Cost of Capital and Finance Evaluation for a Family SME Enterprise of an Ecuadorian Ecotourism Resort in San Carlos Parish, Los Ríos Province

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Abstract

The entrepreneurs of family SMEs allow innovation, and economic growth, mainly in the ecotourism sector. The objective is to analyze the entrepreneurship finance of an Ecuadorian ecotourism resort in San Carlos Parish, Los Ríos province for the next five years. The methodology is descriptive and quantitative. An experimental design and analytical and bibliographic methods were applied in this research. The study shows the viability, comparing risk (discount rate) and profitability.

Keywords

Finance, Ecotourism, Entrepreneurship, SMEs, Discount Rate and Risk.

1. Introduction

The entrepreneurship of family businesses in the ecotourism sector worldwide has created new opportunities for economic and sustainable growth and development. Silveira et al., [1] indicates that entrepreneurs in Latin America have micro, small and medium-sized companies that are competitive and even have export capacity.

Rodríguez [2] points out that for classical economic theory, authors such as Cantillon, Thunen, and Baudeau consider the entrepreneur as a risk, but also indicate they can be very intelligent when developing strategies, while Bentham and Smith say that they can take an innovative risk. Castillo 1999 clarifies that entrepreneurs manage to make the goods market more efficient by creating new wealth. In fact, Schumpeter, within the theory of entrepreneurship, mentions technical and financial innovation motivates competitors to take risks in irregular economic growth [2].

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Rodríguez [2] agrees that entrepreneurship, in addition to the ability to take risks, new companies can be developed. In fact, business development tests the capabilities of the entrepreneur for the implementation of project ideas. 90% of the world's companies are family-owned. Olvera [3] indicates that they contribute to employment and global GDP and remarks that job creation is one of the objectives pursued by society, and the new expectations of small and medium-sized companies.

Silveira et al. [1] consider entrepreneurship in the tourism context. In fact, ecotourism in Ecuador can be an alternative for sustainable development over time. The World Tourism Organization establishes the importance of the sector that satisfy the needs of tourists, and provides opportunities for the future, respecting cultural integrity and the ecosystem that sustains life for sustainable tourism development [4].

Silveira et al. [1] highlight that besides profits, tourism entrepreneurs stand out in improving lifestyles and getting contact with the environment in order to benefit client expectations. Gessa et al. [4] point out that responsible and sustainable entrepreneurship serves to solve social problems in the environment.

Torraleja et al. [5] say that family tourism businesses located in strategic geographic areas stimulate economic growth and social development. On the other hand, in the San Carlos Parish, the labor force is maintained by the agriculture that occurs at the beginning and end of the harvest, affecting the economy of its inhabitants for the rest of the year, that 's why it is important to have new sources of revenue.

The problem is the lack of initiative of family SMEs in natural environments for responsible eco-friendly and sustainable tourism exploitation in the Province of Los Ríos, mainly in the San Carlos Parish, where tourism is not developed yet. The objective is to analyze the finance of the Ecuadorian ecotourism resort start-up business in San Carlos Parish, Los Ríos Province for the next five years. This study is justified due to the climatological, topographical, and ecological conditions that make it the right place to start the ecotourism resort, improving the economy through the creation of new jobs for its inhabitants, and developing new business opportunities.

The study was developed before the pandemic. However, after a massive global vaccination plan, economic reactivation with innovative projects, such as the development of an ecotourism resort in the San Carlos Parish, Los Ríos Province is the perfect way to inject resources into the State through tourism, as developed countries do. So, this is a clear example of how the tourist can affect in a positive way the economy of a country.

2. Theoretical Framework

Entrepreneurship is a socioeconomic phenomenon for the development of society to contribute to the growth and effective performance of companies [2]. Additionally, Schumpeter considers the entrepreneur as the founder of a new company with innovation [6].

In 1982, Verin mentioned that during the 17th and 18th centuries, entrepreneurship was attributed to those who were in charge of construction projects, later Richard Cantillón in France clarified it as the ability to take risks in situations of uncertainty for obtaining variable profits [2].

Adam Smith emphasized the role of the entrepreneur in the economy and recognized inno-

vation. However, in the German school, analyzing the theory of marginal productivity, Von Mangoldt relates the entrepreneur with profit, risk, and ingenuity used.

Silveira et al. [1] considers the entrepreneur as the person who sees an opportunity and creates a new business, while authors such as Rauch, Wiklund, Lumpkin, and Frese consider they are necessary for economic development [7].

On the other hand, Rodríguez [2] indicates that for the neoclassical school, there are 2 types of entrepreneurs: the traditionalists who are mercantilists, and the capitalists with a business mentality, focused on increasing and multiplying their wealth, becoming, in the long run, an innovative entrepreneur. While Jackson 2001 cited by the same author indicated that Marshall considered the entrepreneur as a superior worker with leadership and industrial organization.

Olvera [3] considers that the entrepreneurial spirit implies: creativity, innovation, flexibility, growth, and risk, for the generation of new ideas. In fact, in the sense of American neoclassical theory, authors such as John Bates Clark, consider the entrepreneur as the director of economic activity (Theory of risk takers), while Frank Night, emphasizes that risks are not important if the uncertainty can be assured (Theory of profits) [2].

In another aspect, Silveira et al [1] point out that in countries such as Mexico or Cuba, their main source of economic income is tourism, where the role of the entrepreneur plays an important role in generating employment and offering services to international tourists.

Gessa et al. [4] indicate that small and medium-sized companies have the capacity to generate wealth, development, and well-being. While family businesses, during the time they consolidate, set clear rules and criteria, including the entrepreneurial spirit and innovation from the family to the company [8]. Olvera [3] highlights the role of the family business in the construction of new projects or studies with collective goals, in order to get family development and well-being.

In Mexico, Micro, small and medium enterprises, known as Mypyme represent 99.7% of the total GDP in the country. According to the Intersecretarial Commission for Industrial Policy, 65% of Mexican companies are family-owned. In fact, in a study of 122 MSMEs in the tourism sector of the state of Quintana, 72 are family businesses, and 50 are non-family businesses. It was found that family businesses are the oldest and generate the highest profitability [9].

Esparza et al. [9] agree that there is clear evidence in empirical studies of differential management between family and non-family businesses, being that financial management is important for family business because it is necessary to keep the company sustainable and competitive.

Ecological entrepreneurship according to Gessa et al. [4], business activity is focused on preserving the natural environment of the earth, biodiversity, and the ecosystem. Rural communities have historically suffered exclusion from economic progress. Various private initiatives carry out responsible ventures, mainly with tourism, associated with the enjoyment of natural and cultural attractions of the locality, in order to generate employment for the communities and promote their development [10].

Burgos [11] emphasizes the approach to new markets with eco-humanistic awareness, to guarantee tourism with responsible use of natural resources. Tourism as a source of socioeconomic revitalization has grown and contributes to the Gross Domestic Product of countries in the world. The support of Public administration has influence in a positive way. Family businesses are pioneers in starting business opportunities with minimal risks and higher profitability, so the increase in quality of goods and services in ecotourism are the new resources to serve the market [5].

There is a European study in Jaén, in which the Kolmogorov-Smirnov quality test was applied. It was affirmed that family businesses have different expectations about the quality of the tourist service they offer, unlike non-businesses ones, which take into consideration some aspects, such as employees who know the business and have a good presence, quality products, optimal facilities with hygiene, a pleasant environment of interest, cordiality, good personalized attention, and guaranteed reservations [5].

However, SMEs sustain tourism activity, especially with accommodation offers, and the creation of vacation centers that allow sustainable development of the activity [12]. Silveira et al. [1] highlight the intervention of governments in entrepreneurial activities through public policies and the support of state banks that can make ecotourism entrepreneurship their main economic source.

External factors are necessary to analyze at the time of developing new projects, because they can affect the sales and liquidity of companies, even in some cases they can provoke unemployment in some organizations. There are different variables that could influence a business's profitability, such as the Ukraine-Russia war that caused inflation and limitation of services debt increase [13].

2.1. Finances of family SMEs in ecotourism

Esparza et al. [9] point out that within the theory of the hierarchy of financial preferences, there is an order in the sources to finance new investments, with own funds, low-risk bank debt, and stock emission.

Manzanera [14] indicates that the entrepreneurial vocation begins with an idea. The entrepreneur matures with projects and will become an entrepreneur, in which the biggest obstacle is the lack of financing, and his great challenge is to find partners and investors. There is corporate financial management, which involves 3 important aspects: managing the capital budget, analysis of the capital structure, and working capital. In fact, the management of working capital is an activity that guarantees the company resources to continue operations [15].

Esparza et al. [9] indicate that 10% of family businesses fail due to a lack of financial resources. In fact, Hussain, 2006 cited by Esparza, et al., indicates that SMEs in the United Kingdom primarily prefer banks to finance themselves, while in China they support themselves with family loans.

De Sousa [16] points out that the Capital Asset Valuation Method, known by its acronym in English as CAPM is the best alternative for investment purposes because it refers to the rate of return required by investors. In fact, the CAPM allows companies to guide financial decisions [17].

That is why the function of the administrator leads him/her to carry out financial activities, mainly the planning of capital investments and identifying investment opportunities, which depend on the nature or type of business [15].

Financial management includes important decisions in investment, financing, and asset management [18]. In this sense, CAPM financial asset valuation method is very useful, because it is a technique to estimate the return on investments. Additionally, due to the acceptance in the estimation of working capital costs, it is considered an evolution in the theory of finance [16].

De Sousa [16] mentions that the CAPM method, where allows investors to choose the highest expected return for a given level of risk. Silveira et al. [1] emphasize the education of the entrepreneur as a characteristic of the evolution of the company.

In this sense, Manzanera et al. [14] indicate that the entrepreneur must have knowledge of finance for the analysis of sensible financial planning, giving peace of mind to the investor through financial strategies that lead to business success. Esparza et al. [9] say that family businesses use resources efficiently, also have lower debts, higher levels of liquidity, and obtain higher returns of profitability on capital investments.

3. Methodology

The methodology used is the descriptive and quantitative, non-experimental cross-sectional design, with probabilistic sampling and analytical methods.

It was developed a survey of the inhabitants of San Carlos Parish, which belong to a middle socioeconomic class, in order to know the level of acceptance of the resort in the area.

Below is the calculation of sample size, taking into account a 95% confidence level.

- N= 17,000 (population size according to INEC)
- Z= 1.96 (confidence level, 95%)
- P= 0.5 (percentage of success)
- Q= 0.5 (percentage of failure)
- D= 0.05 (percent error)

$$n = \frac{(17000 * 1.96^{2} * 0.5 * 0.50)}{(17000 - 1) + 1.96^{2} * 0.50 * 0.50}$$

$$n = \frac{17000 * 3.8416 * 0.50 * 0.50}{42.50 + 0.9604}$$

$$n = \frac{16326.80}{43.46}$$

$$n = 376 \quad respondents$$
(1)

The 376 people in the survey correspond to the representative sample of the target market. In this investigation, it was necessary bibliographic research, in order to gather information about Entrepreneurship theories, Finance Management, Capital Asset Valuation Method, and Finance of family SMEs in ecotourism. Investment appraisal methods were used to develop financial analysis, such as Net Present Value (NPV), Internal Rate of Return (IRR), and Capital Asset Pricing Model (CAPM) for the cost of capital estimation.

4. Results

Based on the objective of the investigation, the following results were found: 90% like to travel to tourist places in their free time, 65% of those surveyed would be willing to take the service if

Table 1Profit and loss statement projection

		Year 1	Year 2	Year 3	Year 4	Year 5
Recreational activities	30%	389,451	447,873	507,789	578,442	657,753
Restaurant	30%	389,451	447,873	507,789	578,442	657,753
Accommodation	30%	389,451	447,873	507,789	578,442	657,753
Others	10%	129,817	149,291	172,933	192,814	219,251
Incomes		1,298,170	1,492,910	1,696,300	1,928,140	2,192,510
Administrative expenses	20%	180,000	185,000	190,000	195,000	200,000
Operational expenses	50%	450,000	462,500	475,000	487,500	500,000
Advertising expenses	30%	270,000	277,500	285,000	292,500	300,000
Total expenses		900,000	925,000	950,000	975,000	1,000,000
Profit before taxes		398,17	567,91	746,3	953,14	1,192,510
Employee participation		59,726	85,187	111,945	142,971	178,877
Income tax		84,611	120,681	158,589	202,542	253,408
Net profit		253,833	362,043	475,766	607,627	760,225

Source: Elaborated by authors

there were the creation of an ecotourism resort in the San Carlos Parish with various facilities of recreational activities, accommodation, and restaurant.

69% would go five times a year, 12% twice a year, 8% once a month, 7% every weekend, and 4% once a week. On the other hand, 30% of those surveyed prefer swimming pools, 20% comfortable facilities, 19% restaurants, 15% sports activities, 11% horseback riding, and 5% events.

Subsequently, the potential demand for the ecotourism resort was calculated (amount of tickets), taking into consideration the size of the market of 17,000 inhabitants; 65% of clients are willing to visit the ecotourism resort; 11050 potential clients, number of units per customer (1); the number of units demanded on each occasion; the number of times of visits during the year (5). As a result, the potential demand in one year is 55250. Potential demand in the first year (55250) was multiplied by a competitive price (\$23.49 dollars), below the main competitors as a strategy. The income Statement for the first 5 years of the enterprise was developed (see Table 1).

4.1. Finance analysis

The Capital Asset Valuation method has been used, where it is necessary to know the cost of debt = (Effective Bank Interest * (1-tax)). Being the Effective Banking Interest 9.33%, obtained from the credit simulator of the National Financial Corporation CFN (Annex 1), and the tax weight is 36.25% for which companies in Ecuador pay 25% Income Tax and 15% Employee Participation. So, the cost of debt is 5.95%.

The financing represents 60% by external banking via CFN and 40% by contribution from partners, so the level of leverage is 1.5 times higher than the contribution from partners, which is 150%.

Table 2Weighted Average Cost of Capital (WACC)

Ways of financing	Amount \$	Weighing of contributions	Cost of Capital	Weighted average cost	
Credit bank (CFN)	568.074	60%	5,95%	3,57%	
Capital	378.716	40%	11,32%	4,53%	
Total	946790	100%		8,10%	

Source: Elaborated by authors

To calculate the leveraged beta, the following formula is used: Leveraged beta = ((sector beta * project leverage)* (1- tax weight)) + sector beta.

The beta of the sector was obtained from the hotel sector of the table of comparable betas of the United States (Damodaran, 2019), reaching 71%. Using the data and the formula, a leveraged beta of 1.39 is obtained, which will be used to calculate the cost of capital contributed by the partners. Subsequently, the CAPM formula is applied = (Risk-free rate + (Leveraged Beta * Risk premium)) + Country Risk.

The risk-free rate of North American bonds [19] is 1.74%. Leveraged beta is 1.39, the yield of the hotel market is 7.75% [20], risk premium is 6.01%, obtained from the difference between the market rate of return and the risk-free rate. The country risk that is 1,223% [21]. As a result, the cost of invested capital of the partners is 11.32%.

Previously, the cost of debt was calculated at 5.95% and the CAPM at 11.32%, and the WACC = (Weighting of contributions * Cost of capital) is calculated, which is a rate that is used to show a valuation of business-type investment studies (see Table 2).

Therefore, the discount rate of the study is 8.10%, which was used to calculate the Net Present Value with the flows weighted over time, resulting in \$419,672.59 dollars, and the Internal Rate of Return of 25%, obtaining a return on investment of 3.08 times more, considering an excellent hotel ecotourism financial proposal study for the San Carlos parish in the province of Los Ríos, Ecuador, so the financial risks are minimal (see Table 3).

5. Conclusion

The role of the entrepreneur at a global level has transcended not only with the contribution to the GDP, but also through the development of SMEs, some of them funded by family members in the tourism sector. Viable results have been obtained by these businesses, such as countries like Mexico and Cuba because this sector is their main economic source of income.

Due to the climatological conditions and geographical location, the San Carlos Parish, Los Ríos Province is the right place for the installation of an ecotourism resort. The support of sustainable development through environmental processes promotes employment in the region.

Taking into consideration that the business is going to be financed through public bank CFN with 60% (the lowest SME rate in the country), and a partner contribution of 40%, additionally a discount rate of 8,10% (WACC estimation), as a result, the Net Present Value (NPV) is \$419,672.59, and the Internal Rate of Return (IRR) 25%, obtaining 3.08 times more than the value invested

Table 3Cash Flow Forecasting

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Recreational activities		389,451	447,873	507,789	578,442	657,753
Restaurant		389,451	447,873	507,789	578,442	657,753
Accommodation		389,451	447,873	507,789	578,442	657,753
Others		129,817	149,291	172,933	192,814	219,251
Incomes		1,298,170	1,492,910	1,696,300	1,928,140	2,192,510
Accounts Receivable						
Initial cash	0	0	228,693	228,956	237,870	275,233
Operative incomes		1,298,170	1,492,910	1,696,300	1,928,140	2,192,510
Total		1,298,170	1,721,603	1,925,256	2,166,010	2,467,743
Non-Operating Income						
Own financing from	378,716					
partners External credit (CFN)	568,074					
Total Non-Operating In-						
come	946,790					
Total	946,790	1,298,170	1,721,603	1,925,256	2,166,010	2,467,743
Expenses						
Investment	-726,290					
Administrative expenses		-180,000	-185,000	-190,000	-195,000	-200,000
Operational expenses		-450,000	-462,500	-475,000	-487,500	-500,000
Publicity expenses		-270,000	-277,500	-285,000	-292,500	-300,000
Capital payment		-123,624	-135,153	-147,758	-161,539	
Interest payment		-45,853	-34,323	-21,718	-7,938	
Employee participation			-59,726	-85,187	-111,945	-142,971
Tax payment			-84,611	-120,681	-158,589	-202,542
Dividend payment			-253,833	-362,043	-475,766	-607,627
Total avnances		-1,069,477	-1,492,647	-1,687,387	-1,890,777	-1,953,140
Total expenses						
Net cash flow	-726,290	228,693	228,956	237,870	275,233	514,603

Source: Elaborated by authors

The main result obtained was to carry out an analysis through the CAPM financial method, in fact, the financial structure is thanks to the contribution of the CFN Public Bank in 60% with the lowest SME rate in the country, and the contribution of the partners in 40%. The discount rate was 8.10%, the NPV \$419,672.59 dollars, and the IRR 25%, obtaining 3.08 times more than the value invested. The outcomes show viability with minimal risks.

The business initiatives that operate in the tourism sector can work with the efforts of public institutions, in conjunction with the private ones, channeling resources into society more

committed to its environment [4]. In this sense, the state, the participation of private companies, families, and tourists, each with their role and contribution, make ecotourism projects lead to sustainable development. The business system and market with the awareness of the social system and the biosphere, imply harmonizing support schemes and conservation of life, even with business activity, known as pro-sustainable entrepreneurship [4].

Analyzing external variables such as the pandemic, in fact, it has been favorable, since financial institutions currently grant SME loans to businessmen and entrepreneurs, making the realization of this project more effective. If we analyze the war of Russia-Ukraine as an external variable, it does not directly affect the project, because it is evidenced by an economic recovery in Ecuador, from the perspective that the development of an ecotourism resort in the San Carlos Parish, Los Ríos Province is a local project, and national and foreign tourists can visit the resort, without any inconvenience, being a safe and reliable place.

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