

MASTER
ECONOMICS OF BUSINESS AND STRATEGY

Economic and Financial Analysis of Investment Projects in the Tourism Sector

Felismina Isabel Ferreira Tavares

M

2026



Economic and Financial Analysis of Investment Projects in the Tourism Sector
Felismina Isabel Ferreira Tavares

Internship Report
Master in Economics of Business and Strategy

Supervised by
Rosa Forte

2026

Acknowledgements

This report marks the conclusion of one of the most important chapters of my life. It has been a journey filled with meaningful experiences and challenges that have shaped both my academic and personal growth. Throughout this journey, I have been fortunate to be surrounded by people who supported and encouraged me. To all of them, I would like to express my deepest gratitude.

First and foremost, I would like to thank my academic supervisor, Professor Rosa Forte. From the very beginning, she was always available to guide and support me with patience and dedication. I am truly grateful for her guidance, feedback, and encouragement, which enabled me to complete this work with greater confidence and rigour.

I would also like to express my sincere gratitude to Frederico Mendes & Associados for giving me my first professional opportunity. This internship was an extremely rewarding experience, and I will always be grateful for the welcoming environment in which I was received, where I truly felt like part of the FMA family. A very special thank you goes to Salomé, my supervisor at FMA. From the first day, she was always available to help and share her knowledge. She gave me the opportunity to shape my internship according to my interests, and her support and trust made this experience even more meaningful. I will always be grateful for everything she taught me.

To my friends, thank you for making this journey so much lighter, for the companionship, support, and unforgettable memories throughout these years. To my boyfriend, thank you for standing by my side throughout this entire journey. Thank you for believing in me, especially during the moments when I struggled to believe in myself, for constantly encouraging me to aim higher, and for always being there to support me whenever I needed it.

Finally, to my family, and especially to my parents, this achievement belongs to you as much as it belongs to me. You have always been my greatest source of strength, encouraging me to keep going even when I doubted myself, celebrating every achievement as if it were your own, and believing in me unconditionally. Knowing that I had the opportunity to pursue an academic path that you yourselves never had the chance to experience makes this accomplishment even more meaningful. Thank you for being my greatest examples of resilience, integrity, hard work, and ambition. Everything I have achieved is only possible because of your love, sacrifices, and unwavering support. This milestone is mine, but above all, it is yours.

Abstract

This report stems from the curricular internship carried out at Frederico Mendes & Associados (FMA), a consultancy firm specialised in financial and tax incentives. The report focuses on the economic-financial appraisal of tourism investment projects, in the context of applications under the *Crescer com o Turismo* public support programme, a scheme managed by Turismo de Portugal targeting investment in the Portuguese tourism sector. In this setting, the quality and consistency of the financial analysis are decisive factors in the eligibility and competitiveness of each application.

The main internship activities included the construction of economic-financial models (EFM) for tourism investment projects, the monitoring and management of funded projects already underway, and participation in complementary consultancy work. Drawing on this experience, the report presents a critical analysis comparing the investment appraisal practices observed at FMA with the main investment appraisal methods, with particular emphasis on Net Present Value (NPV), Internal Rate of Return (IRR), the Payback Period, and sensitivity and scenario analysis as tools for managing uncertainty in practical investment decision-making.

This analysis identifies points of convergence, including the combined use of multiple evaluation indicators, the hybrid sensitivity-scenario approach, and the anchoring of revenue projections to sector-specific benchmarks, alongside points of divergence, including the determination of the discount rate, the treatment of residual value, and the absence of real options analysis. The central finding is that the gap between theory and practice is largely structural, reflecting the operational and regulatory constraints of Small and Medium-sized Enterprises (SMEs)-focused tourism investment consultancy rather than a methodological shortcoming. Two areas of feasible improvement are proposed: the incorporation of project-specific sensitivity analysis and the inclusion of qualitative real options reasoning in the business plan.

Keywords:

Tourism; Investment evaluation; Public Funding; Financial modelling; Consultancy; Portugal

Resumo

O presente relatório resulta do estágio curricular realizado na Frederico Mendes & Associados (FMA), consultora especializada em incentivos financeiros e fiscais. O relatório centra-se na avaliação económico-financeira de projetos de investimento turístico, no âmbito das candidaturas ao programa Crescer com o Turismo, um sistema de incentivos gerido pelo Turismo de Portugal orientado para o investimento no setor do turismo em Portugal. Neste contexto, a qualidade e consistência da análise financeira são determinantes para a elegibilidade e competitividade das candidaturas.

As principais atividades do estágio incluíram a construção de modelos económico-financeiros para projetos de investimento turístico, o acompanhamento e gestão de projetos financiados e a participação em atividades complementares de consultoria. Com base nesta experiência, o relatório apresenta uma análise crítica que compara as práticas de avaliação de investimentos observadas na FMA com os principais métodos de avaliação de investimentos, com destaque para o Valor Atual Líquido, a Taxa Interna de Rentabilidade, o Payback Period e a análise de sensibilidade e de cenários como instrumentos de gestão da incerteza na tomada de decisão de investimento.

A análise identifica convergências, incluindo o uso combinado de múltiplos indicadores, a abordagem híbrida de sensibilidade e cenários e a utilização de *benchmarks* setoriais nas projeções de receita, bem como divergências na determinação da taxa de desconto, no tratamento do valor residual e na ausência de análise de opções reais. Conclui-se que o desfaseamento entre teoria e prática é maioritariamente estrutural, refletindo as condicionantes operacionais e regulatórias da consultoria de investimento turístico dirigida a Pequenas e Médias Empresas, e não uma limitação metodológica. Por fim, são propostas duas oportunidades de melhoria: a utilização de análises de sensibilidade específicas para cada projeto e a inclusão de raciocínio qualitativo sobre opções reais no plano de negócio.

Palavras-chave:

Turismo; Avaliação de investimento; Financiamento Público; Modelação Financeira; Consultoria; Portugal

Table of Contents

Acknowledgements	i
Abstract.....	ii
Resumo.....	iii
List of tables.....	vii
List of figures.....	viii
List Of Abbreviations.....	ix
1. Introduction.....	1
2. Frederico Mendes & Associados	4
2.1. Company Overview and Strategic Positioning.....	4
2.2. Business Model and Areas of Intervention.....	6
2.3. Financial and Peer Analysis.....	7
3. Internship Activities	10
3.1. Overview and Organisational Integration	10
3.2. Financial Modelling and Investment Appraisal.....	11
3.2.1. General Financial Structuring	11
3.2.2. Economic-Financial Modelling for Tourism Investment Projects	12
3.3. Project Implementation and Monitoring.....	16
3.4. Regulatory Interactions During Project Implementation.....	18
3.5. Complementary Consultancy Activities	19
3.6. Professional Development and Team Integration.....	20
4. Literature Review	21
4.1. The Conceptual Foundations of Investment Appraisal.....	21
4.2. Principal Evaluation Indicators	22
4.2.1. Net Present Value	22
4.2.2. Internal Rate of Return	23

4.2.3.	Payback Period and Discounted Payback.....	24
4.3.	Real Options: A note on Advanced Appraisal Methods	26
4.4.	The Determination of the Discounted Rate.....	27
4.5.	The Treatment of Uncertainty	28
4.5.1.	Sensitivity Analysis.....	28
4.5.2.	Scenario Analysis.....	29
4.6.	Economic and Financial Appraisal of Tourism Investment Projects	30
4.7.	The Effect of Public Funding on Investment Viability	32
4.8.	The Consultancy as Intermediary: Client Engagement in Public Funding Processes	34
5.	Bridging Theory and Practice: A Critical Assessment of Economic-Financial Appraisal Methods in Tourism Investment Consultancy	36
5.1.	Points of Convergence Between Theory and Observed Practice.....	36
5.1.1.	The Combined Use of NPV, IRR and Payback as Complementary Indicators	36
5.1.2.	Sensitivity and Scenario Analysis as an Integrated Risk Analysis Framework	37
5.1.3.	Tourism-Specific Benchmarks, Seasonality, and the Credibility of Revenue Projections	38
5.2.	Points of Divergence between Theory and Observed Practice	39
5.2.1.	The Discount Rate: From CAPM-Derived WACC to Practical Convention...	39
5.2.2.	The Treatment of Public Funding and the Incremental Analysis.....	40
5.2.3.	The Residual Value as a Regulatory Parameter rather than a Theoretically Derived Terminal Value	41
5.2.4.	The Limited Role of Refined IRR Measures	42
5.2.5.	Standardised Scenarios versus Project-Specific Sensitivity	43
5.2.6.	The Real Options Gap	44
5.2.7.	Client Engagement: A Dimension the Appraisal Literature Largely Overlooks	45

5.3.	Towards an Improved Practice: Possibilities and Limits	46
6.	Conclusion	49
	References.....	51
	Appendixes - Figures.....	55
	Appendixes - Tables	56

List of tables

Table 1 - Stages of the FMA tourism EFM process	12
Table 2 - Revenues streams and costs categories considered in the tourism EFM	13
Table 3 - Principal advantages and limitations of NPV criteria	23
Table 4 - Overview of principal capital budgeting methods	25
Table 5 - Tourism's contribution to the Portuguese economy 2023-2024	32
Table A.1 - Payment request information example.....	56

List of figures

Figure 1 - FMA Services Portfolio.....	6
Figure 2 - Sales Growth for FMA and the Portuguese MC Sector	8
Figure 3 - EBITDA Margin per year.....	8
Figure 4 - Net Return on Equity.....	9
Figure A.1 - Selection of organisations and companies from FMA's client portfolio	55
Figure A.2 - Key information on a selection of FMA's direct competitors	55

List Of Abbreviations

ADR	Average Daily Rate
AICEP	Agência para o Investimento e Comércio Externo de Portugal
AIRR	Average Internal Rate of Return
ANI	Agência Nacional de Inovação
CAPM	Capital Asset Pricing Model
CEM	Criação de Emprego e Microempreendedorismo
DCF	Discounted Cash Flow
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortisation
EFM	Economic-financial models
FMA	Frederico Mendes & Associados
GDP	Gross Domestic Product
IEFP	Instituto do Emprego e Formação Profissional
IRR	Internal Rate of Return
I&D&I	Investigação, Desenvolvimento e Inovação
KPIs	Key Performance Indicators
MIRR	Modified Internal Rate of Return
NPV	Net Present Value
OAT	One-at-a-time
OR	Occupancy Rate
PRR	Plano de Recuperação e Resiliência
RevPAR	Revenue Per Available Room
RFAI	Regime Fiscal de Apoio ao Investimento
ROE	Return on Equity
SICE	Sistema de Incentivos à Competitividade Empresarial
SIFIDE	Sistema de Incentivos Fiscais em Investigação e Desenvolvimento Empresarial
SMEs	Small and Medium-sized Enterprises
WACC	Weighted Average Cost of Capital

1. Introduction

This report was prepared within the scope of the curricular internship carried out at Frederico Mendes & Associados (FMA), a consultancy firm specialised in financial and tax incentives and in supporting the preparation, submission, and monitoring of investment projects. Embedded in a logic of articulation between academic training and professional practice, the internship was designed to provide applied experience in the field of investment project management, allowing not only contact with the instruments and procedures used in a consultancy context, but also the development of a critical reflection on the concrete challenges faced by the organisation and its clients.

The internship was structured around a set of core objectives: the resolution of specific organisational challenges, namely through the development of economic-financial feasibility models and proposals for improving application and execution processes in the context of financial and fiscal incentive schemes; exposure to different functional areas of the firm, including financial analysis, accounting, strategy, and investment project management; the practical application of theoretical knowledge in fields such as feasibility studies, investment evaluation, and the assessment of financial and tax incentives; the development of analytical, organisational, and interpersonal competencies; and a process of reflection on continuous improvement and on the impact of the work developed on the organisation and its clients.

The activities undertaken during the internship were designed to promote progressive learning and direct contact with professional practice. These include support in the analysis of investment projects, the preparation of applications to incentive schemes, the verification of expenditure eligibility, the preparation of payment claims, responses to requests for clarification, and the drafting of rebuttals, as well as contact with economic and financial models and other decision-support tools. This context makes it possible to understand, in an integrated manner, the role of consultancy in the technical, financial, and documentary structuring of projects subject to appraisal by managing entities.

FMA's activity is developed in close articulation with the main public investment support instruments available in Portugal. In the case of the tourism sector, particular relevance is assumed by the *Crescer com o Turismo* Programme, promoted by Turismo de Portugal, aimed at supporting initiatives that contribute to the qualification, innovation, and enhancement of tourism activity, while simultaneously reinforcing its contribution to the sustainable develop-

ment of territories (Turismo de Portugal, 2025). In parallel, larger projects may fall within the scope of *SICE - Inovação Produtiva*, integrated into Portugal 2030, an instrument aimed at stimulating innovative business investment and promoting the differentiation, diversification, and strengthening of firms' competitiveness (COMPETE 2030, 2024).

Throughout the internship, the intern was extensively involved in the economic and financial appraisal of tourism investment projects, as this represented one of the firm's core areas of consultancy and a significant component of the activities carried out during the internship. The practical experience gained in this context provided direct exposure to the challenges associated with the appraisal of tourism investment projects, making this field a natural focus for the critical reflection developed in this report.

The choice of the tourism sector as the focus of this report is justified by its structural relevance to the Portuguese economy. According to the Tourism Satellite Account, tourism accounted for a direct and indirect contribution of 12% of Gross Domestic Product in 2023, above the 11.2% recorded in 2022, thus evidencing a trajectory of recovery and consolidation following the pandemic period (INE, 2025a). This trend remained evident in 2024, when total tourism consumption in Portugal represented 16.6% of GDP, a new historic maximum, while the direct and indirect contribution of tourism to the Portuguese economy stood at approximately 11.9% of GDP (INE, 2025a). The sector's dynamism is further reflected in final data for 2024, which point to 31.6 million guests, 80.4 million overnight stays, and €27.7 billion in tourism revenues (INE, 2025b). Furthermore, according to projections disclosed based on estimates by the World Travel & Tourism Council, tourism may account for 21.5% of Portuguese GDP in 2025, which further reinforces the strategic importance of the sector and the relevance of analysing investment projects in this area (COMPETE 2030, 2025).

It is within this context that the report focuses on the economic and financial appraisal of investment projects in the tourism sector, as a particularly relevant component in the process of preparing and assessing applications to support schemes. The consistency of this analysis is crucial for demonstrating the robustness, credibility, attractiveness, and eligibility of projects. This is particularly pertinent in competitive environments characterized by limited resources and increasingly stringent requirements regarding the technical and financial justification of proposed projects within funding applications.

In this way, the primary aim of this report is to articulate the practical experience acquired during the internship with the contributions of the literature, seeking to assess the

extent to which the activities developed in the domain of the economic and financial appraisal of tourism investment projects are consistent with the main theoretical and methodological references available. In doing so, the report aims to identify areas of convergence and divergence, as well as potential opportunities to enhance the adopted procedures, thereby contributing to a more grounded reflection on consultancy practice applied to the appraisal of investment projects in the tourism sector.

With this purpose in mind, the report is structured as follows. Chapter 2 presents Frederico Mendes & Associados and its organisational context. Chapter 3 describes the activities carried out during the internship. Chapter 4 reviews the academic literature relevant to investment evaluation and tourism investment. Building on this theoretical foundation, Chapter 5 develops a critical reflection by comparing the practices observed during the internship with the contributions of the literature. Finally, Chapter 6 presents the main conclusions, summarises the key lessons drawn from the internship experience, and outlines possible avenues for future development.

2. Frederico Mendes & Associados

This chapter presents Frederico Mendes & Associados (hereafter FMA), the firm where the curricular internship was conducted. It is organised into three sections: the first describes the firm's profile and strategic positioning; the second outlines its business model and areas of intervention; and the third offers a financial and peer analysis. It should be noted that FMA is a small firm, and that all information included in this chapter was obtained from internal sources, with the firm's knowledge and authorisation. The exception is the financial benchmarking and competitor data presented in Section 2.3, which were obtained from Orbis, a global company database provided by Bureau van Dijk, and from *Quadros do Setor* (Banco de Portugal, hereafter BdP), with the FMA's authorisation.

2.1. Company Overview and Strategic Positioning

Frederico Mendes & Associados is a Portuguese consultancy firm headquartered in Espinho, Aveiro, specialised in the identification, structuring, and management of fiscal and financial incentives for private companies and public institutions. Founded in 2007 by Frederico Mendes, Managing Partner, the firm operates at the intersection of private investment and public funding, providing technical support throughout the full lifecycle of investment projects, from the initial diagnosis of financing opportunities to the submission of applications, the management of funded projects, and the conduct of technical audits.

Since its establishment, FMA has positioned itself as a boutique consultancy with a deliberately lean organisational structure, prioritising service quality over scale of operations. This strategic approach has proven especially suitable for a market characterized by the increasing complexity of public funding instruments and a growing number of companies competing for the same funding pools. In this context, the quality and rigor of applications submitted on behalf of clients become critical competitive factors, and FMA's ability to produce technically robust and financially credible investment proposals is a key differentiator.

The firm's identity is articulated around the philosophy of “Small by Design”, a deliberate choice to remain compact and specialised rather than broad and generic. This philosophy translates into three organisational pillars: Great on Talent, reflecting a rigorous approach to recruitment and continuous professional development; Great on Relationships, reflecting FMA's commitment to long-term client partnerships in which it acts as a trusted strategic partner rather than a transactional service provider; and Great on Results, reflecting an accountability culture defined by the value created and the impact delivered for each client.

In 2019, FMA expanded its geographic presence by opening a second office on the island of Madeira, thereby reinforcing its capacity to serve clients across the entire Portuguese territory.

From an organisational standpoint, the firm's consultancy activity is structured around two operational teams: the Innovation team and the Economic-Financial team, both supervised by the Head of Consulting. Within each team, the career structure progresses from Investment Project Analysts, the entry-level function, through Project Leaders, to Managers at the senior level. Back-office functions are handled by a dedicated Marketing team, headed by the Head of Marketing alongside Marketing Managers, as well as separate roles responsible for Financial and Information Technology (IT) management and Human Resources. All functions ultimately report to Frederico Mendes as Chief Executive Officer (CEO).

The firm employs around thirty professionals from diverse academic backgrounds, including Economics and Management, Engineering, Law, and Marketing, with an average age of approximately thirty years. The team's multidisciplinary composition reflects the complexity of the technical, financial, and regulatory dimensions involved in the projects it manages, and approximately 17% of its collaborators hold doctoral qualifications, underlining the firm's commitment to academic rigour as a foundation for professional practice.

FMA's track record reflects sustained growth in both the scale and diversity of its client portfolio. As of March 2026, the firm serves more than 710 active clients, has managed more than 3,000 projects of national and European relevance, and has structured investment supported by public incentive instruments totalling over €1,200 million. The firm's client retention rate is particularly noteworthy: more than 76% of active clients have maintained a working relationship with FMA for three years or more, a figure that speaks to the durability and quality of the partnerships established.

FMA's client base consists predominantly of small and medium-sized enterprises (SMEs) operating across a wide range of sectors. The firm's institutional recognition was further reinforced by its distinction as a *Pequenas e Médias Empresas (PME) Excelência* award recipient in 2023, a classification awarded by the Portuguese credit guarantee system to firms meeting demanding criteria of financial performance and management quality. Figure A.1 in the Appendix presents a selection of the firm's most recognisable clients, including the University of Porto, Super Bock Group, and MC.

Within the tourism segment specifically, FMA's portfolio includes more than 70 pro-

jects, representing approximately 7% of the firm's total managed investment, reflecting the sector's growing weight within the firm's overall activity, and justifies the focus of the present report.

2.2. Business Model and Areas of Intervention

FMA's service offering is structured around six complementary service lines, each addressing a distinct phase of the funded investment project cycle: Incentives Monitor, Incentives Application, Incentives Management, Incentives Marketing, Incentives Audit, and Incentives Academy. As illustrated in Figure 1, these lines collectively cover the entire process of accessing and managing public support instruments, from opportunity diagnosis through to training and project recovery. This integrated model enables FMA to support clients well beyond the application stage.

Figure 1 - FMA Services Portfolio

Services



Note. Adapted from FMA

One of FMA's main strengths is its thorough knowledge of the national and European public funding landscape. The firm operates across a broad portfolio of programmes, with particular expertise in the frameworks under Portugal 2030, the *Plano de Recuperação e Resiliência* (PRR), the *Sistema de Incentivos Fiscais à Investigação e Desenvolvimento Empresarial* (SI-FIDE), and a range of sectoral instruments managed by entities such as Turismo de Portugal, the Agência para o Investimento e Comércio Externo de Portugal (AICEP), the Agência Nacional de Inovação (ANI), and the Instituto do Emprego e Formação Profissional (IEFP),

among others.

Within the tourism sector, the most directly relevant programmes are *Crescer com o Turismo*, promoted by Turismo de Portugal and aimed at supporting the qualification, innovation, and sustainable development of tourism activity, and *SICE - Inovação Produtiva*, integrated into Portugal 2030 under COMPETE 2030, which targets innovative business investments and the strengthening of firms' competitiveness. The tourism investment projects supported by FMA in this context span a range of typologies, with particular relevance to rural accommodation and four- and five-star hotel developments.

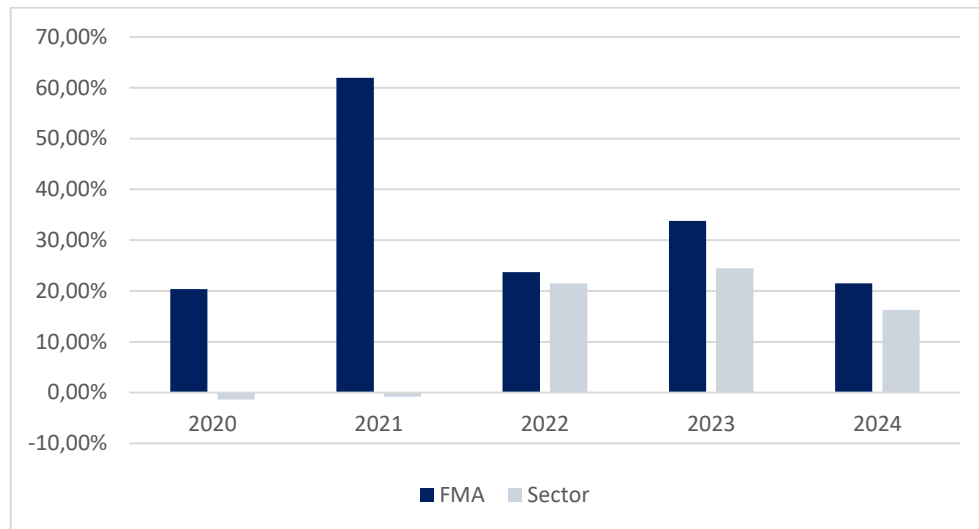
FMA's business model is deliberately agile in adapting to the evolution of available funding instruments and regulatory frameworks. However, the firm's strategic scope remains firmly anchored in the domain of financial and fiscal incentives, where its accumulated expertise and institutional knowledge constitute a sustainable competitive advantage that would be diluted by diversification beyond this area of specialisation.

2.3. Financial and Peer Analysis

To contextualise FMA's financial performance, a peer group of direct competitors was identified using data from Orbis and companies' websites. The selected firms INOVA+, Sociedade Portuguesa de Inovação, Yunit Consulting, FNWAY Consulting & Innovation, Scope Invest, and HM Consultores were chosen on the basis of their comparable size, geographical proximity, and similarity of activities. Key information on each is presented in Figure A.2 (Appendix).

FMA demonstrates strong commercial performance, as reflected in the evolution of its sales growth over the period under analysis (see Figure 2). The company consistently recorded higher growth rates than the Portuguese business and management consulting sector (*Classificação de Atividades Económicas*, CAE 70220 - Other Management Consulting Activities, small enterprises), particularly in 2021, when sales growth reached its highest level. Although growth moderated in subsequent years, FMA continued to outperform the sector benchmark, reflecting its ability to expand its operations and strengthen its market position.

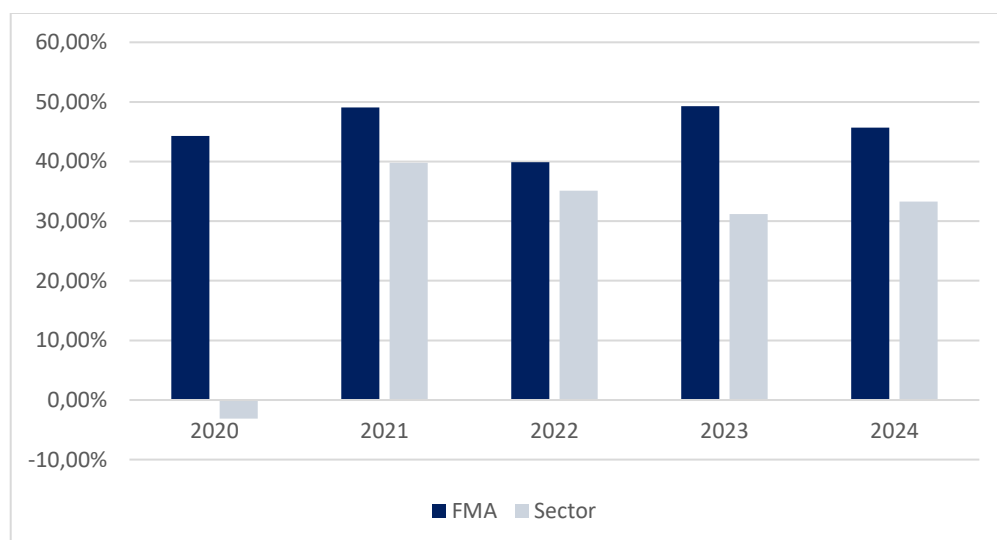
Figure 2 - Sales Growth for FMA and the Portuguese MC Sector



Note. Adapted from Quadros do Setor - BdP, FMA, Orbis

Figure 3 presents the Earnings Before Interest, Taxes, Depreciation and Amortisation (EBITDA) margin achieved by FMA and the sector benchmark. FMA consistently recorded EBITDA margins above the sector average throughout the period under analysis, reflecting its ability to maintain strong operating profitability while sustaining its growth trajectory.

Figure 3 - EBITDA Margin per year

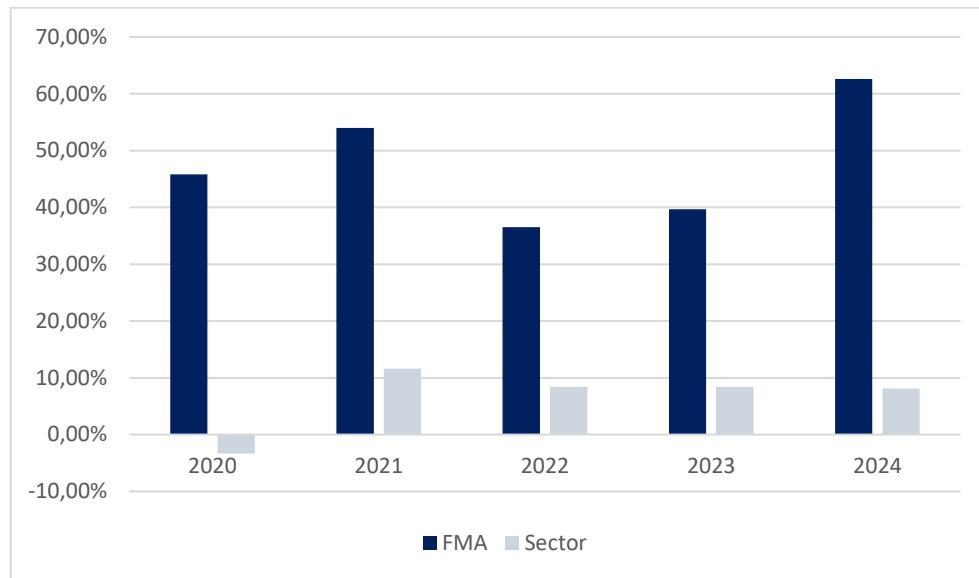


Note. Adapted from Quadros do Setor - BdP, FMA, Orbis

Lastly, the Return on Equity (ROE) presented in Figure 4 highlights FMA's ability to

generate attractive returns for its shareholders. Throughout the period under analysis, the company maintained ROE levels consistently above the sector benchmark and in line with some of the strongest performers within the peer group. These results reflect a solid financial position and a sustained capacity to create value through its operations.

Figure 4 - Net Return on Equity



Note. Adapted from Quadros do Setor - BdP, FMA, Orbis

3. Internship Activities

This chapter describes the activities carried out during the internship. Section 3.1 introduces the organisational context and the teams involved. Section 3.2 covers the core technical work: preparing economic-financial models for funding applications, both in general (3.2.1) and for tourism projects specifically (3.2.2) - the main focus of this report. Section 3.3 turns to monitoring funded projects already underway, including payment requests. Section 3.4 examines the regulatory and administrative interactions associated with the implementation of funded projects. Section 3.5 describes complementary consultancy work and client communication. Section 3.6 closes with the internal training and team integration activities conducted during the internship.

3.1. Overview and Organisational Integration

The curricular internship was carried out at Frederico Mendes & Associados between February and April 2026, on a full-time basis. Throughout this period, the intern was integrated as an Investment Project Analyst within a multidisciplinary team responsible for preparing, financial structuring, and monitoring of applications for public funding schemes, including support mechanisms under Portugal 2020, the *Plano de Recuperação e Resiliência* (PRR), and Portugal 2030.

During the internship, it was possible to engage with two distinct functional teams, the innovation team and the economic-financial team, who differ in the type of projects each team handles rather than in the nature of the tasks performed. The innovation team works predominantly on projects requiring a stronger grounding in scientific and technical knowledge, such as industry decarbonisation measures, Industry 4.0 initiatives, Mobilising Agendas, and *Investigação, Desenvolvimento e Inovação* (I&D&I) projects. The economic-financial team, in contrast, focuses primarily on fiscal incentive schemes, territorially anchored support measures, and programs such as *Crescer com o Turismo* and Coaching 4.0, among others. Certain funding programmes, including *SICE - Inovação Produtiva* and the *Linha “LA nas PMEs”*, cut across both teams and may be addressed by either, depending on project allocation. The intern was integrated into the economic-financial team, though occasional interaction with colleagues from the innovation team provided useful exposure to the broader range of instruments within the firm's portfolio.

The activities developed encompassed three broad domains: the preparation and fi-

nancial structuring of new applications, the monitoring and management of ongoing funded projects, including the preparation of payment requests and project adjustments, and a set of additional tasks arising spontaneously from the firm's operational demands, which proved particularly enriching from a professional standpoint. The most substantial work carried out during the internship concerned applications under the *Crescer com o Turismo* programme, promoted by Turismo de Portugal, which became the primary focus of the present report.

3.2. Financial Modelling and Investment Appraisal

3.2.1. General Financial Structuring

A central component of the internship consisted of contributing to the development of economic-financial models (EFM) supporting investment project applications across a range of sectors and funding programmes. These models serve as the quantitative backbone of each application, providing the managing entity with a forward-looking assessment of the expected financial performance resulting from the proposed investment and demonstrating the project's economic viability over the defined investment horizon.

The financial projections were developed using standardised Frederico Mendes & Associados (FMA) templates, which were subsequently adapted to the specific characteristics of each project. For companies with an established operating history, the analysis generally involved forecasting future cash flows over the implementation and operational period of the project, whilst also establishing a baseline scenario without the proposed investment. For newly created entities, projections were constructed from the outset, a circumstance particularly common in the tourism sector, where new ventures are frequently established with the specific objective of pursuing publicly supported investment opportunities.

The financial model incorporated the principal revenue streams associated with the client's activity, together with the main cost categories, including cost of goods sold, external supplies and services, personnel expenses, and maintenance expenditures. These projections also generated key financial performance indicators, such as EBITDA, together with projected cash flows, providing a basis for assessing the project's viability, liquidity, and financing needs. Beyond the income statement projections, the financial models incorporated assumptions regarding working capital requirements, including accounts receivable, inventories, and accounts payables, as well as general operating costs, reflecting both the company's historical performance and the operational requirements associated with the proposed investment. These financial projections were subsequently reviewed by project managers and senior con-

sultants and, once validated, formed part of the formal documentation submitted in support of each application.

An important parallel task involved defining the proposed funding structure for each project. This required balancing the volume of eligible expenditure, the equity contribution of the promoter, and the incentive requested, to maximise the financial sustainability and strategic impact of the investment whilst remaining within the parameters established by the applicable incentive regulation. The intern further contributed to ensuring consistency between the investment plan - which specifies the distribution of planned expenditures across budget lines and over time - and the underlying financial model, so that the timing of the investment was coherent with both operational feasibility and regulatory expectations.

3.2.2. Economic-Financial Modelling for Tourism Investment Projects

The financial structuring of tourism investment projects constitutes a particularly demanding and technically specific task within the firm's activity, reflecting the complexity of the sector's revenue structure and the stringent requirements imposed by the *Crescer com o Turismo* programme. Given this complexity, FMA has developed a structured methodological approach to preparing EFM for tourism projects, comprising several interrelated stages and components, in which the intern played an active and meaningful role. Table 1 summarises the main stages.

Table 1 - Stages of the FMA tourism EFM process

Stage	Purpose
Express evaluation	Quick, preliminary check of the project's viability, using available data and sector benchmarks, before committing to full modelling (allows the analyst to determine whether the proposed investment presents sufficient economic merit to justify proceeding to a more detailed analysis and application process).
Baseline model	Projects the company's cash-flows without the investment based on its historical growth trajectory (only applies to companies with an operating history).
Project model	Cash-flows generated by the project, including its revenues and associated costs.
Consolidated model	Produces the final financial projection by combining the baseline and the project models through the addition of their respective financial statements. For newly created entities, where no baseline model exists, the project model alone serves as the final projection.
Sensitivity analysis	Tests the consolidated model under three pessimistic scenarios: a 10% increase in costs, a 10% decrease in revenues, and both combined (a key requirement of the managing entity's financial robustness assessment).

The assumptions underlying these projections varied with the business's maturity. For companies with an established operating history, revenue and cost forecasts were primarily informed by historical financial performance, complemented by sectoral benchmarks and project-specific assumptions. For newly created entities, where historical data were unavailable, the analysis relied more heavily on market information, industry benchmarks, and operational assumptions derived from the proposed business model and investment plan.

The projections of the company's expected cash flows with the implementation of the project constituted the most substantive analytical stage and were the component to which the intern contributed most directly. These projections incorporated a detailed set of assumptions covering both the revenue and cost dimensions of the project, summarised in table 2.

Table 2 - Revenues streams and costs categories considered in the tourism EFM

Year	T	...	T+9	
Revenues				Key assumptions
Accommodation				
Occupancy rate (%)				Average daily rate by region; occupancy rate by capacity level; seasonal price variation
Average room rate (€)				
Number of available rooms				
Guests per occupied room				
Restaurant				
Indoor occupancy rate (%)				
Terrace occupancy rate (%)				
Average spend per customer (€)				
% of hotel guests using the restaurant				
Events / Workshops				
Number of events				Seasonal price/demand variation
Average participants per event				
Average spend per guest (€)				
Average spend per external customer (€)				
SPA and wellness treatments (including massage services)				
Utilisation rate (%)				Expected demand for massage services
Average spend per guest (€)				
Average spend per external customer (€)				

Year	T	...	T+9	
Product sales (wine and local products)				
Quantity sold (units)				
Average spend per guest (€)				
Average spend per external customer (€)				
Costs				Key assumptions
CMVMC (<i>Custo das mercadorias vendidas e matérias consumidas</i>) (% of revenues)				Set at 4% of revenues, based on Turismo de Portugal benchmark data
FSEs (<i>Fornecimento de Serviços Externos</i>) (% of revenues)				Estimated from Banco de Portugal macroeconomic assumptions and cost trends, with gradual efficiency gains over the projection period
Staff				
Annual salary Growth rate (%)				Annual salary growth rate of 2%
Annual base salary per employee (€)				
Number of employees				
Maintenance and other operating costs				Based on the property's scale and operational needs

The assumptions draw heavily on data published by Turismo de Portugal, which provides regional benchmarks for average daily room rates, occupancy rates, and other operational indicators. Anchoring the model's assumptions to these official data sources is a deliberate methodological choice, as it enhances the credibility and robustness of the projections. These benchmarks also provide the basis for the EFM's evolution over the projection horizon. Occupancy rates and average daily room rates are assumed to increase gradually, reflecting the expected maturation of the business, projected demand growth, and effects of inflation. In addition, seasonality is explicitly incorporated into the projections to capture the expected fluctuations in occupancy and revenue throughout the year, thereby providing a more realistic representation of the project's operating performance.

Concerning costs, particular attention is given to the personnel cost component, given that human resource allocation directly affects both the cost structure and, under certain incentive programmes, the eligibility conditions and incentive calculation. In this context, correctly estimating the number of employees, their functions, and remuneration levels is a critical input that must be consistent with the project's operational plan.

Beyond the points already flagged in Table 2, two further assumptions are considered

particularly vulnerable in the programme's eligibility assessment: spa revenue, given the absence of a standardised definition of what this category encompasses depending on the type of accommodation, and the demonstration of an innovation and differentiation dimension appropriate to the project's geographic and competitive context. This last criterion is particularly challenging, as it requires not only strong financial performance but also a compelling argument for the project's distinctive contribution to the development of tourism in the region where it is to be located.

These calculations culminate in the construction of projected financial statements - namely the balance sheet and the income statement - for each year of the project horizon. The preparation of these statements is not merely a presentational requirement but constitutes an evaluation criterion, as it demonstrates the internal consistency of the assumptions adopted and the analyst's ability to translate operational projections into a coherent and integrated set of financial outputs. These statements, in turn, are the basis for the viability indicators. The key financial indicators, which constitute the primary decision criteria for assessing investment viability and are discussed in Section 4.2, are the Net Present Value (NPV), the Internal Rate of Return (IRR), and the Payback Period. Particular emphasis is placed on the NPV and IRR, while the Payback Period is assessed in its discounted form against the project's ten-year investment horizon. The residual value¹ considered at the end of the forecast horizon is set at 95% of the project's net asset value, in accordance with the reference parameters established by Turismo de Portugal. As no specific residual value percentage is prescribed under the applicable funding programmes, the Express Evaluation adopts a conservative assumption of 80% as an internal practice to ensure a prudent preliminary assessment.

The business plan complements the EFM with a narrative account of the investment rationale, market positioning, and operational model, in a format consistent with the programme's requirements. Together with the financial models and the standard supporting documentation, it forms the complete application package submitted for evaluation.

¹ Residual value represents the value attributed to the project at the end of the forecast period, reflecting the future economic benefits expected to be generated beyond the reference period. According to the European Commission, the residual value should represent the value of the remaining economic life of the project's assets after the end of the analysis period and may be estimated based on the present value of the future net cash flows generated during that remaining lifetime (European Commission, 2015).

3.3. Project Implementation and Monitoring

In parallel with the preparation of new applications, a significant part of the internship involved contributing to the monitoring and management of funded projects at various stages of their implementation cycle. The tools used for this purpose are internal monitoring models - complex spreadsheet-based instruments that consolidate all relevant information concerning a funded project within a single structured framework and serve as the primary instrument for tracking progress, ensuring compliance, and supporting communication with managing entities.

These monitoring models typically comprise several interconnected pages, each addressing a distinct dimension of the project's lifecycle. A central page compiles the key identifying information of both the company and the funded project, including the approved incentive amount, the project start and end dates, and the principal milestones and deliverables established in the financing contract. Additional pages are dedicated to tracking the different categories of expenditures eligible for reimbursement, which may include expenses incurred with third-party suppliers, as supported by invoices, and personnel costs, the latter typically encompassing gross remuneration up to the applicable regulatory ceiling, holiday pay, and Christmas allowances, among other eligible cost components. A further page tracks the approved investment plan, mapping planned expenditure against actual expenditure by budget line and enabling the identification of under-executed lines, potential reallocations, and emerging needs that may require a formal amendment request to revise the approved investment plan. Given that the approval process for funded projects often spans a considerable period of time, it is not uncommon for the originally proposed investment plan to become misaligned with the company's evolving operational needs during project implementation. Identifying and addressing these misalignments promptly is a key function of the monitoring process.

A particularly important dimension of project monitoring concerns the tracking of key performance indicators (KPIs) established in the financing contract. These indicators, which may relate to turnover growth, employment creation, export performance, or other metrics relevant to the specific funding program, are assessed after the project's implementation to verify compliance with the commitments established in the funding application. Although the applicable funding programmes typically specify only a minimum investment execution requirement, an internal target of at least 80% achievement of the committed indicators is agreed with the client as a conservative safeguard against the risk of future

funding recovery. The monitoring model incorporates a dedicated page for tracking indicator performance, enabling the analyst and project manager to anticipate any risk of non-compliance and take corrective actions in a timely manner. Given the financial and reputational consequences of non-compliance, this component of project monitoring is treated with considerable rigour within the firm.

Additionally, given the structural differences between the various incentive programmes, particularly regarding eligible expenditures, reporting requirements, payment claim procedures, and key performance indicators, each monitoring model must be tailored to the specific requirements of the applicable programme. A significant part of the work involved adapting and refining existing monitoring models to reflect the specific rules of each funding programme. This included the adaptation of the model used for the Coaching 4.0 programme, ensuring that its logic, structure, and calculation methodologies remained fully aligned with the applicable regulatory framework.

The preparation of payment requests - by which project promoters claim reimbursement from managing entities for expenditures incurred in the execution of funded projects - constituted another significant component of the internship. This process involves a rigorous examination of the eligibility of each expenditure item to ensure that only costs that are compliant with the applicable regulatory conditions are included in the claim. In practical terms, the eligibility verification of invoice-supported expenditures incurred with third-party suppliers required the analysis of invoices and corresponding proof of payment, accounting extracts, cost centre reports, and supplier statements, in order to confirm that the costs were genuinely incurred, correctly recorded in the company's accounting system, and attributable to the funded project. The verification of personnel costs was comparably detailed, requiring the examination of payslips, social security declarations, and, where applicable, employment insurance policies. A simplified illustration of the data collected in the context of invoice verification for a payment request under a project with a 60% incentive coverage rate is presented in Table A.1 (Appendix).

A further dimension of expenditure eligibility verification concerned the assessment of capital goods proposed for inclusion as eligible investment items. This required confirming that the assets in question were new - that is, had not been previously used - and that their acquisition was consistent with the project's operational rationale and capable of generating the productivity or sustainability gains asserted in the application. These verifications occasionally required direct coordination with both the client and the relevant vendors to

obtain the necessary documentary evidence. All verified information was subsequently transposed into the official submission platform used by the relevant managing entity for payment request processing.

Additional responsibilities assumed by the intern included the preparation of internal consolidation tools used by FMA to aggregate eligibility information and generate preliminary estimates of the reimbursement amounts to be claimed. These estimates were subsequently reviewed and validated by senior consultants prior to formal submission.

3.4. Regulatory Interactions During Project Implementation

A further set of activities during the internship involved supporting the preparation of formal communications with managing entities throughout the implementation of funded projects. These communications related to project amendments and administrative procedures arising during the project lifecycle, including changes to implementation schedules, modifications to approved investment plans and expenditure allocations, and, where applicable, project withdrawal requests. The work also encompassed the preparation of responses to requests for clarification and supplementary information issued by the competent entities, requiring the compilation of supporting documentation and the provision of technical justifications concerning the investments under assessment.

Additional exposure was gained to the specific technical and regulatory argumentation required to justify the eligibility and value added of investments proposed under support measures with a decarbonisation dimension. For example, applications submitted under the Industry Decarbonisation programme required the presentation of quantified evidence demonstrating the expected contribution of the proposed equipment to reducing carbon dioxide (CO₂) emissions, improving energy efficiency, or decreasing the consumption of primary resources. Such claims were supported by market analyses and comparative budget proposals, enabling the managing entity to verify that the selected solution resulted from a balanced cost-benefit assessment rather than from the promoter's individual preference.

Further activities included supporting the preparation of formal rebuttals in cases where applications received a favourable technical assessment but were not allocated funding due to budgetary constraints and the competitive nature of the selection process. In these cases, the response strategy typically involved identifying the evaluation criteria in which the application received less favourable scores and developing substantiated arguments aimed at contesting or clarifying the evaluators' conclusions. A particularly relevant example con-

cerned applications submitted under a funding programme promoting the adoption of artificial intelligence solutions by SMEs, where projects involving broadly similar investments were assessed differently according to the evaluators' perception of the extent to which the proposed solutions contributed to the applicant's specific business model. Participation in these activities required a detailed understanding of the applicable regulatory framework, together with the ability to construct coherent and persuasive technical arguments, competencies that were significantly strengthened throughout the internship period.

3.5. Complementary Consultancy Activities

In addition to the activities described above, the internship included participation in the preparation of applications for fiscal incentive schemes, specifically RFAI (*Regime Fiscal de Apoio ao Investimento*). The primary objective of these applications was to ensure that all benefits available under the applicable regulatory framework were accurately identified and claimed on the client's behalf. Support was provided in preparing the technical reports and supporting documentation required for submission under this incentive, ensuring that the expenditures presented were adequately justified and complied with the respective eligibility requirements.

Throughout the internship, regular and direct interaction with client representatives was maintained through a variety of channels, including telephone, email, and virtual meetings, with the purpose of requesting documentation, clarifying technical requirements, transmitting project updates, and coordinating the timely assembly of application materials. In a number of cases, activities involved coordinating communication between internal teams and client-side contacts, ensuring that information was exchanged in a consistent and efficient manner among all parties involved in the project.

Client responsiveness and the timely provision of documentation emerged as one of the most frequent operational challenges encountered during the internship. This challenge was particularly pronounced among clients managing multiple concurrent funded projects, who occasionally exhibited lower levels of engagement with specific applications, resulting in delays in providing documentation or limited clarity regarding project objectives. In these contexts, the ability to manage the client relationship constructively, balancing the firm's delivery commitments with an understanding of the client's operational constraints, proved to be an essential professional skill. Addressing these situations often required implementing closer follow-up routines and more proactive communication practices, particularly as sub-

mission deadlines approached.

3.6. Professional Development and Team Integration

Internally, regular coordination meetings with colleagues and project managers formed an important part of the working environment. These meetings facilitated task allocation, ensured alignment regarding project objectives, and clarified responsibilities across the analyst team, particularly in projects requiring collaboration across multiple workstreams. The internship also included a set of internal training sessions designed to strengthen both the technical knowledge and regulatory understanding required for participation in funded project consultancy activities. These sessions covered topics including the application of the *Regime de Auxílios de Minimis*² and its implications for funding eligibility, the interpretation and analysis of financial statements in the context of project assessment, and the regulatory and operational requirements associated with funding programmes expected to open during the internship period.

Particular emphasis was placed on understanding the design and implementation requirements of specific support programmes for which FMA anticipated a significant volume of applications. This included detailed training on the eligibility conditions, merit evaluation criteria, funding constraints, and strategic objectives underpinning each measure. One example was the *Criação de Emprego e Microempreendedorismo* (CEM) funding program, for which training focused on the assessment of applicant eligibility, the factors contributing to project merit, the applicable regulatory requirements, and the procedures governing both application submission and the subsequent delivery of project monitoring and reporting obligations.

Additional training sessions addressed the practical use of the digital platforms employed by managing entities, including procedures for submitting applications, uploading supporting documentation, and managing the various deliverables required throughout the project lifecycle. Collectively, these training activities contributed significantly to developing a more comprehensive understanding of the regulatory, financial, and operational dimensions of public funding programmes, thereby enhancing the ability to support clients throughout the different stages of the funding process.

² The *Regime de Auxílios de Minimis* is an EU State aid framework that applies to public financial support of limited value. As these aid amounts are considered too small to significantly affect competition or trade within the European Union, they may be granted without prior approval by the European Commission, provided that the applicable aid limits are respected (European Commission, 2023).

4. Literature Review

The economic and financial appraisal of investment projects is a central pillar of corporate decision-making, providing the analytical foundation upon which judgments concerning the allocation of scarce capital resources are formed. In the specific context of applications to public incentive schemes, such as those managed by the firm at the center of this report, this appraisal assumes an additional dimension of significance, insofar as it is required not only to support the private investor's decision to commit resources but also to demonstrate to the managing entity responsible for assessing the application, that the project is financially credible, technically sound, and capable of generating the expected impacts within the projected timeframe. The following sections review the main theoretical contributions relevant to this analytical process, covering the conceptual foundations of investment appraisal (Section 4.1), the principal evaluation indicators (Section 4.2), the theoretical frontier of real options analysis (Section 4.3), the determination of the discount rate (Section 4.4), the treatment of uncertainty through sensitivity and scenario analysis (Section 4.5), the specific characteristics of investment appraisal in the tourism sector (Section 4.6), the effect of public funding on project viability (Section 4.7), and, finally, the client engagement in public funding processes (Section 4.8).

4.1. The Conceptual Foundations of Investment Appraisal

Investment project appraisal rests fundamentally on the concept of the time value of money, which establishes that a monetary unit available in the present is worth more than an equivalent unit receivable in the future, owing to both its immediate productive capacity and the uncertainty inherent in any deferred receipt. According to Graham & Harvey (2001), this principle gives rise to the Discounted Cash Flow (DCF) methodology, which constitutes the dominant analytical paradigm in corporate finance literature and serves as the theoretical foundation for the most widely employed investment evaluation indicators. Within this framework, the assessment of a project's economic and financial viability is structured around three interrelated components: the estimation of expected future cash flows over the investment horizon; the determination of an appropriate discount rate reflecting the opportunity cost of the capital deployed; and the application of a decision criteria capable of translating those inputs into a coherent investment recommendation (Graham & Harvey, 2001).

The relevance of this methodology extends well beyond its technical properties. It provides a common analytical language for communicating the financial attractiveness of investment proposals across stakeholders with different risk profiles, time horizons, and decision-making perspectives. The principal evaluation indicators derived from this framework - Net Present Value (NPV), Internal Return Rate (IRR), and the Payback Period - are examined in turn in the sections that follow.

4.2. Principal Evaluation Indicators

Before examining each indicator individually, it is useful to consider what survey evidence tells us about how firms actually use them in practice. Graham and Harvey (2001), drawing on a survey of 392 chief financial officers in the United States, show that Net Present Value is widely recognised as the most theoretically sound criterion, yet many firms continue to apply simplified or combined approaches. This reflects informational constraints, organisational pressures, and the time demands of real-world decision-making. Brounen et al. (2004), replicating this study across the United Kingdom, Germany, the Netherlands, and France, found very similar patterns. This suggests that the gap between theoretical best practice and actual usage is a structural feature of capital budgeting across modern economies. These findings are particularly relevant here, given that FMA operates in a consultancy environment serving primarily SMEs, where methodological rigour must be weighed against the operational and informational constraints inherent to smaller firms. Andor et al. (2015), in a study of capital budgeting practices in Central and Eastern Europe, further confirm that firms routinely combine multiple indicators rather than applying any single criterion in isolation.

4.2.1. Net Present Value

Net Present Value (NPV) is widely regarded in the academic literature as the preferred criterion for project appraisal. Survey evidence also shows that present value techniques are widely used in corporate practice, particularly among larger firms (Pasqual et al., 2013; Graham & Harvey, 2001). Formally, NPV is defined as the algebraic sum of the present values of all cash flows, both inflows and outflows, associated with the project over its entire economic life, with the initial investment outlay constituting the principal negative component of the calculation. A positive NPV indicates that the project is expected to generate economic value above its cost of capital and, in doing so, creates value for the firm itself, thereby justifying the commitment of resources, whilst a negative NPV implies that the in-

vestment would destroy rather than create value and should, absent other strategic considerations, be rejected (Pasqual et al., 2013; Graham & Harvey, 2001). Table 3 summarises the principal advantages and limitations of the NPV criteria.

Table 3 - Principal advantages and limitations of NPV criteria

Advantages	Limitations
Measures value creation in absolute monetary terms; consistent to maximise investor wealth (Arshad, 2012).	Being an absolute measure, NPV may favour larger projects and complicate comparisons across investments of different scales (Pasqual et al., 2013).
Flexible enough to accommodate multiple investment phases, varying risk profiles, and non-conventional cash flow patterns (Miles & Ezzell, 1980).	Sensitive to the discount rate: even modest imprecision may alter the investment recommendation (Saltelli, 2002).
A positive NPV under baseline assumptions signals financial robustness in public funding applications, lending credibility to the investment proposal (European Commission, 2014).	Relies on uncertain future cash flow projections whose credibility can be difficult to verify independently (Pindyck, 1991).

The robustness of NPV therefore depends not only on the soundness of its mathematical formulation but equally on the quality and transparency of the underlying projected cash flows, a dimension that is particularly critical in the appraisal of tourism sector projects, as discussed in Section 4.6.

4.2.2. Internal Rate of Return

The Internal Rate of Return (IRR) is defined as the discount rate that equates the present value of expected future cash inflows to the initial investment outlay, thereby producing a Net Present Value of zero (Pasqual et al., 2013). As a decision criterion, the IRR rule recommends accepting an investment when the calculated rate exceeds the investor's required rate of return or the project's cost of capital and rejecting it otherwise. Its widespread adoption in both corporate and consultancy practice is largely attributable to its intuitive appeal as a relative percentage measure, which facilitates communication and benchmarking across projects and allows stakeholders without a specialized background in quantitative finance to form an immediate judgment of the investment's financial attractiveness. Graham and Harvey (2001) report that IRR is among the most frequently used capital budgeting techniques in practice, most applied alongside NPV rather than as a substitute for it, a

finding that reflects the complementary role widely assigned to it within applied financial analysis.

Notwithstanding its practical prevalence, the IRR criterion presents several well-documented theoretical limitations. The most fundamental relates to the implicit reinvestment rate assumption: the method assumes that all intermediate cash flows are reinvested at a rate equal to the IRR itself, which is often unrealistic, particularly for projects yielding unusually high returns (Pasqual et al., 2013). When the reinvestment rate actually available is lower than the project IRR, the standard calculation will overestimate the effective profitability of the investment. Kierulff (2008) proposes the Modified Internal Rate of Return (MIRR) as a correction, replacing the reinvestment assumption with an explicitly specified rate. A second limitation is the possibility of multiple IRRs in projects where cash flows change sign more than once over the investment horizon, rendering the standard decision rule ambiguous (Hazzen, 2003). Magni (2013) proposes the Average Internal Rate of Return (AIRR) as a more theoretically consistent alternative, though it remains largely confined to the academic literature.

More recently, Castagnoli and Favero (2025) offer a fresh perspective on the interpretation of IRR. They argue that the IRR of a project should be understood as the interest rate at which an agent may switch from viewing a project as profitable to viewing it as detrimental or vice versa. Rather than a simple return figure, IRR acts as a sensitivity threshold in the profitability assessment. The authors also show that this interpretation can be extended to cases where more than one IRR exists, providing a coherent approach to a problem that has long complicated the practical use of the indicator (Castagnoli & Favero, 2025).

For these reasons, academic literature consistently recommends using IRR as a complement to, rather than a substitute for, NPV, acknowledging its communicative and benchmarking value whilst cautioning against its isolated use as the primary basis for investment decisions (Arshad, 2012).

4.2.3. Payback Period and Discounted Payback

The Payback Period is one of the oldest and most operationally straightforward capital budgeting methods, defined as the length of time required for the cumulative cash inflows generated by a project to recover the initial investment outlay in full (Lefley, 1996). Despite its acknowledged theoretical limitations, it remains one of the most widely used investment evaluation tools in practice, particularly among SMEs and in contexts characterised by capital constraints or limited analytical resources (Purnamasari & Adriza, 2024). Its

persistence is commonly attributed to its operational simplicity, its direct interpretability as a measure of capital recovery speed, and its function as a proxy for liquidity risk: projects with shorter payback periods are perceived as less financially exposed, as the resources committed are recouped more quickly and are therefore less vulnerable to changes in the economic environment. Andor et al. (2015) confirm the persistence of this indicator in European capital budgeting practice, noting that its usage remains particularly prevalent in contexts characterised by higher perceived risk and limited access to long-term financing.

However, the Payback Period is subject to two structural limitations. First, in its standard undiscounted formulation, the method fails to account for the time value of money, treating cash flows received at different points in time as equivalent. This deficiency can be partially addressed by using the Discounted Payback Period, which applies present-value discounting to cash flows when determining the payback period, accounting for the opportunity cost of capital and yielding a more theoretically consistent estimate (Lefley, 1996). Second, and more fundamentally, both variants disregard all cash flows generated after the recovery period has elapsed, meaning that a project with a longer payback but substantially superior long-term value creation may be incorrectly penalised relative to one with a shorter payback but inferior overall performance. This renders the Payback Period structurally incomplete as a standalone criterion and underscores the importance of its use exclusively as a supplementary measure (Lefley, 1996).

The preceding discussion highlights that no single indicator is without limitations and that, in practice, investment evaluation benefits from the combined use of multiple evaluation criteria. Table 4 summarises the principal strengths and limitations of the capital budgeting methods examined in this section.

Table 4 - Overview of principal capital budgeting methods

Method	Key Strengths	Key Limitations
Net Present Value (NPV)	Absolute measure of value creation; theoretically consistent; flexible across project structures.	Sensitive to the discount rate; dependent on uncertain cash flow projections.
Internal Rate of Return (IRR)	Intuitive percentage measure; easy to communicate; widely understood by non-specialists.	Reinvestment rate assumption; possible multiple IRRs; should not be used in isolation.
Payback Period	Simple; direct measure of capital recovery speed and liquidity risk.	Ignores time value of money; disregards cash flows beyond the recovery period.

4.3. Real Options: A note on Advanced Appraisal Methods

Beyond the conventional DCF-based framework reviewed in the preceding sections, the academic literature has increasingly recognised the limitations of static discounted cash flow models in capturing the full economic value of investment decisions taken under significant uncertainty. The concept of real options - introduced into the investment analysis literature by McDonald and Siegel (1986) and subsequently systematised by Pindyck (1991), among others - posits that many investment decisions implicitly embed managerial options whose value is not reflected in standard NPV calculations. These include, most commonly, the option to defer an investment pending the resolution of market uncertainty, the option to expand operations if demand proves stronger than expected, the option to contract or suspend activity during adverse periods, and the option to abandon the project altogether if conditions deteriorate irreversibly (Trigeorgis & Reuer, 2017). Pindyck (1991) demonstrates that the irreversibility of many capital investment decisions, combined with the value of waiting for additional information, implies that the standard NPV rule may systematically undervalue the option to delay, leading to a lower investment threshold than would be optimal in the presence of genuine managerial flexibility. The explicit valuation of these embedded options can, in certain cases, materially affect the investment recommendation derived from a purely static analysis.

Notwithstanding its theoretical appeal, real options analysis has found relatively limited adoption in standard consultancy practice and in the appraisal frameworks of public investment support programmes (Graham & Harvey, 2001). According to these authors, the methodological complexity of option valuation techniques, the data requirements associated with the estimation of volatility parameters, the difficulty of communicating results to non-specialist stakeholders, and the absence of standardised protocols for integrating real options into conventional financial models constitute constraints that are often cited as limiting factors in contexts where operational simplicity, regulatory compliance, and transparent communication are paramount. The practical consequence is that the full strategic value of flexible investment projects may be underestimated by the conventional NPV framework, a limitation that is particularly relevant in emerging or structurally uncertain tourism segments, where the option to phase, expand, or reposition investments in response to evolving market conditions may itself represent a significant source of value. An awareness of this gap between the theoretical frontier and observed practice is nonetheless analytically valuable, as it highlights the importance of complementing conventional appraisal indicators with qualita-

tive strategic judgment concerning the flexibility and adaptability embedded in the investment structure.

4.4. The Determination of the Discounted Rate

The discount rate occupies a central position in any DCF-based investment evaluation, as it determines the weight assigned to future cash flows relative to the present and thereby directly governs the sign and magnitude of the resulting NPV. The academically recommended measure for this parameter is the Weighted Average Cost of Capital (WACC), which represents the opportunity cost of the capital employed in the project, computed as the weighted sum of the after-tax cost of debt and the cost of equity, with weights reflecting the relative proportions of each source in the project's financing structure (Miles & Ezzell, 1980). The cost of equity is most commonly estimated using the Capital Asset Pricing Model (CAPM), which expresses the required return on equity as a function of the risk-free rate, the equity risk premium, and the systematic risk of the firm or project as measured by its beta coefficient that is, the sensitivity of its returns to movements in the broad market portfolio (Fama & French, 2004).

The determination of an appropriate WACC presents significant challenges, particularly in the context of private SMEs that constitute the typical client profile of investment consultancy firms operating in the Portuguese market. Unlike publicly listed corporations, whose equity betas can be directly observed from market data, SMEs require the use of proxy measures derived from comparable listed peers - a procedure that introduces estimation error and demands the exercise of considerable professional judgment. Fama and French (1997), in an influential study of industry costs of equity, document the substantial imprecision inherent in standard CAPM-based estimates, even when applied to listed firms, and argue that the resulting uncertainty renders any single-point estimate of the discount rate potentially misleading. This finding has important implications for SMEs appraisal, where the additional complexity introduced by the absence of observable market data compounds the estimation challenge further. Graham and Harvey (2001) confirm that practitioners frequently respond by applying discount rates that incorporate informal risk adjustments beyond the theoretically prescribed cost of capital, thereby acknowledging the limitations of the standard framework.

The determination of an appropriate equity risk premium and, where relevant, a

country risk premium represents a further dimension of complexity, given the documented dispersion in the rates adopted by practitioners across different markets and the consequent sensitivity of the resulting NPV estimates to this parameter (Fama & French, 1997). Within the context of investment consultancy, a common response consists of relying on sector-specific reference rates drawn from publicly available industry databases or regulatory benchmarks, supplemented by adjustments reflecting the specific risk profile and financing structure of the individual project. Although operationally pragmatic, this approach inevitably involves a degree of inherent simplification that should be explicitly acknowledged in the analytical documentation accompanying any funding application. It is also pertinent to note that the inclusion of non-repayable public grants in the financing structure of an investment project reduces the net private investment outlay required from the promoter. By lowering the initial capital commitment while leaving expected project benefits unchanged, public support improves, *ceteris paribus*, the resulting NPV. This dynamic is discussed in greater detail in Section 4.7.

4.5. The Treatment of Uncertainty

4.5.1. Sensitivity Analysis

Sensitivity analysis is one of the most widely employed methodological instruments for examining the robustness of investment evaluation results to changes in the assumptions underlying the financial model. In its most common application, known as one-at-a-time (OAT) analysis, the technique involves systematically varying one input variable at a time whilst holding all others constant at their baseline values, with a view to quantifying the impact of individual deviations on the output indicators, most typically NPV and IRR (Saltelli, 2002). This approach enables the identification of the variables to which projected outcomes are most sensitive, thereby directing analytical attention towards the key value drivers and informing the formulation of more robust and credible financial projections.

Saltelli (2002) highlights that sensitivity analysis plays a central role in understanding how model outputs depend on underlying assumptions, while also providing a structured basis for communicating the implications of uncertainty to decision-makers. In the specific context of applications to public funding support schemes, this dual function is especially relevant. The managing entities responsible for appraising such applications are typically expected to assess not only the projected baseline results but also the robustness and resilience

of the financial model under adverse conditions, meaning that sensitivity analysis directly strengthens the credibility of the submission. By demonstrating that the analyst has critically examined the model's assumptions and can identify the conditions under which the project's viability may be compromised, sensitivity analysis contributes to a more transparent and credible analytical process.

Nonetheless, the OAT approach is subject to the limitation of analysing variables in isolation, thereby failing to capture the interactions between them that frequently arise in practice. In investment contexts where key input variables are positively correlated, for example, where occupancy rates and average room rates are jointly driven by underlying demand conditions, the OAT approach may underestimate the combined impact of simultaneous adverse movements across multiple dimensions (Saltelli et al., 2019). More comprehensive global sensitivity analysis methods, which assess the joint effect of variations across the full input space simultaneously, offer a theoretically superior treatment of these interactions, though at the cost of greater methodological and computational complexity, which often limits their application in standard consultancy contexts (Saltelli et al., 2019). In practice, a pragmatic approach combining OAT sensitivity analysis with the construction of explicit alternative scenarios as described in the following section, represents an effective balance between analytical rigour and operational feasibility in the context of SMEs investment project appraisal.

4.5.2. Scenario Analysis

Scenario analysis is a complementary, though conceptually distinct, approach to the management of uncertainty in investment evaluation. Unlike sensitivity analysis, which examines the isolated impact of changes in individual variables, scenario analysis involves the construction of internally consistent combinations of assumptions, often operationalised through a limited number of scenarios, such as optimistic, base (or expected), and pessimistic cases, that represent coherent representations of the range of states the operating environment may assume over the investment horizon (Schoemaker, 1995). By simultaneously presenting financial outcomes across these scenarios, the method enables a more holistic assessment of the distribution of possible project results, capturing the cumulative effect of multiple unfavourable or favourable developments that are likely to co-occur rather than arise in isolation (Schoemaker, 1995).

Godet (2000), in a systematic treatment of scenario planning methodology, argues that the value of scenario-based approaches lies not only in their capacity to produce a range

of numerical outcomes but equally in their function as a structured process for identifying and questioning the key assumptions that underpin any forward-looking analysis. In the context of this report, this function appears particularly useful for investment evaluation in public funding applications: demonstrating that a project keeps a positive NPV, or at least an acceptable payback period, under the pessimistic scenario can be read as a signal of financial resilience, since it lowers the perceived risk that the funded project will fail to deliver its expected economic and social impacts. Schoemaker (1995) argues that well-constructed scenarios are not merely statistical ranges but qualitatively coherent narratives that force decision-makers to confront and engage with the full range of plausible futures, thereby improving the quality of both the analysis and the ultimate investment decision. This claim has since found empirical support: Phadnis et al. (2015), in a field experiment with industry experts, show that scenario planning measurably improves judgment in long-range investment decisions. The integration of sensitivity analysis and scenario analysis thus is widely regarded as a robust approach in investment evaluation under uncertainty, combining the granular diagnostic capability of the former with the holistic risk communication function of the latter.

4.6. Economic and Financial Appraisal of Tourism Investment Projects

Investment projects in the tourism sector share a set of structural characteristics that introduce specific analytical challenges relative to projects in other industries, and which must be adequately reflected in both the financial modelling process and the choice of evaluation criteria. Tourism investments, particularly those relating to hotel accommodation, rural tourism units, and broader hospitality infrastructure, are typically capital-intensive, requiring substantial initial expenditures on property acquisition, construction or renovation, equipment, and operational setup, with revenue streams that are deferred in time and subject to significant variability across seasons, demand cycles, and competitive conditions (Barros, 2005). According to the author, this combination of high upfront investment and uncertain, deferred revenues tends to produce extended Payback Periods and NPV profiles that are highly sensitive to assumptions concerning occupancy rates, average pricing, and the pace at which a new or refurbished tourism unit is able to establish its market position.

The structural condition of seasonality further compounds the complexity of tourism investment evaluation. Koenig-Lewis and Bischoff (2005), in a systematic review of tourism seasonality research, identify the concentration of demand in specific periods as one

of the most persistent and analytically challenging features of tourism markets, with direct implications for revenue forecasting, capacity planning, and the financial modelling of investment projects. Highly seasonal demand patterns increase revenue volatility, compress the effective operational period over which fixed costs must be recovered, and expose the promoter to liquidity pressures during low-season periods that may, if not properly managed, affect the project's financial resilience. In the Portuguese context, where a significant proportion of tourism demand, particularly in coastal destinations and certain rural tourism segments, is concentrated in the summer months, these dynamics are especially pertinent to the construction of credible financial projections.

The performance of accommodation-based tourism projects is conventionally assessed through a set of sector-specific Key Performance Indicators (KPIs) that have become standard references in the hospitality industry. These include the Occupancy Rate (OR), defined as the proportion of available room-nights sold over a given reference period; the Average Daily Rate (ADR), which measures the average revenue earned per occupied room; and Revenue Per Available Room (RevPAR), which combines these two metrics into a single composite indicator by multiplying the ADR by the OR, thereby expressing the overall revenue-generating efficiency of the accommodation unit irrespective of its effective utilisation (Sainaghi et al., 2013). Abrate et al. (2012), in an empirical study of pricing dynamics in European hotels, demonstrate that these indicators are not only measures of historical performance but also key inputs for forward-looking financial projections, given their centrality in the revenue assumptions that drive projected cash flows and, through these assumptions, investment evaluation indicators. These metrics therefore serve as vital benchmarks against which the projected performance of a new or repositioned tourism project can be validated, and their use in preparing funding applications provides managing entities with a basis for assessing the credibility and market consistency of the financial projections submitted.

Demand forecasting for tourism investment projects presents additional methodological difficulties, owing to the structural volatility of tourism demand and its sensitivity to a broad range of exogenous factors, including macroeconomic conditions, transportation costs and connectivity, geopolitical developments, and public health events (Gricar, 2023). Gössling et al. (2021), analysing the impact of the COVID-19 pandemic on global tourism, provide a powerful illustration of the speed and severity with which exogenous shocks can materialise in this sector, with global tourism flows contracting by approximately 74% in 2020 - a scale of disruption that no conventional financial model would have projected under

a standard pessimistic scenario. Whilst such extreme events represent tail risks by definition, their occurrence underscores the importance of stress-testing financial projections against a broad range of adverse scenarios and of incorporating adequate buffers in the financial model to ensure that the project's viability is not entirely contingent on the continuation of favourable baseline conditions, a practice commonly adopted in financial risk management of tourism projects.

In the Portuguese context, recent tourism data point to a structural growth trajectory rather than a simple post-pandemic rebound. Table 5 summarises this pattern. Between 2023 and 2024, tourism activity continued to expand, with both guest arrivals and overnight stays reaching record levels and the sector maintaining a contribution of approximately 12% to national Gross Domestic Product (GDP). For investment evaluation purposes, it is this sustained trend, rather than any single observation, that justifies treating the recovery as structural. The challenge for the investment analyst, however, is to distinguish this underlying growth trajectory from short-term cyclical fluctuations and temporary demand shocks, thereby ensuring that projected revenues remain both ambitious and economically credible.

Table 5 - Tourism's contribution to the Portuguese economy 2023-2024

Year	2023	2024
Tourism share of GDP (direct and indirect)	12%	11,9%
Guests arrivals	30 million	31.6 million (+5,2%)
Overnight stays	77.1 million	80.4 million (+4,1%)

Note. Retrieved from INE (2025a) for GDP share; INE (2025b) for guests and overnight stays

4.7. The Effect of Public Funding on Investment Viability

The analysis of investment projects' viability within the context of public incentive programmes cannot be adequately conducted without accounting for the effect that the receipt of public funding has on the economic and financial indicators derived from the appraisal. From a theoretical perspective, non-repayable grants and subsidised financing reduce the net private investment outlay, thereby improving the NPV of the project by reducing the magnitude of the negative component of the discounted cash flow calculation (European Commission, 2014). Similarly, the IRR may be enhanced when the net private investment committed is reduced by the amount of the public grant, whilst the expected cash inflows from operations remain unchanged. This improvement in both NPV and IRR has important implications for the appraisal of projects whose viability under purely private market condi-

tions would be marginal, insofar as the availability of public support may influence whether such investments meet minimum financial attractiveness thresholds and proceed to implementation.

The academic literature on public funding additionality examines the extent to which subsidies effectively stimulate investment activity that would not otherwise have taken place, as opposed to merely displacing private resources that would have been committed regardless. Kleer (2010) argues that, beyond their direct financial effect, public subsidies may also serve as a certification signal to private investors and external financiers, reducing informational asymmetries and increasing confidence in the quality and viability of the supported projects. Czarnitzki and Hussinger (2018) provide empirical evidence showing that publicly funded firms tend to increase their overall investment and innovation expenditure rather than simply replacing private resources with public funds. Their findings suggest that subsidised investments are generally complementary to private investment decisions, thereby supporting the argument that well-designed public support mechanisms can generate genuine economic impact beyond the mere redistribution of financial resources. In the Portuguese context, the frameworks provided by Portugal 2020 and Portugal 2030, together with sector-specific instruments such as *Crescer com o Turismo*, promoted by Turismo de Portugal and *SICE - Inovação Produtiva*, integrated within Portugal 2030, embody precisely this policy rationale: instruments designed not merely to co-finance investments that would proceed in their absence, but to support investment projects that contribute to broader economic and territorial objectives, often addressing financing constraints faced by viable projects (COMPETE 2030, 2024; Turismo de Portugal, 2025).

The practical implications of these dynamics for investment evaluation are twofold. On the one hand, the correct analytical treatment of public grants requires that the subsidy component be clearly identified and presented separately in the financial model, so that the reader can distinguish between the project's intrinsic viability under private financing conditions and its conditional viability as a publicly co-funded investment. This distinction is not merely an academic formality but a regulatory requirement embedded in the appraisal frameworks of most public support programmes, which typically request that the financial analysis be presented both with and without the incentive, in order to assess the extent to which the project depends on public support and the impact of the subsidy on its financial viability (European Commission, 2014). On the other hand, the structuring of the financing plan, encompassing the balance between non-repayable grants, eligible investment, equity contri-

bution, and bank financing, constitutes a central and technically demanding component of the application process, as it directly affects both the financial credibility of the promoter and the regulatory compliance of the project with the applicable programme requirements.

4.8. The Consultancy as Intermediary: Client Engagement in Public Funding Processes

The theoretical contributions reviewed in the preceding sections are predominantly concerned with the technical and methodological dimensions of investment evaluation, namely the choice of evaluation indicators, the determination of the discount rate, and the treatment of uncertainty. However, in a consultancy setting, constructing a financial model is not a purely analytical exercise carried out in isolation. It depends, at every stage, on information that must be obtained from the client, including historical accounting data, operational assumptions, investment-related information, and business plans concerning the scope and implementation of the proposed project. The quality, completeness, and timeliness of this information directly affect the credibility of the resulting financial model and, consequently, the strength of the application submitted to the managing entity.

Fu et al. (2023), in a multi-level study of project teams in professional service firms, examine the effects of client involvement on the performance and creativity of consulting teams. The authors find that client involvement can be a “mixed blessing”: it generally enriches the information available to the service team and improves outcomes, but its benefits are conditional on the existence of what the authors term “team bonding capital”, that is, a sufficiently close working relationship between the client and the service provider. Where this relational foundation is weak, client involvement may introduce additional coordination costs and delays rather than improving the quality of the work produced. This finding is directly relevant to the consultancy context described in this report, in which client responsiveness, namely the timely provision of documentation and clarification of objectives, constitutes a key determinant of the smoothness of the application process.

At a broader level, Chatzinikolaou and Vlados (2025), in a review of the role of intermediary organisations within innovation and development policy, argue that such organisations perform a crucial function in translating public policy instruments into concrete decisions and actions at the level of the individual firm, particularly for SMEs that typically lack the internal resources to interpret and act upon complex regulatory frameworks on their own. The authors note, however, that the effectiveness of this intermediation is frequently

constrained by what they describe as policy bottlenecks operating at the interface between the macro level of policy design, the meso level of intermediary organisations, and the micro level of the individual firm. Read alongside the certification and additionality arguments already discussed in relation to public funding (Kleer, 2010; Czarnitzki & Hussinger, 2018), this perspective suggests that consultancy firms such as FMA occupy a position of "double intermediation": they must translate the technical and regulatory requirements of the funding programme into a coherent financial model, while simultaneously depending on the client's active engagement to supply the inputs without which that model cannot be constructed or, subsequently, executed. The quality of this client-facing relationship is therefore not a peripheral operational matter but a determinant of the appraisal process that sits alongside, and interacts with, the purely technical considerations reviewed in the previous sections.

5. Bridging Theory and Practice: A Critical Assessment of Economic-Financial Appraisal Methods in Tourism Investment Consultancy

The two preceding chapters address investment project appraisal from complementary perspectives. Chapter 4 focuses on the theoretical foundations of economic and financial appraisal, while Chapter 3 examines their practical application within the consultancy work undertaken during the internship at FMA, particularly in the preparation of economic and financial models (EFMs) for tourism investment projects under the *Crescer com o Turismo* programme.

The purpose of this chapter is to bring these two perspectives into direct dialogue. The analysis proceeds in three sections. First, it identifies the principal points of convergence between the theoretical guidelines reviewed in Chapter 4 and the practices observed in Chapter 3, that is, the areas in which the consultancy's approach broadly mirrors, or operationalises, the academic literature (Section 5.1). Second, it identifies the principal points of divergence, that is, the areas in which observed practice departs from the theoretical framework or in which the literature reviewed in this work does not explicitly address factors that prove relevant in practice (Section 5.2). Finally, the chapter considers whether, and to what extent, the divergences identified could realistically be addressed (Section 5.3).

5.1. Points of Convergence Between Theory and Observed Practice

5.1.1. The Combined Use of NPV, IRR and Payback as Complementary Indicators

One of the clearest points of convergence between the literature reviewed in Chapter 4 and the practice described in Chapter 3 concerns the use of multiple evaluation indicators rather than reliance on a single criterion. The academic literature is consensual in its theoretical preference for the NPV as the appropriate decision criterion, on the grounds that it measures value creation in absolute terms and is directly consistent with the objective of maximising investor wealth (Arshad, 2012). At the same time, survey-based studies consistently find that, in practice, firms tend to use NPV alongside IRR and the Payback Period, rather than relying on NPV alone (Graham & Harvey, 2001; Andor et al., 2015).

The EFM process described in Chapter 3 reflects exactly this pattern. The financial models prepared during the internship culminate in the calculation of NPV, IRR, and the

Discounted Payback Period. All three indicators are reported as part of the application package, which closely matches what the empirical capital budgeting literature describes as standard practice (e.g. Graham & Harvey, 2001; Brounen et al., 2004; Andor et al., 2015). The reasons for the combined use of the criteria are also consistent with the literature's explanations: NPV provides the theoretically grounded measure of value creation, IRR offers an intuitive percentage-based measure that is more easily communicated to, and benchmarked by, non-specialist evaluators within the managing entity, and the Discounted Payback Period provides a measure of the speed of capital recovery, which is of particular relevance in the context of public funding, where the managing entity is concerned not only with whether a project creates value but also with how quickly the supported investment becomes self-sustaining. As noted in Chapter 3, the managing entity expects the discounted payback period to fall within the ten-year investment horizon. This illustrates how the Payback Period, despite its well-known theoretical limitation of disregarding cash flows beyond the recovery point (Lefley, 1996), continues to serve a meaningful function as a risk-screening device within an appraisal framework that is primarily oriented around NPV and IRR.

5.1.2. Sensitivity and Scenario Analysis as an Integrated Risk Analysis Framework

A second significant point of convergence concerns the treatment of uncertainty. Chapter 4 reviewed two distinct, though complementary, approaches to this problem: sensitivity analysis, which examines the impact of varying individual assumptions in isolation (Saltelli, 2002), and scenario analysis, which constructs internally consistent combinations of assumptions representing coherent alternative states of the world (Schoemaker, 1995; Godet, 2000). The literature suggests that, while each approach has its own limitations when used alone, a combination of the two represents an effective balance between analytical rigour and operational feasibility in small and medium-sized enterprises (SMEs) investment project appraisal, as noted in section 4.5. The sensitivity analysis stage described in Chapter 3, in which each EFM is subjected to three alternative scenarios, namely a 10% increase in operating costs, a 10% decrease in total revenues, and the simultaneous combination of both effects, is, in essence, a practical application of this hybrid approach. It is not a pure one-at-a-time sensitivity exercise in the sense described by Saltelli (2002), since it does not isolate the effect of each individual revenue or cost assumption separately. The 10% revenue reduction applies a uniform decrease across all revenue line items simultaneously, rather than examining the impact of each individual revenue assumption in isolation. Nor is it a fully de-

veloped scenario analysis in the sense described by Schoemaker (1995), since the three cases are not built up from internally consistent narratives about future market conditions but are instead generic percentage adjustments applied uniformly. Rather, it occupies an intermediate position: it applies a scenario-like structure (three named cases, ranging from an adverse cost shock to a combined adverse shock) to inputs that are defined in the manner of a sensitivity test (fixed percentage deviations from baseline).

In this sense, the FMA methodology can be understood as a pragmatic, standardised compromise that captures the spirit of both approaches reviewed in the literature, even if it does not correspond precisely to either in its pure form. The function that Schoemaker (1995) and Godet (2000) attribute to scenario analysis, namely demonstrating that the project remains viable, or at least retains an acceptable Payback Period, under adverse conditions, and thereby providing a meaningful signal of financial resilience to the appraising entity, is fully present in the FMA approach and is, indeed, explicitly stated in Chapter 3 to carry significant weight in the managing entity's assessment.

5.1.3. Tourism-Specific Benchmarks, Seasonality, and the Credibility of Revenue Projections

A third area of close alignment concerns the treatment of revenue projections for tourism investment projects. Section 4.6 of the Literature Review emphasised that tourism projects are characterised by capital-intensive structures, deferred and seasonally variable revenues, and a dependence on sector-specific key performance indicators (KPIs), namely the Occupancy Rate, the Average Daily Rate (ADR), and Revenue Per Available Room (RevPAR), which serve both as historical performance measures and as inputs to forward-looking financial projections (Sainaghi et al., 2013; Abrate et al., 2012). Koenig-Lewis and Bischoff (2005) further identify seasonality as one of the most persistent and analytically demanding features of tourism markets, with direct implications for revenue forecasting and the financial modelling of investment projects.

The practice described in Chapter 3 closely mirrors these theoretical observations. The revenue assumptions underlying the EFM, including occupancy rates, average room rates, and the pricing of ancillary services such as the restaurant, spa, and event spaces, are explicitly anchored to regional benchmarks published by Turismo de Portugal, precisely the type of sector-specific reference data that Abrate et al. (2012) identify as central to credible revenue forecasting in the hospitality sector. Likewise, the practice of incorporating seasonality through a monthly analysis of demand and occupancy, subsequently converted into an-

nual averages for projection purposes, is a direct response to the structural feature of tourism demand identified by Koenig-Lewis and Bischoff (2005). The explicit anchoring of assumptions to official, publicly available data sources also serves the additional function, noted in Chapter 3, of safeguarding the credibility of the projections in the event of scrutiny by the managing entity, which is consistent with the broader argument made in section 4.7 that the transparency of assumptions is itself a criterion against which applications for public funding are assessed.

5.2. Points of Divergence between Theory and Observed Practice

It should be noted from the outset that the existence of a gap between theory and practice is not, in itself, a sign of deficient practice. As Graham and Harvey (2001) and Brounen et al. (2004) both demonstrate, this gap is a structural and well-documented feature of corporate finance across markedly different institutional and geographical contexts. The contribution of this chapter is therefore not to judge FMA's practices against an idealised theoretical benchmark and find them wanting, but rather to use the side-by-side comparison of theory and practice as an analytical device for understanding why certain simplifications occur, what they imply for the robustness of the appraisal process, and where, if at all, there is scope for incremental improvement.

5.2.1. The Discount Rate: From CAPM-Derived WACC to Practical Convention

The most significant point of divergence between theory and practice concerns the determination of the discount rate. Section 4.4 of the Literature Review presented the Weighted Average Cost of Capital (WACC), with the cost of equity estimated through the Capital Asset Pricing Model (CAPM), as the academically recommended approach to discount rate determination (Miles & Ezzell, 1980; Fama & French, 2004). At no point in the description of the EFM process in Chapter 3 is there a reference to the calculation of a project-specific WACC through the estimation of a beta coefficient, the identification of comparable listed peers, or the explicit decomposition of the discount rate into its cost-of-debt and cost-of-equity components. This is not, in itself, a surprising finding, and the literature reviewed in Chapter 4 in fact anticipates it rather precisely. Fama and French (1997) document the substantial imprecision inherent in CAPM-based cost of equity estimates even when applied to listed firms with directly observable market data. For the private SMEs that constitute the typical client profile described throughout Chapter 3, no such market data

exists at all, meaning any CAPM-based estimate would necessarily rely on proxy betas drawn from listed comparable firms with different operating characteristics and capital structures, a procedure that the literature itself describes as introducing considerable estimation error and requiring substantial professional judgement. Graham and Harvey (2001) further confirm that, even among large firms with access to market data, practitioners frequently apply discount rates that incorporate informal risk adjustments rather than mechanically applying the theoretically prescribed cost of capital.

In practice, FMA uses as its discount rate reference the profitability benchmark for management activities published by Banco de Portugal (n.d.), which provides a sector-specific indication of expected return. This reference rate varies depending on the appraising entity and the specific programme parameters, and is updated periodically. It is also worth noting that the EFM is built in current prices, meaning that the discount rate applied already incorporates expected inflation and therefore represents a nominal rather than a real rate. This is consistent with standard practice in public investment evaluation (European Commission, 2014).

The most plausible explanation for the apparent absence of a formal CAPM-based WACC calculation in the FMA process, therefore, is not that the underlying theory is unknown or disregarded, but that its practical application to private SMEs operating in a single, well-defined sector and geography is of limited additional value relative to its cost. Where a sector-specific reference rate, whether derived from regulatory guidance, programme-specific parameters, or internal benchmarking against previously appraised projects of a similar nature, can achieve a comparable degree of precision to a CAPM-derived estimate riddled with proxy-related estimation error, the adoption of a standardised reference rate represents a defensible simplification rather than a methodological shortcoming. This interpretation is consistent with the literature's own framing of the issue: Graham and Harvey (2001) describe the use of informally adjusted discount rates not as a deviation but as the empirically dominant practice. Whether this constitutes an area for improvement is considered in section 5.3.

5.2.2. The Treatment of Public Funding and the Incremental Analysis

A second point of divergence concerns the manner in which the incremental effect of the investment is identified and presented in the financial model. As discussed in Section 4.7, the financial analysis should be presented both with and without the public grant, allowing the project's intrinsic viability to be distinguished from its conditional viability as a publicly co-funded investment. Beyond this distinction, the European Commission (2014) rec-

ommends that the incremental effect of the investment be assessed through two entity-level financial models: a baseline scenario without the investment and a project scenario including the investment. The incremental effect is then derived by comparing the two scenarios.

The FMA process described in Chapter 3 follows a similar but structurally distinct approach. Rather than building a full with-project entity model and deriving the incremental by subtraction, FMA prepares three separate models: a baseline representing the existing business without the investment, a project-specific model containing only the revenues and costs directly attributable to the new investment, and a consolidated model combining the two. The consolidated model effectively represents the with-project scenario, while the project-specific model effectively represents the incremental cash flows.

Mathematically, the consolidated model produced by this approach is equivalent to the full with-project model described in the theoretical literature, provided that all incremental effects are correctly captured in the project-specific model. The divergence lies in this assumption of separability. The FMA approach works well when the investment project's revenues and costs are clearly separable from the existing business. However, where the investment generates interaction effects with existing operations - such as higher restaurant or spa revenues driven by additional hotel guests, shared cost savings, or partial cannibalisation of existing revenue streams - these effects may not be fully reflected in a model that considers the project in isolation. In such cases, the theoretical approach of modelling the full with-project entity and deriving the incremental by subtraction offers a more complete treatment.

The careful structuring of the financing plan - balancing eligible investment, equity contribution, and the requested incentive - as described in Chapter 3, does reflect the literature's emphasis on financing structure as a determinant of both the promoter's financial credibility and the regulatory compliance of the project (European Commission, 2014; Kleer, 2010). The financing plan itself is therefore consistent with theoretical guidance, even where the incremental analysis methodology departs from its strictest interpretation.

5.2.3. The Residual Value as a Regulatory Parameter rather than a Theoretically Derived Terminal Value

A third, related point of divergence concerns the treatment of the residual (terminal) value at the end of the projection horizon. In conventional DCF analysis, the residual value is expected to reflect the remaining economic value of the project and is therefore determined on the basis of project-specific assumptions. The practice observed at FMA differs from this approach by applying a standardised residual value prescribed by the funding pro-

gramme.

The practice described in Chapter 3 instead applies a fixed parameter: the residual value is set at 95% of the project's net asset value at the end of the forecast horizon, reduced to 80% in the preliminary pessimistic analyses conducted at the express evaluation stage, in accordance with reference parameters established by Turismo de Portugal. This is a clear divergence from the theoretically open-ended treatment of terminal value found in the academic literature, in the sense that the residual value is not derived from project-specific assumptions about growth, market conditions, or resale prospects, but is instead a fixed regulatory convention applied uniformly across projects.

The rationale for this divergence is, again, readily explicable. A fixed, programme-wide residual value parameter ensures comparability across the large number of applications that the managing entity must appraise within a single funding call, removing one further degree of analytical freedom, and therefore one further source of potential manipulation or inconsistency, from the appraisal process. From the perspective of the consultancy firm, adopting a prescribed parameter also removes a source of ambiguity that would otherwise require project-specific justification, a process that would be both time-consuming and, given the absence of reliable resale markets for many smaller and more specialised tourism assets, difficult to support with sufficient evidence. The divergence from theory here is therefore best understood not as a simplification adopted for convenience by the consultancy itself, but as a structural feature of the regulatory framework within which the consultancy operates, a framework that, in this respect, prioritises comparability and simplicity over the project-specific precision that the academic literature would, in principle, favour.

5.2.4. The Limited Role of Refined IRR Measures

A fourth point of divergence concerns the refinements to the IRR criterion discussed in section 4.2.2. The literature documents several well-known limitations of the standard IRR calculation, including its implicit and often unrealistic reinvestment rate assumption, the possibility of multiple IRRs in projects with non-conventional cash flow patterns, and more fundamental conceptual inconsistencies that have led some authors to propose alternative formulations such as the Modified Internal Rate of Return (MIRR) (Kierulff, 2008) or the Average Internal Rate of Return (AIRR) (Magni, 2013).

None of these refinements appears to play any role in the EFM process described in Chapter 3, where the IRR is calculated and reported in its standard form. As with the discount rate, this divergence is readily explained, and indeed the literature itself indicates that

refined IRR measures remain largely confined to the academic literature, with limited adoption in consultancy practice (section 4.2.2). Two further considerations specific to the tourism investment context reinforce this point. First, the cash flows profile of the typical project described in Chapter 3, namely a single, front-loaded investment outlay followed by a stream of positive operating cash flows over the projection horizon, is precisely the conventional cash flow pattern for which the standard IRR is well-defined and unproblematic. The multiple-IRR problem identified by Hazen (2003) arises specifically in projects with repeated sign changes in net cash flows, a pattern that is unlikely to characterise the projects described in this report. Second, given that IRR is reported alongside NPV and the Discounted Payback Period rather than used in isolation, as discussed above, the specific theoretical weaknesses of IRR as a standalone criterion are, to a considerable extent, already mitigated by the multi-indicator approach itself. The absence of MIRR or AIRR calculations therefore appears to represent a low-cost simplification rather than a material gap in the rigour of the investment appraisal.

5.2.5. Standardised Scenarios versus Project-Specific Sensitivity

A more nuanced point of divergence, building on the convergence identified above regarding sensitivity and scenario analysis, concerns the degree of customisation involved. Saltelli (2002) and, more explicitly, Saltelli et al. (2019) emphasise that the value of sensitivity analysis lies in its capacity to identify the variables to which a specific project's outcomes are most sensitive, thereby directing analytical attention towards that project's particular key variable drivers. The same logic underlies Schoemaker's (1995) argument that well-constructed scenarios are not merely statistical ranges but narratives that force decision-makers to engage with the specific assumptions underpinning a given project.

The three-scenario approach described in Chapter 3, namely the application of a uniform 10% cost increase, a uniform 10% revenue decrease, and their combination, is applied identically across projects, irrespective of which specific revenue or cost lines are, in fact, the most uncertain for a given project. For a hotel project, for example, occupancy rate and average room rate are likely to be the dominant drivers of revenue variability, as implied by the literature review discussed in section 4.6 (e.g. Sainaghi et al., 2013), whereas for a project with a more diversified revenue base, including catering, spa, and event income, no single variable may dominate to the same extent. The uniform 10%/10% framework does not distinguish between these cases.

This divergence between project-specific sensitivity, as envisaged by the academic

literature, and an uniform scenario framework applied across all projects, is most plausibly explained by the same considerations of comparability and simplicity discussed above in relation to the residual value. A managing entity appraising many applications within a single call benefits from the ability to compare the resilience of different projects under a common stress scenario, which a fully project-specific sensitivity analysis would not provide. From the consultancy's perspective, a standardised approach also offers considerable efficiency gains in a high-volume environment in which broadly similar models must be prepared for a substantial number of clients within tight submission deadlines. Whether, and how, this divergence might be addressed without sacrificing these benefits is discussed in the final section of this chapter.

5.2.6. The Real Options Gap

The most theoretically significant point of divergence concerns the real options framework discussed in section 4.3. The literature on real options (McDonald & Siegel, 1986; Pindyck, 1991; Trigeorgis & Reuer, 2017) argues that many investment decisions incorporate managerial flexibility, such as the option to defer, expand, contract, or abandon a project in response to evolving conditions, whose value is not captured by a static NPV calculation. Notably, this is the one area in which the Literature Review explicitly anticipates the divergence. As noted in section 4.3, Graham and Harvey (2001) found that real options methods are rarely used in practice, with adoption remaining limited even among large firms, a pattern that holds even more strongly in the context of SMEs-focused consultancy and public investment support programmes. The practice described in Chapter 3 confirms this expectation entirely. At no stage of the EFM process is there any reference to the valuation of embedded flexibility, whether the option to phase the investment, to expand the accommodation capacity if early demand proves stronger than projected, or to reposition elements of the offering, such as the spa or event facilities, in response to market feedback. The financial model is a static, single-path projection, evaluated under a baseline and three adverse scenarios, but not under a framework that explicitly values the firm's ability to adapt its course of action over time.

Unlike the discount rate or residual value divergences discussed above, this gap is less easily justified purely on grounds of regulatory comparability, since the absence of real options thinking is a feature of the broader consultancy and regulatory landscape rather than a deliberate simplification adopted in response to a specific practical implementation constraint. The explanations offered in Section 4.3 nonetheless remain compelling in this con-

text. Taken together, the methodological complexity of option valuation, the data requirements associated with estimating volatility parameters for assets such as a small rural hotel, for which no observable market price series exists, and the difficulty of communicating option values to non-specialist evaluators within the managing entity render formal real options valuation impractical within the operational constraints described throughout Chapter 3. As already mentioned in section 4.3, however, an awareness of this gap remains analytically valuable, since it highlights the importance of complementing the static financial model with qualitative strategic judgment concerning the flexibility embedded in the investment, a point to which the final section of this chapter returns.

5.2.7. Client Engagement: A Dimension the Appraisal Literature Largely Overlooks

A final, and somewhat different, point of divergence concerns not a specific technical choice but the scope of the appraisal literature. Sections 4.1 to 4.7 treat the inputs to the financial model, historical accounting data, operational assumptions, supplier cost estimates, projected occupancy and pricing, as essentially given, and focus on how these inputs are transformed into evaluation indicators. Chapter 3, however, identifies client responsiveness and the timely provision of documentation as one of the most frequent operational challenges encountered during the internship, particularly among clients managing multiple concurrent funded projects, where a degree of reduced engagement with specific applications was occasionally observed. This is a divergence not in the sense that practice departs from a theoretical prescription, but in the sense that the conventional appraisal literature has comparatively little to say about a factor that, in practice, materially affects the feasibility and timeliness of the appraisal process.

Section 4.8 helps to make sense of the observation. Fu et al. (2023) find that client involvement is something of a "mixed blessing": it generally enriches the information available to a service team, but its benefits are conditional on the existence of sufficient team bonding capital, that is, a sufficiently close working relationship between client and service provider. Where this relational foundation is weaker, client involvement can introduce coordination costs and delays rather than improving the work produced. Chatzinikolaou and Vlastos (2025) add a complementary, policy-level perspective, arguing that intermediary organisations such as consultancy firms play an important role in translating public funding instruments into investment decisions for SMEs that often lack the internal resources to engage with such frameworks independently, but that the effectiveness of this intermediation is con-

strained at the interface between the intermediary and the firm it serves. Taken together, these studies suggest that the pattern observed in Chapter 3, namely that engagement varies more by client capacity than by any consistent unwillingness to cooperate, is not an idiosyncratic operational difficulty but a documented feature of professional service delivery and of intermediary-based public support more generally. It also explains why this dimension does not appear in Sections 4.1 to 4.7: those sections are concerned with the analytical transformation of inputs into outputs, whereas the quality and timeliness of the inputs themselves depend on the client-consultant relationship, which lies outside that analytical framework but is equally important for the credibility and completeness of the resulting application.

5.3. Towards an Improved Practice: Possibilities and Limits

Having identified the principal points of convergence and divergence between theory and practice, it is appropriate to consider whether, and how, the divergences identified above might be addressed. The discussion below distinguishes between changes that appear genuinely feasible within the operational constraints of SMEs-focused tourism consultancy and those that, while theoretically appealing, are unlikely to represent a worthwhile use of resources given the costs involved.

Among the divergences discussed, the discount rate and residual value conventions appear the least amenable to change, and arguably the least in need of it. As argued above, these conventions are largely a feature of the regulatory framework within which FMA operates, designed to ensure comparability across applications, and there is limited evidence that project-specific CAPM-based discount rates or project-specific terminal value assumptions would produce materially more reliable results for private SMEs, given the well-documented estimation difficulties that such refinements would introduce (e.g. Fama & French, 1997). Similarly, the absence of MIRR or AIRR calculations appears to be a low-cost simplification given the conventional cash flow profile of the projects concerned. The incremental analysis structure is also difficult to change without significant modifications to the regulatory template and modelling workflow. In cases where the project and existing operations are clearly separable, the current approach is unlikely to produce results that differ materially from a full with-project/without-project entity-level comparison.

Two areas, however, appear to offer more realistic scope for incremental improvement. The first concerns the standardisation of the sensitivity analysis. While an uniform three-scenario framework offers clear benefits in terms of comparability and operational

efficiency, there would appear to be relatively little additional cost involved in supplementing this standard framework with a brief, project-specific identification of the one or two assumptions to which the project's NPV and IRR are, in fact, most sensitive, for example, the occupancy rate for an accommodation-led project or the average spend per guest for a project with a stronger food and beverage or events component. In this context, it is worth noting that FMA currently uses the Discounted Payback Period as the primary indicator of project resilience under adverse scenarios, that is, as the threshold below which the project is deemed to retain acceptable financial viability. The academic literature on sensitivity analysis suggests that a complementary measure could be the calculation of breakeven point: the minimum (or maximum) value of a key assumption at which the NPV becomes zero, or at which the IRR falls below the required return (Saltelli et al., 2019; European Commission, 2014). For a hotel project, for example, this would mean calculating the minimum occupancy rate consistent with a positive NPV, providing a direct, project-specific measure of the margin of safety embedded in the revenue projections. This would not require abandoning the standardised scenarios, which retain their value for comparability across applications, but would add a project-specific layer of analysis that more directly reflects the logic of identifying key variable drivers emphasised by Saltelli (2002) and Saltelli et al. (2019), at a marginal cost that appears proportionate to the potential gain in analytical insight.

The second area concerns the real options gap. As section 4.3 concludes, a full formal valuation of embedded options is unlikely to be practical or proportionate in this context. However, the literature's own suggestion that the gap can be partially addressed through qualitative strategic judgment, rather than formal valuation, appears genuinely practicable. A brief narrative discussion within the business plan, addressing how the project might be phased, expanded, or adapted in response to early operating experience, for instance, the possibility of developing additional rooms or extending event facilities in a later phase should initial occupancy exceed projections, would not require any change to the quantitative EFM, but would acknowledge, in qualitative terms, the flexibility that Pindyck (1991) and Trigeorgis and Reuer (2017) argue is frequently embedded in investment projects and frequently overlooked in static appraisal frameworks. Given that the business plan already contains a narrative component describing the investment rationale and market positioning, as noted in Chapter 3, the incorporation of such a discussion would represent a modest extension of an existing document rather than the introduction of an entirely new analytical exercise.

Finally, with respect to client engagement, the analysis suggests that this challenge is

unlikely to be resolved through changes to the financial model, since it originates in the client's own resource constraints rather than in any deficiency of the appraisal methodology. What the literature does suggest, however, is that the strength of the working relationship between consultancy and client, what Fu et al. (2023) term “team bonding capital”, moderates the effect of client involvement on outcomes. This implies that investment in the relationship itself, for example, through more structured and proactive communication routines initiated earlier in the application process, of the kind already described as a response strategy in Chapter 3, may be a more productive avenue than attempting to design around the constraint through changes to the technical content of the model. This is consistent with the observation in Chapter 3 that closer follow-up routines and more proactive communication practices, particularly as submission deadlines approach, were found to be an effective, if reactive, response to this challenge in practice.

6. Conclusion

This report aimed to examine the extent to which the economic-financial evaluation methods applied in professional consultancy practice align with the guidelines of the academic literature on investment appraisal. The empirical basis for this analysis was the internship carried out at Frederico Mendes & Associados (FMA) between February and April 2026, with a particular focus on the preparation of economic-financial models (EFMs) for tourism investment projects under the *Crescer com o Turismo* programme, a context that proved both technically demanding and analytically rich.

The main finding is that the gap between theory and practice, where one exists, is largely structural and justifiable rather than indicative of methodological shortcomings. This conclusion is consistent with the evidence reported by Graham and Harvey (2001) and Brounen et al. (2004), who identify such a gap as a persistent feature of corporate finance practice across different institutional settings. Overall, close alignment was identified in the combined use of NPV, IRR, and the Discounted Payback Period, the application of a hybrid sensitivity-scenario framework, and the use of official tourism sector benchmarks to support revenue projections.

Where divergences from the academic literature were identified, they were found to arise primarily from the regulatory and operational environment within which consultancy firms operate rather than from conceptual weaknesses in the underlying appraisal methods. The use of a sector reference discount rate published by Banco de Portugal instead of a CAPM-derived WACC represents a pragmatic simplification given both the well-documented limitations of CAPM estimation for listed firms (Fama & French, 1997) and the absence of the market information required for private SMEs. Likewise, the incremental analysis differs from the entity-level modelling approach recommended by the European Commission (2014), although this distinction becomes materially relevant only when project cash flows cannot be clearly separated from existing operations. The use of a standardised residual value reflects the comparability requirements of the funding programme, while the absence of real options analysis is more appropriately explained by the methodological complexity of option valuation, limited data availability, and the practical constraints of communicating such analyses within a public funding context, despite the theoretical relevance of managerial flexibility (Trigeorgis & Reuer, 2017).

Although these divergences are largely justified, the analysis also identified opportunities

for incremental methodological improvement. First, the existing standardised sensitivity framework could be complemented by project-specific breakeven points identifying the thresholds at which the project's financial indicators no longer satisfy the required criteria. Although not required under the current appraisal framework, such an analysis could provide decision-makers with a clearer indication of the project's tolerance to adverse changes in key variables, complementing the conventional sensitivity analysis described by the European Commission (2014) and the broader methodological principles discussed by Saltelli et al. (2019). Second, while a formal real options valuation would not be proportionate in this context, a brief qualitative discussion within the business plan of the managerial flexibility inherent in the investment would acknowledge an important dimension of investment decision-making that static financial models are unable to capture (Pindyck, 1991).

This report is subject to two principal limitations. First, the internship covered a period of approximately three months and focused exclusively on projects submitted under a single public funding programme. Consequently, the findings cannot be considered representative of either FMA's wider consultancy activities or the broader Portuguese consultancy sector. Future research could extend the analysis to a broader sample of consultancy firms and compare appraisal outcomes obtained under the current standardised framework with those derived from project-specific sensitivity analyses.

Beyond evaluating the consistency between academic theory and professional consultancy practice, this report highlights that effective investment appraisal depends not only on the application of appropriate financial techniques but also on the institutional context within which those techniques are applied. Regulatory requirements, operational constraints, and the practical realities of advising SMEs all shape the evaluation process in ways that the academic literature does not always fully capture. In addition, the internship demonstrated that the quality of the client-consultant relationship is a fundamental condition for the quality and timeliness of the work produced, reinforcing the findings of Fu et al. (2023) regarding the importance of client engagement and collaboration in professional service delivery.

Overall, the internship provided a comprehensive understanding of the financial, strategic, and regulatory dimensions of public incentive consulting. More broadly, the experience illustrated the important role played by advisory firms such as FMA in facilitating SMEs' access to public investment support while highlighting the operational and institutional complexities that shape investment appraisal in professional consultancy practice.

References

- Abrate, G., Fraquelli, G., & Viglia, G. (2012). Dynamic pricing strategies: Evidence from European hotels. *International Journal of Hospitality Management*, 31(1), 160-168. <https://doi.org/10.1016/j.ijhm.2011.06.003>
- Andor, G., Mohanty, S. K., & Toth, T. (2015). Capital budgeting practices: A survey of Central and Eastern European firms. *Emerging Markets Review*, 23, 148-172. <https://doi.org/10.1016/j.ememar.2015.04.002>
- Arshad, A. (2012). Net present value is better than internal rate of return. *Interdisciplinary Journal of Contemporary Research in Business*, 4(8), 211-219. <https://docslib.org/doc/8450538/net-present-value-is-better-than-internal-rate-of-return-asma-arshad>
- Banco de Portugal. (n.d.). *Sector tables*. Retrieved May 23, 2026, from <https://www.bportugal.pt/QS/qswweb/Dashboards>
- Barros, C. P. (2005). Measuring efficiency in the hotel sector. *Annals of Tourism Research*, 32(2), 456-477. <https://doi.org/10.1016/j.annals.2004.07.011>
- Brounen, D., de Jong, A., & Koedijk, K. (2004). Corporate finance in Europe: Confronting theory with practice. *Financial Management*, 33(4), 71-101. <https://www.jstor.org/stable/3666329>
- Castagnoli, E., & Favero, G. (2025). A contribution to the NPV-IRR debate. *Decisions in Economics and Finance*, 48, 153-174. <https://doi.org/10.1007/s10203-024-00494-6>
- Chatzinikolaou, D., & Vlados, C. (2025). Public support for business, intermediary organizations, and knowledge transfer: Critical development and innovation policy bottlenecks. *Journal of the Knowledge Economy*, 16, 4605-4625. <https://doi.org/10.1007/s13132-024-02161-y>
- COMPETE 2030. (2024). SICE - Inovação Produtiva - Outros Territórios. <https://www.compete2030.gov.pt/avisos/sice-inovacao-produtiva-outros-territorios-mpr-2024-2/>
- COMPETE 2030. (2025). Turismo em Portugal alcança contributo histórico para o PIB. <https://www.compete2030.gov.pt/comunicacao/turismo-em-portugal-alcanca-contributo-historico-para-o-pib/>
- Czarnitzki, D., & Hussinger, K. (2018). Input and output additionality of R&D subsidies.

- European Commission. (2023). Commission Regulation (EU) 2023/2831 of 13 December 2023 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid. *Official Journal of the European Union*, L 2023/2831. <https://eur-lex.europa.eu/eli/reg/2023/2831/oj>
- European Commission. (2014). Guide to Cost-Benefit Analysis of Investment Projects: Economic Appraisal Tool for Cohesion Policy 2014-2020. *Publications Office of the European Union*. https://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/cba_guide.pdf
- European Commission. (2015). Guide to cost-benefit analysis of investment projects: Economic appraisal tool for cohesion policy 2014-2020. *Publications Office of the European Union*. <https://doi.org/10.2769/97516>
- Fama, E. F., & French, K. R. (1997). Industry costs of equity. *Journal of Financial Economics*, 43(2), 153-193. [https://doi.org/10.1016/S0304-405X\(96\)00896-3](https://doi.org/10.1016/S0304-405X(96)00896-3)
- Fama, E. F., & French, K. R. (2004). The capital asset pricing model: Theory and evidence. *Journal of Economic Perspectives*, 18(3), 25-46. <https://doi.org/10.1257/0895330042162430>
- FNWAY Consulting & Innovation. (n.d.). *Equipa*. <https://fnway.com/equipa/>
- Fu, N., Flood, P. C., Rousseau, D. M., Morris, T., & Johnstone, M. (2023). When are clients helpful? Capitalising on client involvement in professional service delivery. *PLOS ONE*, 18(2), e0280738. <https://doi.org/10.1371/journal.pone.0280738>
- Godet, M. (2000). The art of scenarios and strategic planning: Tools and pitfalls. *Technological Forecasting and Social Change*, 65(1), 3-22. [https://doi.org/10.1016/S0040-1625\(99\)00120-1](https://doi.org/10.1016/S0040-1625(99)00120-1)
- Gössling, S., Scott, D., & Hall, C. M. (2021). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1-20. <https://doi.org/10.1080/09669582.2020.1758708>
- Graham, J. R., & Harvey, C. R. (2001). The theory and practice of corporate finance: Evidence from the field. *Journal of Financial Economics*, 60(2-3), 187-243. [https://doi.org/10.1016/S0304-405X\(01\)00044-7](https://doi.org/10.1016/S0304-405X(01)00044-7)
- Gricar, S. (2023). Tourism forecasting of "unpredictable" future shocks: A literature review by the PRISMA model. *Journal of Risk and Financial Management*, 16(12), 493.

<https://doi.org/10.3390/jrfm16120493>

- Hazen, G. B. (2003). A new perspective on multiple internal rates of return. *The Engineering Economist*, 48(1), 31-51. <https://doi.org/10.1080/00137910308965050>
- HM Consultores. (n.d.). *HM Consultores*. <https://hmconsultores.pt/hm-consultores/>
- INOVA+. (n.d.). *Pessoas*. <https://inova.business/pessoas/>
- Instituto Nacional de Estatística. (2025a). Conta satélite do turismo: 2024. *Instituto Nacional de Estatística*. https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_destaques&DESTAQUESdest_boui=707093676&DESTAQUEStema=55581&DESTAQUESmodo=2
- Instituto Nacional de Estatística. (2025b). Estatísticas do turismo: 2024. *Instituto Nacional de Estatística*. https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpub_boui=66197834&PUBLICACOESmodo=2
- Kierulff, H. (2008). MIRR: A better measure. *Business Horizons*, 51(4), 321-329. <https://doi.org/10.1016/j.bushor.2008.02.005>
- Kleer, R. (2010). Government R&D subsidies as a signal for private investors. *Research Policy*, 39(10), 1361-1374. <https://doi.org/10.1016/j.respol.2010.08.007>
- Koenig-Lewis, N., & Bischoff, E. E. (2005). Seasonality research: The state of the art. *International Journal of Tourism Research*, 7(4-5), 201-219. <https://doi.org/10.1002/jtr.505>
- Lefley, F. (1996). The payback method of investment appraisal: A review and synthesis. *International Journal of Production Economics*, 44(3), 207-224. [https://doi.org/10.1016/0925-5273\(96\)00022-9](https://doi.org/10.1016/0925-5273(96)00022-9)
- Magni, C. A. (2013). The internal rate of return approach and the AIRR paradigm: A refutation and a corroboration. *The Engineering Economist*, 58(2), 73-111. <https://doi.org/10.1080/0013791X.2012.745916>
- McDonald, R., & Siegel, D. (1986). The value of waiting to invest. *Quarterly Journal of Economics*, 101(4), 707-727. <https://doi.org/10.2307/1884175>
- Miles, J. A., & Ezzell, J. R. (1980). The weighted average cost of capital, perfect capital markets, and project life: A clarification. *Journal of Financial and Quantitative Analysis*, 15(3), 719-730. <https://doi.org/10.2307/2330405>
- Moody's Bureau van Dijk. (n.d.). *Orbis* [Database]. Retrieved May 23, 2026, from <https://or-bis.bvdinfo.com/>
- Pasqual, J., Padilla, E., & Jadotte, E. (2013). Equivalence of different profitability criteria with the net present value. *International Journal of Production Economics*, 142(1), 205-210.

- <https://doi.org/10.1016/j.ijpe.2012.11.007>
- Phadnis, S., Caplice, C., Sheffi, Y., & Singh, M. (2015). Effect of scenario planning on field experts' judgment of long-range investment decisions. *Strategic Management Journal*, 36(9), 1401-1411. <https://doi.org/10.1002/smj.2293>
- Pindyck, R. S. (1991). Irreversibility, uncertainty, and investment. *Journal of Economic Literature*, 29(3), 1110-1148. <https://www.jstor.org/stable/2727613>
- Purnamasari, P., & Adriza (2024). Capital budgeting techniques and financial performance: a comparison between SMEs and large listed firms. *Cogent Economics & Finance*, 12(1), 2404707. <https://doi.org/10.1080/23322039.2024.2404707>
- Sainaghi, R., Phillips, P., & Corti, V. (2013). Measuring hotel performance: Using a balanced scorecard perspectives' approach. *International Journal of Hospitality Management*, 34, 150-159. <https://doi.org/10.1016/j.ijhm.2013.02.006>
- Saltelli, A. (2002). Sensitivity analysis for importance assessment. *Risk Analysis*, 22(3), 579-590. <https://doi.org/10.1111/0272-4332.00040>
- Saltelli, A., Aleksankina, K., Becker, W., Fennell, P., Ferretti, F, Holst, N., Li, S., & Wu, Q. (2019). Why so many published sensitivity analyses are false: A systematic review of sensitivity analysis practices. *Environmental Modelling & Software*, 114, 29-39. <https://doi.org/10.1016/j.envsoft.2019.01.012>
- Schoemaker, P. J. H. (1995). Scenario planning: A tool for strategic thinking. *Sloan Management Review*, 36(2), 25-40. <https://sloanreview.mit.edu/article/scenario-planning-a-tool-for-strategic-thinking/>
- Scope Invest. (n.d.). *Sobre nós*. <https://www.scopeinvest.pt/sobre-nos/>
- Sociedade Portuguesa de Inovação. (n.d.). *Empresa*. <https://www.spi.pt/empresa/>
- Trigeorgis, L. & Reuer, J. J. (2017). Real options theory in strategic management. *Strategic Management Journal*, 38(1), 42-63. <https://doi.org/10.1002/smj.2593>
- Turismo de Portugal. (2025). *Programa Crescer com o Turismo*. <https://business.turismodeportugal.pt/pt/investir/financiamento/programas/paginas/programa-crescer-com-turismo.aspx>
- Yunit Consulting. (n.d.). *Sobre nós*. <https://www.yunitconsulting.pt/pt/quem-somos/sobre-nos/>

Appendixes - Figures

Figure A.1 - Selection of organisations and companies from FMA's client portfolio



Note. Based on commercial and marketing materials provided by Frederico Mendes & Associados (2026)

Figure A.2 - Key information on a selection of FMA's direct competitors



Note. Compiled from Orbis and the companies' websites

Appendixes - Tables

Table A.1 - *Payment request information example*

	Invoice number	Supplier VAT number	Invoice date	Rubric	Total Amount	Eligible Amount (excl. VAT)	Reimbursement
1	FT 2026X	PT501234567	12/01/2026	2	430,00 €	331,10 €	198,66 €
2	FT 2026X1	PT501234567	03/02/2026	1	958,70 €	738,20 €	442,92 €
3	FT2026X2	PT501234567	19/02/2026	3	135,99 €	104,71 €	62,83 €
4	FT2026X3	PT501234567	28/03/2026	2	1040,40 €	801,11 €	480,66 €

Note. Based on FMA's models

FACULDADE DE ECONOMIA

