Company Ticker: «name»

Ticker: «ticker» Recommendation: «recommendation»

Country: «country» Target Price:

Industry: «industry» Analyst Target:

Short Ratio: «short\_ratio» Up(Down) (%): «up\_down\_var»

ESG Score:«esg\_score» Number of Analysts:

Market Cap: «price» Div. Yield: «div\_rate»

# 1. Description

«description»

## 2. Fundamental Key Ratios

A primeira secção ilustra os dados fundamentais (Tabela 1) e valorização (Tabela 2) da empresa comparativamente ao *peer* de indústria. Na tabela 1 verifica-se (…). Na tabela 2

|  |  |  |
| --- | --- | --- |
|  |  | **Industry** |
| Gross Margin |  |  |
| Operating Margin |  |  |
| NI Margin |  |  |
| ROA |  |  |
| ROE |  |  |
| D/E |  |  |
| Coverage Ratio |  |  |
| Coverate Ratio Prime |  |  |
| Div Rate |  |  |

# 3. Valuation Key Ratios

|  |  |  |
| --- | --- | --- |
|  | «ticker» | **Industry(Peer)** |
| P/E | «pe\_company» |  |
| P/Forward (E) |  |  |
| PEG Ratio |  |  |
| P/CFO | «price\_to\_cfo» |  |
| P/FCF |  |  |
| P/B | «pb\_company» | «pb\_industry» |
| P/Sales | «price\_to\_sales» | «p\_to\_sales\_industry» |
| Cash/Assets |  |  |
| EV/EBITDA | «ev\_to\_ebitda\_company» | «ev\_to\_ebitda\_industry» |

# 4. Performance Operativa

## G.O.I. Margins

[gross\_ope\_ni\_margin]

## CFO Margins

[cfo\_margin]

## ROA e ROE

[roa\_roe]

## Coverage Ratios

[coverage\_ratio]

# 5. Modelos de Valorização (Resultados)

## Cash Flow Models

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Method Valuation/Cost of Cap. | Market 3 Moment | Carhart 4 Factor | Industry F&F | **Mean** |
| Perpetuity FCF | «dcf\_fcf\_3\_moment» | «dcf\_fcf\_carhart» | «dcf\_fcf\_industry» | «mean\_dcf\_fcf» |
| Perpetuity FCFE | «dcf\_fcfe\_3\_moment» | «dcf\_fcfe\_carhart» | «dcf\_fcfe\_industry» | «mean\_dcf\_fcfe» |
| Perpetuity DDM | «ddm\_3\_moment» | «ddm\_carhart» | «ddm\_industry» | «mean\_ddm» |
| **Final Mean** | | | | «dcf\_final\_mean» |

## Peer Valuation

|  |  |  |
| --- | --- | --- |
| Method Peer Valuation | Valuation Peer | Ind. Growth Rate (from: PEG) |
| P/S | «value\_ps» | «ind\_g\_peg» |
| P/B | «value\_pb» |
| P/E | «value\_pe» |
| P/CFO | «value\_cfo» |
| P/FCF | «value\_fcf» |
| Mean | «mean\_peer» |

## Monte Carlo Simulations

* 1. Monte Carlo DDM 3 Moment
  2. Monte Carlo DDM Carhart
  3. Monte Carlo DDM Industry F&F

# 6. Prémios de Risco

## Resultados CAPM 3 Moment

|  |  |
| --- | --- |
| **Último Beta (1Y)** | «last\_beta\_market» |
| **Média Beta (1Y)** | «mean\_beta\_market» |
| **Desvio Padrão Beta (1Y)** | «std\_beta\_market» |
| **Risco Coskewness (1Y)** | «beta\_cosk\_market\_2» |
| **Risco Coskewnewss (\*) (1Y)** |  |
| **Último R2** | «last\_r2» |
| **Último Total Beta** | «last\_total\_beta» |

[beta\_r2\_graph\_1]

[p\_values\_graph\_1]

## Resultados Carhart Model (4 Factor Model)

|  |  |  |
| --- | --- | --- |
| **Factor** | **Beta** | **p-value** |
| **Market** | «mkt\_beta» | |
| **Size Factor** | «sml\_carhart» | «sml\_pvalues» |
| **Value Factor** | «hml\_carhart» | «hml\_pvalues» |
| **Momentum Factor** | «momentum\_carhart» | «momentum\_pvalues» |
| **R2** | «r2\_carhart» | |

[beta\_4\_factor]

[p\_values\_graph\_2]

## Resultados Regressão Quantil.

[qr\_regression\_graph]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Quantil | Alpha | Beta Market | Lower Bound | Upper Bound |
|  |  |  |  |  |

## Models Assumption

## Model (A)

* Assumes a cost of equity of calculated using CAPM.
* Assumes cost of capital of calculated using WACC.
* Retrieves the FCF from Yahoo Finance API.

### A1.

* Assumes a perpetual growth rate of 2%.

### A2.

* Assumes implied growth rate derived from PEG for 1 year
* Assumes a perpetual growth rate of 2%.

### A3.

* Assume average growth rate on revenue for the last 3 years for the following 5 years .
* Assumes a perpetual growth rate of 2%.

## Model (B)

* Assumes a cost of equity of calculated using CAPM.
* Assumes cost of capital of calculated using WACC.
* Retrieves the FCF from Yahoo Finance API.

### B1.

* Assumes a perpetual growth rate of 2%.

### B2.

* H-Model is used, where H = 5 years.
* Short term growth rate derived from Sustainable Growth rate (SGR) of the company.
* Long term rate converges to industry SGR.

## Monte Carlo Simulation

* Retrieves data from Alpha Vantage API.
* Randomly generate inputs assuming a normal distribution for each input
  + 1000 Iterations
  + Sensitivity inputs:
    - Revenue growth rate
    - EBIT Margin
    - Working Capital to Revenue ratio
    - CAPEX to Revenue ratio