being very important, might be a bit haphazard. But perhaps an artificial intelligence system can more objectively analyze certain factors, or simply provide solutions for investors.

31:15

GG: Well, I would divide the question. I know that IT is working on an artificial intelligence test, but with logic applied to their own business, also including investments on behalf of third parties. Regarding artificial intelligence, I'm not an expert, but I know it's based on statistics, meaning the more data-points there are, the clearer a pattern emerges, and so on until a problem is solved. We do exactly the opposite, in the sense that each deal and analysis is bespoke. So it's very difficult to apply AI to our daily operations because above all, we shouldn't repeat what we did in the past. To know if a company is interesting or not to be acquired, I need to conduct a tailored analysis. I can't decide if statistically this company will be useful or not. So it applies much less to our type of work, given the number of investments we make at Amundi... I mean, we don't make 5,000 investments a year; there might be 1 or 2 projects a year that are launched, so I think that in Amundi's specific case, it's a bit less applicable.

33:42

FF: Lastly, could you share some examples of how Amundi successfully managed investments across different time frames? What were the challenges faced, and what strategies were adopted to optimize short and long-term returns?

34:00

GG: Well, we've made all kinds of investments, very large ones (with integrations), medium ones (keeping companies somewhat separate), and then smaller ones (test investments). The easiest to comment on are those we bought and integrated because they were always done for very short periods, 12-18 months, with synergies and integrations realized, so they were good short and medium-term investments. Then there were other smaller investments where we conducted tests without any certainty, but since they cost little, we tried them out. In some cases, they turned out badly. In those cases, when we started accumulating losses, we did a stop-loss and closed the companies. In other instances, we made investments by taking minority stakes in certain companies to then market their products. But the investment in terms of trade was inconclusive; there wasn't any more interest from our commercial side. In that case, after 2-3 years, we sold our stake, even with a profit. So the financial investment was successful, but we realized that the industrial project did not work, so we cut it.

35:42

GG: In the end, the life of all these investments is that sometimes they work, and sometimes they don't. When they work, there's nothing to do: reap the rewards. When they don't, the question is: at what point do you say enough? The time horizon is somewhat dictated by the hope of being able to get back on the path we had envisioned at the beginning, and then other considerations about market-timing, people, etc.

36:21

FF: Perfect, thank you very much for your time.