# Yield Available for Tourism from Short-Term Investments: Evidence from Angola

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### Abstract

The present study aimed to contribute to a more informed view of the investment alternatives available in the Angolan financial market, which allow the realization of yields that can be channeled to consumer expenses such as those incurred in the context of tourism. To this end, a survey was carried out of the main valid alternatives for the investment of funds in the Angolan financial market, considering two possible alternatives: term deposits, with maturity of up to one year, and the purchase of securities: bonds and shares, also with maturity of up to one year. The main results indicate that in the short term, the alternatives that can provide the highest expected returns to potential tourists, who wish to use them for expenses related to tourism activities, are: term bank deposits at BIC, at an annual effective interest rate of 11.54% considering a daily capitalization period, and the purchase of shares in BODIVA.

**Keywords:** Financial applications, Tourism expenditure, Tourist potential, Yield. **JEL Classification:** *M*0; *Z33*.

### 1. Introduction

The concepts of financial literacy and inclusion have gained considerable attention both within and outside academia, and are even being considered priorities by governments and international institutions. Currently, the sustainability of commercial transactions is based on the ability of consumers in general, and tourists in particular, to identify the best options for purchasing goods and/or services and, secondly, to have the necessary knowledge about the dynamics of money, in its various forms, from physical to virtual, and can make the difference between realizing or not yields from the application of available financial resources. Thus, the different ways they can be applied can represent the basis for informed decision-making by investors when it comes to finding alternative sources of yield for the practice of tourism activities.

According to Sanches-António (2024), in a context of constant change, understanding the dynamics of money becomes essential to identifying the main opportunities and choosing the best possibilities for applying funds.

From this perspective, on the one hand, indicators of financial attitudes and behaviors adopted by consumers of tourism products, and on the other, their capacity to withstand expected (retirement) or unexpected (unemployment) financial shocks, can constitute an important index for measuring their level of financial literacy, about the existence and structure (return, maturity, and risk) of the possibilities available for the application of financial resources. Thus, at a time when rising prices caused by inflation of the main basic products are a reality on a global scale, this study finds its reason in the need for efficient and informed use of the resources available to potential tourists.

According to Wisniewski (2011) the lack of control over the financial budget, resulting, in most cases, from a lack of information and financial planning, has been one of the factors that affects the financial stability of consumers in general. Therefore, to contribute to a more informed view of the short-term investment alternatives available in the Angolan financial context for the realization of financial gains, which can be channeled towards consumer expenses such as those incurred in the context of tourism, we will seek to answer the question related to the best alternative for potential tourists to realize financial gains in the short term.

## 2. Financial Literacy and Tourism Practice

Financial literacy is the ability to distinguish between financial choices that allows one to discuss economic issues, plan for the future, and respond competently to everyday life events that affect personal finances Vitt and Anderson (2001) cited by (Tavares & Almeida, 2021), therefore, according to Sanches-António (2024, p. 2), the optimal relationship that can be established in the process of combining different productive resources (inputs), aiming to obtain a certain good or service (products or outputs), it represents an important challenge for all economic agents who intend to maximize their respective utilities in the use of a certain good. In this sense, familiarity with terms specific to the financial area, such as interest rate, exchange rate, savings, credit, yield, investment, or even financial products (securities: shares and bonds), constitute the basis for informed choices, regarding the offer of financial products and services available. This can be seen in situations where a given tourist, to travel to a certain tourist destination, needs at least some knowledge of the exchange rate dynamics at the destination as a way of safeguarding against unexpected losses arising from the unfavorable exchange rate against the currency of their point of origin.

Thus, the basis of the theoretical support on financial literacy and inclusion is the knowledge that people have about financial products and services (García-Santillán, Venegas-Martínez, & Mendoza-Rivera, 2024).

In the case of Angola, as shown in Graph I, the level of exclusion in access to financial products is still quite high, revealing a low level of investor-financed interaction, with an impact on the local financial intermediation process.



Figure 1. Level of access to financial products. Own from FINSCOPE (2022) Source:

Thus, knowledge of the possibilities of investing in financial assets as a way of realizing yields is directly related to the level of financial literacy or illiteracy that prevails in a given market context, which in the case of Angola is still high, as already mentioned, with the percentage of people without access to financial products standing out.

## 3. Alternatives for Realizing Short-term Yields in the Angolan Financial Market

3.1. Through Commercial Banking: Through Capital Mobilization (Term Deposits)

Despite the high level of exclusion in accessing financial products, commercial banking in Angola represents the main channel of the relationship between the general population (consumers and potential tourists) and the financial system. Thus, an analysis of the alternatives for financial investments, namely term deposits, allowed us to identify those that, due to the interest rates charged and capitalization periods applied, allow for yields that are more attractive to investors. Investing resources in term accounts with commercial banks, whose remuneration varies between 3.50% and 11% interest rate, in the maturities shown in Table I.

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Indicator	BAI <sup>2</sup>			BFA <sup>3</sup>				BIC <sup>4</sup>				
Maturity (Days)	30	90	180	364	30	90	180	364	30	90	180	364
Interest rate (%)	3.50	4.00	8.00	10.50	4.00	7.50	10.25	11	7.75	8.25	8.75	9.25
Source: Own from BA	AI (2024), B	FA (2024)	) and BIC (9	2024).								

**Table 1** Interest rates and respective maturities of the three largest Angolan commercial banks<sup>1</sup>

Considering the highest interest rates that allow for greater returns at each maturity, Table II was prepared from Table I, showing the rates and maturities used in the simulations for various capitalization periods, when presenting the results in topic 5.5

Table 2. Most attractive rates by maturity.					
Indicator	BIC	BIC	BFA	BFA	
Maturity (Days)	30	90	180	364	
Interest rate (%)	7.75	8.25	10.25	11	
Source: Own from the conten	ts in Table 1.				

Then, based on the data that appears in Table II, the expected yields

will be calculated, considering different capitalization periods and the respective maturities.

3.2. Through the Capital Market, Through the Purchase of Securities<sup>6</sup>

<sup>&</sup>lt;sup>1</sup>The three largest commercial banks in Angola were considered, considering the size of their assets, according to the ABANC (2023), criteria. <sup>2</sup>Angolan Investment Bank.

<sup>&</sup>lt;sup>3</sup>Angola Development Bank. <sup>4</sup>International Credit Bank

<sup>&</sup>lt;sup>5</sup>Compared to the other two banks, BAI does not present, at any maturity, any higher rate, that is, that allows a higher expected return, compared to the other two banks targeted by the study (BFA and BIC). <sup>6</sup>Considering the various maturities of the bonds and consequently the receipt of the principal plus interest by the investor, unlike shares which necessarily constitute entry into the share capital of companies.

As mentioned in a) the interbank market is traditionally the main option for mobilizing savings in Angola, with the capital market being a more recent alternative that will certainly follow its necessary and important path towards increasing efficiency levels in the financial intermediation process of the financial system as a whole.

<b>Table 3.</b> Trading volume on BODIVA: By type of infancial instrument in ARZ'							
Market	Financial instrument	Minimum amount to invest	Maturity	Rate			
	Public obligations	1,000.00	- 1 year (364 days)	0.03%			
Secondary	Private obligations	1,000.00	- 1 year (364 days)	0.05%			
	Shares and others	1,000.00	- 1 year (364 days)	0.15%			
Source: Adapted fro	om BODIVA (2018) and CMC (2022).						

**Table 3** Trading volume on BODIVA: By type of financial instrument in AK77

## 4. Procedures Adopted

A review of the literature related to financial literacy and its relationship with savings that enable the practice of tourism activities was carried out. In this sense, authors such as García-Santillán, Venegas-Martínez, & Mendoza-Rivera (2024) were reviewed, who based their ideas on topics related to financial literacy in different contexts: work, market, and administrative.

From this perspective, since the expenses related to the practice of tourism activities are current and therefore limited to the short term, upon their implementation, a search was carried out related to alternatives for the application of financial resources that allow returns, also in the short term, to be obtained by potential tourists, from the two main channels available in the Angolan financial market: commercial banking and BODIVA<sup>8</sup>.

The final part of the study presents the expected returns resulting from the application of financial resources by potential tourists, both through investment in term deposits and from the capital market.

For the situation in which the option to invest involves investments in term deposits with a commercial bank, based on the nominal rates and maturities stated in the reports and accounts of the three largest commercial banks operating in Angola, the respective effective rates and expected yields (interest) were calculated considering a minimum initial capital of 50,000.00, as constant in (BIC, 2024).

In the case where the option to realize yields was to invest in the purchase of securities, the expected returns were calculated in three return possibilities, considering the same initial capital, the same maturity, with the interest rates differing only depending on whether the financial instrument was: treasury bonds, private bonds or shares, for these types of financial instruments. Both, the capital initially invested and the maturity is defined in (BODIVA, 2018) and (CMC, 2022).

However, to make the calculation viable, based on the assumption of homogeneity regarding the base value for investments, regardless of whether term deposits or purchase of securities, the initial value to be invested was set at AKZ 50,000.00, in line with the procedure adopted for setting the value to be invested in term deposits.

## 5. Results

#### 5.1. Through Commercial Banking

Taking as a reference the minimum amount to make a term deposit (AKZ 50,000.00)<sup>9</sup> and the fact that the rates charged by the commercial banks targeted by the study are nominal, the respective effective rates will be calculated, taking into account the capitalization regimes: daily, monthly, quarterly and half-yearly.

Following a periodic perspective, the weekly, bimonthly, and quarterly capitalization periods are missing, as they are absent in the price lists of the three banks analyzed.

Assuming that:

Assuming that: 11% capitalized per day =  $\frac{11\%}{_{364 \text{ days}}}$  = 0.03% effective rate per day or 11.54% p.y. 7.25% capitalized per month =  $\frac{7.75\%}{_{12 \text{ months}}}$  = 0.65% effective rate per month or 8.09% p.y.

$$8.25\%$$

8.25% capitalized per quarter  $=\frac{8.25\%}{4 \text{ quarters}} = 2.06\%$  effective rate per quarter, or 8.50% p.y. 10.25% capitalized per semester  $=\frac{10.25\%}{2 \text{ semesters}} = 5.13\%$  effective rate per semester or 10.52% p.y.

Assuming the assumption of compound capitalization, we have:

and that: 
$$C_n = C_0 (1+i)^r$$

and that:

$$i = \frac{J}{C_o} \cdot 100\%$$

 $J = C_n - C_0$ 

then for the four capitalization periods, we have:

Daily capitalization

$C_{364} = AKZ 50,000 (1+0.0003)^{364}$
C <sub>364</sub> =AKZ 55,768.36
J = AKZ 5,768.36
i = 11,54% p.y.

Monthly capitalization

 $C_{12} = AKZ 50,000 (1+0.0065)^{12}$ C<sub>12</sub> =AKZ 54,042.49 J = AKZ 4,042.49

<sup>&</sup>lt;sup>7</sup>Kwanza: name of the Angolan currency.

<sup>&</sup>lt;sup>8</sup> Angola Debt and Securities Exchange <sup>9</sup> Value taken as a reference from the BIC price list, since of the three banks analyzed it is the only one to present this information.

i = 8.09% p.y.

• Quarterly capitalization

 $C_4 = AKZ 50,000 (1+0.206)^4$  $C_4 = AKZ 54,249.07$ J = AKZ 4,249.07i = 8.50% p.y.

• Semiannual capitalization

 $C_2 = AKZ \ 50,000(1+0.0513)^2$  $C_2 = AKZ \ 55,261.59$  $J = AKZ \ 5,261.59$ i = 10.52% p.y.

Based on the results obtained, the possibility that offers the highest expected return to potential tourists who choose to invest funds in term deposits is investments with daily capitalization periods and an effective interest rate of 0.03% per day or 11.57% per year.

#### 5.2. Through the Capital Market

Using capitalization processes under the compound interest regime and daily capitalization periods, starting from an initial value in line with that used to simulate returns on term deposit applications of AKZ 50,000.00:<sup>10</sup> It is necessary that:

being that:

 $J = C_n - C_0$ 

 $C_n = C_0 (1+i)^n$ 

then for the three financial instruments we have:

Public obligations:

 $\begin{array}{l} {\rm C}_{364} = & {\rm AKZ} \ 50.000 \ (1\!+\!0.0003)^{364} \\ {\rm C}_{364} = & {\rm AKZ} \ 55,768,36 \\ {\rm J} = & {\rm AKZ} \ 5.768,36 \end{array}$ 

• Private obligations:

 $\begin{array}{l} {\rm C}_{364} = & {\rm AKZ} \ 50.000 \ (1{+}0,0005)^{364} \\ {\rm C}_{364} = & {\rm AKZ} \ 59.977,98 \\ {\rm J} = & {\rm AKZ} \ 9.977,98 \end{array}$ 

• Actions:

 $\begin{array}{l} C_{364} = & AKZ \ 50.000 \ (1+0,0015)^{364} \\ C_{364} = & AKZ \ 86.281,39 \\ J = & AKZ \ 36.281,39 \end{array}$ 

Based on the calculation of the expected returns obtained (interest), given the fact that the remuneration rate is higher, the possibility of a greater expected return for the potential tourist should be the purchase of shares.

#### 6. Conclusion

Considering the Angolan salary structure, with an average base salary not exceeding AKZ 200,000.00, and the level of risk involved in its application, the financial instrument that would best suit the profile of investors with fewer resources could be treasury bills (short-term government bonds). However, the results obtained indicate that it is by investing in shares that potential tourist can maximize their expected returns.

On the other hand, given that optimized management of personal finances can allow potential tourists to have the necessary disposable income, based on spending on tourist activities to be carried out by them, it is recommended that they mobilize part of their disposable income in a current account with a specific commercial bank, which, according to the results obtained, are the BIC and BFA banks, converting it into term deposits, since the first result of the study indicates deposits with daily capitalization periods, which constitute the best available alternative in this category.

In this sense, the main objective of the study was achieved in that it was possible, on the one hand, to identify and, on the other, to determine the best possibilities for financial return, considering the different application possibilities analysed, namely: short-term deposits taking into account their maturities and respective capitalization periods, as well as securities: bonds and shares, also short-term.

#### 7. Recommendations

The ongoing dissemination of both the typology and the characterization of the different financial products to potential tourists could represent an important way for them to have more financial resources available, resulting from financially informed choices, and this could also represent an important contribution to reducing the levels of exclusion in access to financial products by the general population.

In the Angolan financial market, such an aim could, for example, be materialized through the creation of financial products aligned with the need to achieve short-term financial returns, such as those intended for travel, leisure, business, religious or cultural events, etc.

Likewise, additional studies should be carried out to measure the level of risk inherent in each type of fund application presented, so that it is possible to more accurately understand the best alternatives from the perspective of their return under the conditions initially foreseen (both in terms of their expected yield and the time limit set for this to be observed).

<sup>&</sup>lt;sup>10</sup> Although the minimum amount to invest in securities at BODIVA is AKZ 1,000.00, as shown in table III.

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