

Sustainable tourism financial feasibility: a case study in Timor-Leste

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Abstract | Recent research points out the importance of diaspora in the tourism sector and the shift happening in the tourism business model in insular countries. Lately, the demand for the niche of eco-cultural tourism has been increasing, while the appearance of new construction techniques has powered the appearance of tourism facilities different from traditional hotels.

An example of this phenomenon is Timor-Leste, where local authorities encourage tourism development to be on small sustainable facilities, the so-called boutique hotels. Nevertheless, the relevant literature does not address the financial feasibility of this type of tourism facility.

Following the expectations of national Timorese authorities regarding the type of facilities to be installed in their territory, a case study on a boutique facility project is presented in this paper. Using a discounted cash flow valuation model this case study's Net Income would be positive at the end of the 5th year of activity, when the break-even occurs, even considering small scale and ensuring environment protection exigencies.

Keywords | Boutique Hotel, Tourist Housing, Financial Valuation, Diaspora

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1. Introduction

Over the last years, the tourist accommodation sector has evolved into different types of tourist housing developments (Timothy & Teye, 2009). One key factor for this evolution is a different attitude from consumers who reject the homogeneity of commercial touristic accommodation generally offered (Rogerson, 2010). Another key factor is the accommodation industry evolution due to new types of building and different materials usage (Aggett, 2007; Klumbis, Sant, Esade, & Munsters, 2010).

The current tourism accommodation in Timor-Leste is organized into two categories: large hotels, mainly located in Dili, the capital of the country, similar to those found in most touristic attractions throughout the world; and small family units with a limited offer of accommodations, managed by local residents. Such scenario prompts the issue of studying whether alternative options can be suitable for the region, namely in areas where some infrastructures are planned as Suai (The Tasi Mane) or Oe-Cusse Enclave.

Local authorities are implementing the Strategic Development Plan 2011-2030 (TL-SDP, 2010) with policies aligned with the United Nations' Millennium Development Goals to set out a pathway to sustainable development. This plan defines the guidelines and limitations for tourism facilities, opening the way to boutique, adventure and eco-tourism experiences.

Nevertheless, the relevant literature does not address the financial feasibility of this type of tourism facility. In this paper a case study for a boutique tourism facility in Timor-Leste is presented, focusing on the financial feasibility of the business, even meeting the previous standards. The financial evaluation was done using Discounted Cash Flow (DCF) model. In this approach, the cash flows were forecasted for five years in order to assess the ability of the investment to generate results. By comparing the current value of the future benefits

with the current value of the invested capital is possible to define the projects' financial feasibility.

The remainder of the paper is organized as follows. Section 2 describes the Timor-Leste profile, while Section 3 its tourism sector. Section 4 presents the theoretical contextual setting and Section 5 the Sunrise Resort case study. Finally, the financial valuation is developed in Section 6, followed by the conclusions in Section 7.

2. Country's Profile

Timor-Leste is located in Southeast Asia, 600 km northwest of Australia, and occupies the eastern half of Timor Island, covering 14,919 km², homeland of 1.2 million inhabitants (TL General Directorate of Statistics, 2015). The territory gained its independence on 20 May 2002 after 450 years of Portuguese colonization and 24 years of Indonesian occupation, followed by two-and-a-half years of provisional United Nations administration (Gomes & Pereira, 2010; Myrtilinen, 2009). Over the years, the country has created the conditions for successful development with absence of conflict and a new confidence in the public institutions (IBRD, IDA, 2013). The offshore oil and natural gas are being extracted since 2003, and the Petroleum Fund accounts for almost 80% of the Government's budget (Alves, 2017). The archipelago is considered a medium-developing country ranked in the 134th position of the United Nations Human Development Index among 188 nations (UNDP, 2017).

Local authorities are implementing the Strategic Development Plan 2011-2030 (TL-SDP, 2010) with policies aligned with the United Nations' Millennium Development Goals to set out a pathway to sustainable development. Public investment has already made significant progress in infrastructure building, namely roads, the Tibar Port, the Oe-Cusse airport and energy production and distribution (Alves, 2017).

Of the non-oil economic sectors, coffee production and tourism are the two featuring most prominently. The Timorese coffee exports account for USD 15.8 million, approximately 1% of the annual budget. This amount is unlikely to grow significantly due to vulnerability to climate shocks, which may affect yield consistency (Rajalingam, 2015).

Regarding tourism, Timor-Leste and neighbouring islands in eastern Indonesia are geographically positioned in one of the 34 world biodiversity hotspots, where at least 0.5% of plant life is unique to the region (TL-SDP, 2010). The territory has pristine landscapes combining temperate, subtropical and tropical climates. At sea level, the climate is hot and humid, with average temperatures ranging from 19 to 30 degrees Celsius. The rainy season runs from December to April and the dry one goes from June to October (Alves, 2017). The territory has a long cultural and historical heritage related to the Portuguese colonization and the resistance against Indonesian occupation (Vong, Pinto, & Silva, 2017).

Journalists and travel writers are encouraged to visit the territory and produce audio-visuals to promote this geography to tourists and investors from Australia, Portugal, Indonesia, China, Malaysia and Singapore (TL-SDP, 2010). Since independence, more than 160,000 United Nations staff, including 7,000 Portuguese, remained in the territory. They are a target audience to encourage revisiting the country with family and friends (Gomes & Pereira, 2010) along with the Timorese diaspora (Vong et al., 2017).

3. Tourism Sector Data

An ANZ report allude to the high cost of travel to Timor-Leste (from Sydney nearly twice the price to *Papua New Guinea* and by far the most expensive of the pacific island nations listed), hindering the territory's competitive stance as a travel desti-

nation in the region (Wilson & Lee, 2013). From a partnership between the Asia Foundation and the Tourism Ministry a survey from an enquiry to 700 travellers to Timor-Leste was implemented from May to July 2014 (Rajalingam, 2015). From the results, we highlight the following:

- The majority of travellers arrived from Australia, Indonesia and Portugal - which are also important receivers of the Timorese diaspora (Vong et al., 2017). Most came for work and business and, prior to their arrival in the territory, they relied on word-of-mouth recommendations to get information for their trip.
- When visiting the country for leisure purposes, travellers indicate high levels of satisfaction towards activities related to Timor-Leste's biodiversity, history, culture, and adventure-based activities (such as hiking and mountain biking). Most of them find leisure activities to be value for money and a third of respondents describe the country's infrastructure as being 'good' or 'very good'.
- Regarding expenses with transport, accommodation, leisure activities and food the research estimates an average expenditure of USD 638 per trip, that represents an annual economic value-add of approximately USD 14.6 million (Rajalingam, 2015).

From the restoration of independence in 2002 until 2012 several touristic infrastructures were created to accommodate United Nations peacekeeping staff and foreign aid workers, namely hotels (61), travel agencies (20) and restaurants (75) (Tolkach, 2013; Vong, Valle & Silva, 2014). Figure 1 includes the Tibar Beach Retreat, a boutique hotel located on a hilltop amongst the coastal mountains, with 8 single bungalows in a timber design inspired by Balinese architecture (Tibar Beach Retreat, 2017).



Figure 1 | Tibar Beach Retreat

Source: <http://www.tibarbeachretreat.com/>

Official data compiled by Lopes (2015), presen-

ted in the following table, indicate several trends about accommodation available in the largest hotels with 20 or more rooms, namely that their number remained unchanged between 2010 and 2015. Between, 2014 and 2015, there was an increase of 13.3% in the number of nights spent in the largest hotels (Table 1).

Table 1 | Nights spent and guests in the largest hotels

	2010	2011	2012	2013	2014	2015
Hotels	18	18	18	18	18	18
Rooms	869	869	875	905	886	907
Beds	871	871	998	1,011	1,115	1,160
Nights spent	102,558	101,948	106,056	101,482	77,982	88,341
Guests	16,870	17,422	19,938	27,576	16,102	16,313

Source: Timor in Figures, 2015 (Lopes, 2015).

Foreigners are the main clients of these hotels and they represent 87.8% of total guests and 91.2% of the number of nights spent. A daily accommodation per guest in double room averages 48 USD, plus 32 USD for 2 daily meals per person at restaurants and bar.

The main hotels are located in Dili and there is opportunity for new boutique facilities in other regions of the territory to accommodate the increasing number of travellers from regions with a shared cultural identity (Fourie & Santana-Gallego, 2012). Current tourism development in the country is focused on natural and cultural assets and emphasizes community-based tourism and ecotourism (TIES, 2017; Vong et al., 2017). Our project under analysis falls within the scope of ecotourism considering its implementation in the surrounding nature and fair-trade practices with the locals (Hardy & Beeton, 2001; Lu & Nepal, 2009; Yasarata, Levent, Burns & Fevzi, 2010).

4. Theoretical Framework

The Strategic Development Plan 2011-2030 (TL-SDP, 2010) implemented by Timorese authorities defined scale limitations for tourism facilities, aiming for boutique, adventure and eco-tourism experiences.

Many researchers have studied the *boutique* tourism market as a niche market in the tourism industry, but have not addressed the issue of financial viability considering the specificities of Timorese legal framework (Cheer & Reeves, 2015; Khosravi, Malek, & Ekiz, 2014; Kleinrichert, Ergul, Johnson, & Uydaci, 2012; Taylor & Newland, 2010; Timothy & Boyd, 2006).

The *boutique* hotel represents a new element within the Timorese hotel sector with the sole good example of the Tibar Beach Retreat which is run by a Timorese family that has lived in Australia (Tibar Beach Retreat, 2017). As in this case, the diaspora can spread information about their homeland locations and also invest in new tourist facilities in homeland as a result of their experiences abroad (Vong et al., 2017). Several researchers have studied this diaspora phenomenon as a niche market

in the tourism industry (Carment & Sadjed, 2016).

Furthermore, the potential need for funding motivates the financial evaluation of the projects to be developed. Valuation of an asset can be determined on three ways: First as the intrinsic value of the asset based on its capacity to generate cash flows in the future; second as a relative value by examining how the market is pricing similar or comparable assets; third to value assets with cash flows that are contingent on the occurrence of a specific event as options (Damodaran, 2012; Ivanovska, Ivanovski, & Narasanov, 2014). The appropriate model to use in a particular setting will depend on the project's characteristics or firm being valued (Gajek & Kuciński, 2017; Gordon, 2013). Under stable environmental conditions, when uncertainty is low enough for managers to make reasonably precise forecasts, and when projects are uncomplicated, the Discounted Cash Flow (DCF) model is the commonly used methodology to assess whether to pursue an investment or not (Pivoriéné, 2017). Research concerning this approach reveals that it is relatively easy to implement, widely taught, widely accepted and has many advantages over alternative investment evaluation methodologies (Thomas, 2001). It also allows for quantitative and precise results that assure economic rationality (Luehrman, 1998). In the project under study, the third way doesn't apply and for the second there is no available data concerning the market pricing of comparable assets in the country. Thus, we opted by the Discounted Cash Flow (the first option): the present value framework for equity valuation indicates that the fundamental value of each investment is the present value of its expected future cash flows, discounted at an appropriate risk-adjusted rate (Miller & Modigliani, 1961; Viebig & Poddig, 2008). The DCF valuation analysis may be done in two perspectives: (1) discounting expected cash flows using the cost of equity and (2) discounting expected cash flows using the weighted average cost of capital (WACC) (Damodaran, 2012; Fernandez, 2003).

The project's cash flows are forecasted over a period to assess the ability of the investment to generate results. By computing the expected cash flows for each financial year, the profitability may be assessed using indicators such as the net present value (NPV), internal rate of return (IRR) and payback period, among others (Gomes, 2011; Nunes, 2016). The IRR is the discount rate that makes the NPV null. By comparing the current value of the future benefits with the current value of the invested capital, the IRR shows the maximum level of profitability the project can offer its promoters (Remer & Nieto, 1995).

5. The case study: Sunrise Resort

According the legend, a giant crocodile became the island of Timor with its mountainous central crest dividing the island (Dive Timor Loro-sae, 2017). The country is named Timor Lorosae – *Land of the Rising Sun* in tetum, one of the three official languages together with portuguese and english. Also connected with the beauty of sun rise in the mountains we choose the brand "Sunrise Resort" and its logotype created by Luis Silvestre (Figure 2). For different reasons, explained bellow, we choose three possible sites to locate the facility, identified in Figure 3: Mount Ramelau (1), Suai-Tasi Mane (2) and Oe-Cusse Enclave (3).



Figure 2 | The Brand "Sunrise Resort" created by Luis Silvestre



Figure 3 | Possible locations for the "Sunrise Resort" in T-L

Source: Google maps

Mount Ramelau (1) was identified by BirdLife International in the early 1980's as an Important Bird Area as it supported several endemic and restricted-range bird species (Trainor & BirdLife International, 2007). Suai (2) with its Tasi Mane plan of oil and gas projects, which may attract private hospitality facilities linked to these public investments (Rigall & Torrent, 2008). Finally, Oe-Cusse Ambeno enclave (3) with its international airport which eases the access to local tropical beaches and mountains with spectacular views and

waterfalls (TL-SDP, 2010).

The Sunrise project aims to be recognized for its comfortable facilities and service quality, able to retain customers. The facility requires an area of 9,000 m², built up to 20% of available land, with wooden bungalows for rooms; a multi-use facility, restaurant, bar, reception hall, outdoor car park, and a lake in the garden.

The project's sustainable component remains in its features: non-intrusive housing and leisure spaces; good environmental practices with rainwater collection and solar energy usage; decoration as quality brand; and fair trade with local producers regarding local goods for the resort's consumption. The "start-up" company management will elaborate a business plan, set up the facility, define operational procedures for the resort's activity and the marketing strategy to the Sunrise Resort as a sustainable tourism product (IAPMEI, 2016).

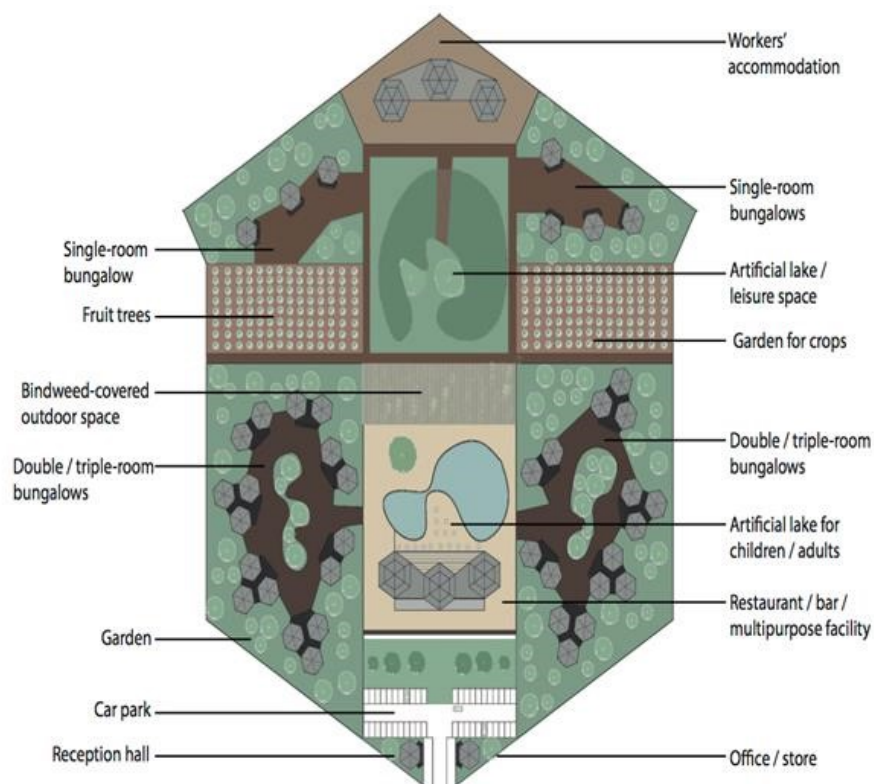


Figure 4 | Sunrise Resort Plan, created by Luis Silvestre

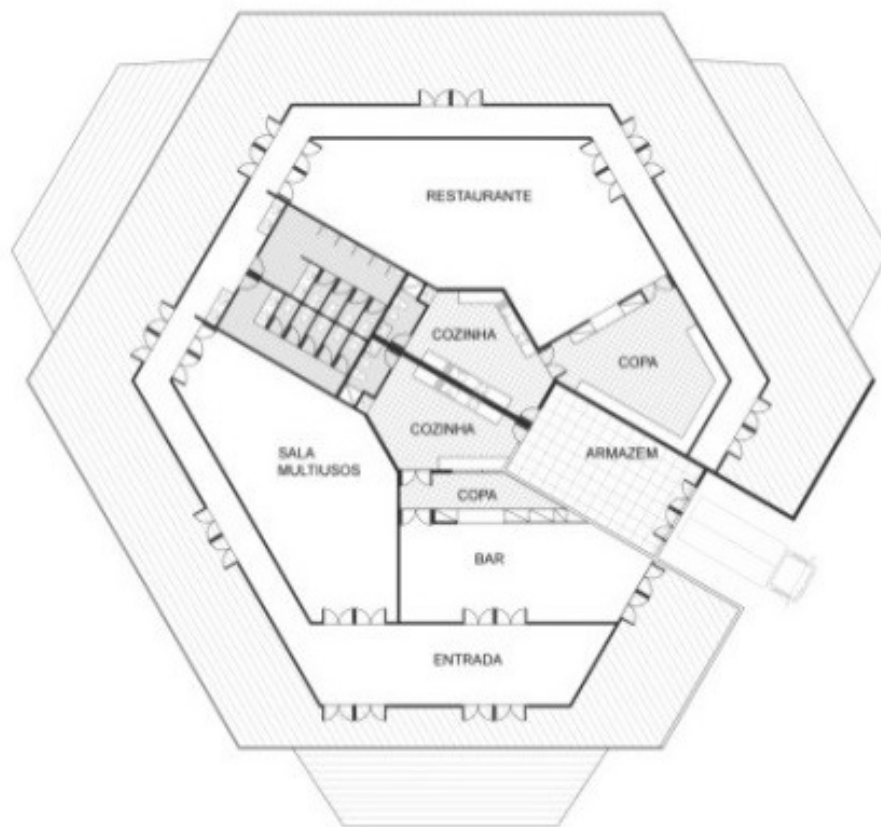


Figure 5 | Main building Plan, created by Luis Silvestre

Note: Entrance (entrada), Restaurant (restaurante) Bar, Kitchen & pantry (cozinha & copa), Warehouse (armazém), Balcony (varanda).

6. Financial Valuation

Matching the valuation model to the firm being valued is as important as using the right inputs (Harrison, 2003). The inputs considered leave space for subjective judgments so the input's calibration influences the final result and there is always some analyst bias (Costa, 2010). The valuation process must be interpreted using some reasonable margin for error (Damodaran, 2012) also considering that an investment valuation ages quickly given the constant information flow into markets.

To compute the project's present value we used a DCF valuation model assuming a 5 years pay-back period (IAPMEI, 2016; Kruschwitz & Löffler,

2006; Miranda, Fernandes, & Moreira, 2016) and to reduce subjectivity we used local legal and official data whenever available. In this sense, we started by checking the Private Investment Law where: foreign Investor is an individual whose nationality is any but Timorese or a legal person which owns at least 75% of shares with voting rights; provides free initiative with equal treatment of national and foreign investors; access to local or international credit and free transfer of funds abroad (TL National Parliament, 2011).

Incentives available may benefit the project profitability and investors are eligible if their investment exceed 50,000 USD (resident national investor) and 1.5 million USD (national non-resident or foreign investor) or in a contract of association

between foreign investor and national residents, where the latter controls at least 75% of share capital (TL National Parliament, 2004). The incentives package may include 100% exemption of: tax income, sales tax and customs import duty on the capital and equipment goods for the project. Tax exemptions are available for different periods, namely of 10 years in peripheral areas of Oe-Cusse Ambeno and Atauro (Alves, 2017).

In our feasibility plan we refer crucial aspects with relevance for the investor's decision (Costa, 2010; Covello & Hazelgren, 2005):

- Labour Law for the employment contracts, working hours, overtime payment and holidays (TL National Parliament, 2012).
- Interest rates of short-term loans (8%) and interest rate of risk-free asset (1%), to be negotiated at local banks (Banco Central T-L, 2017).
- Market Risk Premium with a premium for financing Timor-Leste projects between 2% and 6% above finance costs available for Australia (Imle, 2003). Considering 5.75% the Total Equity Risk Premium for Australia and a conservative scenario, we use 10.75% for market risk premium in Timor-

Leste. The rate for cash flows in perpetuity is 2% and the same value for inflation (Silvestre & Serra, 2011).

- Taxes and Duties Act (TL National Parliament, 2008) which includes: Value added tax (0%); Company tax income (10%); Personal income tax (progressive rate from 0 to 10%); Wage income tax (progressive rate from 0 to 10%); Sales tax (2.5% rate applied to imported taxable goods); Taxable goods and services sold and delivered in Timor-Leste (0%); Taxes on Services (5%).

To prevent the overload of tables some of them will not be presented, namely: Investment in working capital, financing plan, critical operational point, plan for cash needs and balance sheet forecast.

On Investment forecast (Table 2) we consider the following assumptions: a long-term land lease contract to be established with rental payments exempted during 7 years (TL National Parliament, 2011); Investment includes equity (36.67%) and bank credit loans (63.33%); Buildings and constructions include the wooden constructions with prices provided by a Portuguese company (Canto Certo, 2019).

Table 2 | Annual Investment Forecast

	in USD					
	2018	2019	2020	2021	2022	2023
Buildings and other constructions	650,000	-	-	-	-	-
Equipment	108,509	-	-	-	-	-
Transport Equipment	131,400	-	-	-	-	-
Office Equipment	14,545	-	-	-	-	-
Biological Equipment	145,455	14,545	14,545	14,545	14,545	145,455
Other Assets	131,909	72,827	218,282	218,282	218,282	149,884
Total Investment	1,181,318	87,372	232,827	232,827	232,827	295,339
<i>Accumulated Values (VAT = 0%)</i>						
Total Accumulated Investment	1,181,318	1,268,69	1,501,517	1,734,344	1,967,171	2,262,51

Source: Calculations made by the author with data from providers (Canto Certo, 2019) and others

On Sales forecast the assumptions are an occupancy rate of 72.6%, with annual growth rates

between 5% and 7% until full use of installed capacity in the 5th year. In bungalows with two rooms

we consider a daily rental of 40 USD per person in double room, plus 30 USD for 2 daily meals per person at the restaurant and bar (Lopes, 2015).

On Cost of Consumed and Sold Goods we considered a gross margin of 90% on rentals and 50% on restaurant/bar activities similar to other units present in the Timorese market. On Cost forecast of Goods and Services Supplied the annual budget includes a 10% growth rate in several costs (security, electricity, fuel, butane gas, workers' transport, communication, insurance, cleaning and a monthly fumigation).

On Staff costs we follow the average of those paid by the main hotels in Dili and an annual salaries' increase of 2% (TL National Parliament,

2012) and we obtain the figures included in Table 3 that sums up the Income Statement Forecast.

Table 3 below concerns the Income Statement Forecast and in the first four years of the project under analysis there will be losses due to a very conservative scenario in the usage of the multipurpose facilities and the restaurant/bar, with overall negative impact on profits. These negative earnings in its first years of growth of the start-up are acceptable because the investments made take time to pay off (Damodaran, 2012). During the 5th year of activity the break-even occurs and at the end of that period the project's Net Income will be positive of 64,281 dollars.

Table 3 | Income Statement Forecast

	in USD					
	2 018	2 019	2 020	2 021	2 022	2 023
Sales and services revenues	1,278,100	1,450,071	1,647,802	1,875,933	2,132,510	2,462,589
Cost of consumed and sold goods	424,930	493,529	573,596	667,134	775,753	906,074
Goods and services supplied	201,360	207,082	219,506	234,872	251,313	268,905
Staff Costs	422,188	468,025	500,270	574,156	593,576	613,542
EBITDA	229,622	281,435	354,429	399,770	511,869	674,068
Depreciation and amortization	258,609	280,461	338,676	396,725	348,165	248,480
EBIT (Operating Income)	-28,987	0,974	15,753	3,045	163,704	425,588
Interests and similar income	7,040	6,674	5,703	5,310	6,169	8,164
Income and similar costs	99,396	143,865	131,441	119,016	106,592	94,167
Income before tax	-121,343	-136,216	-109,984	-110,660	64,281	339,586
Tax	0,000	0,000	0,000	0,000	0,000	0,000
Net Income	-121,343	-136,216	-109,984	-110,660	64,281	339,586

Source: Calculations made by the author with data from national statistical office and hotels in place

In the context of this DCF valuation model the cash flow to equity are discounted at the capital cost rate, which is composed by the free risk interest rate plus a risk market rate. In the firm's

calculation it is used the weighted average cost of capital (WACC) in 2018, when the overall investment occurs (Table 4).

A full usage of installed capacity is expected in the 5th year of activity. Figures forecasted for the year after, that are included in the last column of Table 4, represent a demand excess in the market that has to be satisfied by installing a project's 2nd stage. From the investment valuation we obtain

the following results: On the investor's perspective the IRR is of 30.04% with a NPV of 184,221 USD; on the Firm's perspective the IRR is of 30.84% with a NPV of 1,345,753 USD (Table 5 & Table 6).

Table 4 | Discount Rate - WACC Calculation

	2018	2019	2020	2021	2022	2023
Banking Credit	1,085,544	991,794	898,044	804,294	710,544	616,794
Shareholders'equity	628,657	492,441	382,456	271,796	335,077	674,663
Total	1,714,201	1,484,235	1,280,500	1,076,090	1,045,621	1,291,457
% Credit Banking	63.33%	66.82%	70.13%	74.74%	67.95%	47.76%
% Shareholders'equity	36.67%	33.18%	29.87%	25.26%	32.05%	52.24%
Capital Cost						
Banking Credit		13.20%	13.20%	13.20%	13.20%	13.20%
Financing with fiscal shield		9.24%	9.24%	9.24%	9.24%	9.24%
Capital Cost		11.77%	11.79%	11.81%	11.83%	11.85%
WACC		10.08%	10.00%	9.89%	10.07%	10.61%

Source: Calculations made by the author using data obtained from local banks and Shareholders

Table 5 | Discount Cash Flow Valuation

	in USD						
On Investor's perspective	2018	2019	2020	2021	2022	2023	2024
Free Cash Flow do Equity	-44,325	-43,558	-107,578	-45,469	30,625	63,647	649,381
Interest rate of free risk assets	1.00%	1.02%	1.04%	1.06%	1.08%	1.10%	1.13%
Market risk premium (Rm-Rf)	10.75%	10.75%	10.75%	10.75%	10.75%	10.75%	10.75%
Discount rate	11.86%	11.88%	11.90%	11.93%	11.95%	11.97%	12.00%
Discount factor	1.00	1.12	1.25	1.40	1.57	1.76	1.97
Discounted Cash Flows	-44,325	-38,933	-85,928	-32,449	19,523	36,235	330,098
	-44,325	-83,257	-169,185	-201,634	-182,111	-145,876	184,221
Net Present Value (NPV)	184,221						
Internal Return Rate (IRR)	30.04%						
Payback period	5 years						

Source: Calculations made by the author using data obtained from the previous tables

Table 6 | Discount Cash Flow Valuation - On Project's perspective

	2018	2019	2020	2021	2022	2023	2024
Free Cash Flow to Firm	-1 030,473	194,057	117,612	167,297	230,967	251,564	2 981,723
WACC	1.00%	1.02%	1.04%	1.06%	1.08%	1.10%	1.13%
Discount factor	10.75%	10.75%	10.75%	10.75%	10.75%	10.75%	10.75%
Discount rate	11.86%	11.88%	11.90%	11.93%	11.95%	11.97%	12.00%
Discount factor	1.00	1.101	1.211	1.331	1.465	1.620	1.792
Discounted Cash Flows	-1 030,473	176,289	97,129	125,727	157,694	155,288	1 664,100
Net Present Value (NPV)	1 345,753						
Internal Return Rate (IRR)	30.84%						
Payback period	5 years						

Source: Calculations made by the author using data obtained from the previous tables

The IRR is the discount rate that makes the NPV null (Remer & Nieto, 1995) and it shows the highest profitability level that the project can offer to its promoters by comparing the current value of the future benefits with the current value of the invested capital. The IRR obtained rounds 30% and it is higher than the reference rate which does not exceed 12%. Whilst the project proved to be eco-

nomically viable because the cash flows cover the amount invested by the shareholders and allows an remuneration at their desired rate (Gomes, 2011). Uncertainty can influence the expected profitability of a project and the risk element should be incorporated in the analysis by observing plausible changes in critical variables. Yet, considering the sensitivity analysis (Jovanovic, 1999) and the

banking credit financing as a weak point of investment projects in Timor-Leste, we consider a scenario of increase in the loans interest rate from 8% to 10% (short term) and from 13.2% to 15% (medium term). With such a scenario, the DCF model gives us the following acceptable data: Break-even in the 6th year; the IRR in the Investor's perspective is of 16.08% with an NPV of 44,060 USD; the IRR in the Firm's perspective is of 29.83% with an NPV of 1,169,134 USD.

7. Concluding remarks

Timor-Leste has a unique culture, marked by the Portuguese colonial heritage, Timorese Liberation Resistance and tropical sea rich in coral and marine life. Available data show that there is an increasing number of travellers to Timor-Leste. Since independence in 2002, more than 160,000 United Nations staff, including 7,000 Portuguese, remained in the territory and they are a target audience to revisit the country along with the Timorese diaspora.

Local authorities focus on tourism development, especially through small sustainable facilities and boutique hotels. They promote the geography to tourists and investors from Australia, Portugal, Indonesia, China, Malaysia and Singapore. In this context, we studied a boutique hotel project (the Sunrise Resort) thought to be a built space, perfectly accommodated in the landscape, suitable for a relaxing holiday, a business trip or as base to discover the natural attractions, culture and hospitality of its inhabitants.

We used the discounted cash flow valuation model with a 5 years payback period to conclude that the Net Income would be positive at the end of the 5th activity year and the break-even occurs with full-use of the installed capacity. The losses forecast during the first four years are due to a very conservative scenario in the usage of the multipur-

pose facilities and the restaurant/bar with overall negative impact on profits. However these results are common once the project needs some time to mature (Damodaran, 2012). Finally, on the investor's perspective the IRR is 30.04% and the NPV 184,221 USD; on the Firm's perspective the IRR is 30.84% and the NPV 1,345,753 USD. Given the IRR obtained, and the reference rates around 12%, the project is economically viable. Even considering a worst scenario of increase in the loans interest rate from 8% to 10% (short term) and from 13.2% to 15% (medium term), the DCF model returns a break-even in the 6th year, an IRR of 16.08% and a NPV of 44,060 USD in the Investor's perspective. These late results are worse but acceptable. Nevertheless, there is a constant information flow and investment valuation ages quickly and has to be updated to reflect current information.

This study also presents some limitations. Firstly, the country risk used in the financial analysis was obtained assuming a premium between 2% and 6% above finance costs available for Australia. It would be relevant to include a more accurate estimate, taking into account the most recent macroeconomic information. Secondly, the financing costs were based on prices charged to Dili hotels by CGD branch in Timor-Leste (BNU Timor). It may be in the interest of the investor to seek alternative sources of financing from international banks. Thirdly, the infrastructures and materials prices were obtained from a Portuguese company experienced in installing facilities on PALOP. We stress that these costs are only illustrative, as there is no hard evidence that this option is better than importing from neighbouring countries (Australia, Indonesia).

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