

iscte

INSTITUTO
UNIVERSITÁRIO
DE LISBOA

Equity Research: Cofina SGPS SA

Maria Teresa Abegoaria Moreira de Araújo

Master in Management

Supervisor

PhD, João Francisco Baptista Colaço Sobral do Rosário, Assistant Professor
Iscte – Instituto Universitário de Lisboa

May, 2024



Department of Marketing, Operations and General Management

Equity Research: Cofina SGPS SA

Maria Teresa Abegoaria Moreira de Araújo

Master in Management

Supervisor

PhD, João Francisco Baptista Colaço Sobral do Rosário, Assistant Professor
Iscte – Instituto Universitário de Lisboa

May, 2024

Acknowledgements

Firstly, I would like to thank my supervisor, Professor João Francisco do Rosário for his tireless guidance throughout my dissertation and for being a fundamental intervenient for me to complete an extremely important step in my academic career. I would also like to thank my family and friends for the endless support.

Resumo

Esta dissertação foi realizada com o propósito de avaliar a empresa Cofina SGPS S.A. de maneira a perceber se as ações desta mesma empresa estão sobre ou subvalorizadas.

Para o fazermos, utilizámos dois métodos de avaliação, o Discounted Cash Flow Method e o método dos Múltiplos. Segundo o primeiro método de avaliação, o preço alcançado para cada ação foi de 0.941 € e 0.741 € segundo as abordagens de free cash flow to firm e free cash flow to equity, respetivamente. No que diz respeito ao segundo método de avaliação foram utilizados três múltiplos, o PER, EV/EBITDA e EV/Sales. É importante salientar que neste último múltiplo foi feita uma bipartição tendo em conta que um dos cálculos foi realizada com as vendas totais e outro com as receitas totais, resultando assim em dois múltiplos. De acordo com este método, obtivemos o valor para cada ação de 1.297 €, 0.856 €, 0.454 € e 1.559€, respetivamente.

Para concluir, com base em todos os valores anteriormente apresentados, tomámos a decisão de recomendar a compra de ações da Cofina SGPS baseada na expectativa destas valorizarem no futuro.

Palavras-chave: Cofina SGPS, Industria dos Media, *Discounted Cash Flow*, *Dividends Discounted Model*, Múltiplos.

Classificação JEL: C53: Forecasting and Prediction; Simulation Methods; D53: Financial Markets; G17: Financial Forecasting and Simulation; G32: Financing Policy; Financial Risk and Risk Management; Capital and Ownership Structure; Value of Firms; Goodwill; L25: Firm Performance: Size, Diversification and Scope; L82: Entertainment; Media

Abstract

This dissertation was conducted with the purpose of valuating the company Cofina SGPS S.A. in order to understand whether these shares are being under or overvalued by the market.

To do so, we made use of two valuation methods, the Discounted Cash Flow Method and the Multiples Method or Relative Valuation. According to the first method used, we reached a share price of 0.941 € and 0.741 € using the free cash flow to firm and free cash flow to equity approaches, respectively. In the second valuation method, we made use of three different multiples, the PER, the EV/EBITDA and the EV/Sales, knowing that in the last multiple a distinction in the calculation process was made given that one of the ratios was calculated using total sales and another using total revenues. In this method, we reached share prices of 1.297 €, 0.856 €, 0.454 € and 1.559 €, respectively.

To conclude, and based on all that was computed previously, we made a recommendation to buy Cofina SGPS shares based on the expectancy for said shares to value themselves.

Keywords: Cofina SGPS, Media Industry, Discounted Cash Flow, Dividends Discounted Model, Multiples.

JEL Classifications: **C53:** Forecasting and Prediction; Simulation Methods; **D53:** Financial Markets; **G17:** Financial Forecasting and Simulation; **G32:** Financing Policy; Financial Risk and Risk Management; Capital and Ownership Structure; Value of Firms; Goodwill; **L25:** Firm Performance: Size, Diversification and Scope; **L82:** Entertainment; Media

TABLE OF CONTENTS

1. Introduction.....	1
2. Literature Review.....	3
2.1. Introduction.....	3
2.2. Discounted Cash Flow Valuation.....	3
2.2.1. The Free Cash Flow to Firm Approach.....	4
2.2.2. The Free Cash Flow to Equity Approach.....	4
2.2.3. Discount Rates.....	5
2.2.3.1. Weighted Average Cost of Capital.....	5
2.2.3.2. Cost of Equity.....	6
2.2.4. Terminal Value.....	8
2.2.5. Enterprise Value.....	9
2.2.6. Equity Value.....	9
2.3. Dividends Discounted Model.....	10
2.3.1. The Gordon Growth Model.....	10
2.3.2. The Two-stage Dividend Discount Model.....	11
2.4. Relative Valuation.....	12
2.4.1. Multiples based on Capitalization.....	12
2.4.2. Multiples based on the Company's Value.....	13
2.4.3. Growth referenced Multiples.....	13
2.5. Discounted Cash Flow vs Relative Valuation.....	13
3. Market and Company Overview.....	15
3.1. Company History.....	15
3.2. Shareholder Structure.....	15
3.3. Company Structure.....	16
3.3.1. The Press Segment.....	16
3.3.2. The Television Segment.....	18
3.3.3. Participations in outside companies.....	19
3.4. Company Performance.....	19
3.5. Media Industry Analysis.....	24
3.5.1. Print.....	25
3.5.2. Television.....	25
3.5.3. Digital Media.....	25
3.6. Consumer Trends.....	26
4. Valuation.....	29

4.1.Introduction.....	29
4.2.Discounted Cash Flow Method- FCFF Approach	29
4.2.1.The Weighted Average Cost of Capital	29
4.2.1.1.Discount rate - Cost of Equity	29
4.2.1.2.Cost of Equity Estimation.....	31
4.2.1.3.Discount rate - WACC	31
4.2.1.4.WACC Estimation	31
4.2.2.Revenues	31
4.2.3.Operational Costs	32
4.2.4.Depreciations and Amortizations	32
4.2.5.Capital Expenditures	32
4.2.6.Working Capital	33
4.2.7.Terminal Value	33
4.2.8.Equity Value	34
4.2.9.Sensitivity Analysis	34
4.3.Discounted Cash Flow Method - FCFE Approach	37
4.4.Multiples or Relative Valuation	38
4.4.1.The price to earnings ratio - PER	38
4.4.2.The Enterprise Value to EBITDA ratio – EV/EBITDA	39
4.4.3.The Enterprise Value to Sales ratio – EV/Sales	39
4.5.Valuation Results	40
4.6.Final recommendation	40
5.Conclusion	43
6.Bibliography	45
7.Annexes.....	49
Annex A: Revenue evolution form the different segments	
Annex B: Operational Cost evolution from the different segments	
Annex C: EBITDA evolution from the different segments	
Annex D: Income Statement	
Annex E: Expected growth for the media industry in Portugal	
Annex F: Projected Operational Revenues	
Annex G: Projected Operational costs	
Annex H: Projected Depreciations and Amortizations	
Annex I: Projected Capital Expenditures	
Annex J: Working Capital Computation	

Index of Figures

Table 2.1.: Multiples based on Capitalization

Table 2.2.: Multiples based on the Company's Value

Table 2.3.: Growth referenced Multiples

Table 4.1.: Depreciation and Amortization Projection

Table 4.2.: Capital Expenditures computation

Table 4.3.: Working Capital Projection

Table 4.4.: Cofina's projected values using the FCFF Approach

Table 4.5.: Ranges for the different variables

Table 4.6.: Cofina's projected values using the FCFE Approach

Table 4.7.: Peer group and respective Market Capitalization

Table 4.8.: Market Capitalization and Net Income of the peer group

Table 4.9: Enterprise Value and EBITDA of the peer group

Table 4.10.: Enterprise Value and Sales of the peer group

Table 4.11.: Summary of the different valuation methods

Index of Figures

Figure 3.1.: Cofina's Shareholder Structure

Figure 3.2.: Performance of the Press Segment

Figure 3.3.: Performance of the Television Segment

Figure 3.4.: Cofina's Operational Activity

Figure 3.5.: Performance of Correio da Manhã Newspaper

Figure 3.6.: Performance of TV Guia Magazine

Figure 3.7.: Performance of Correio da Manhã Television

Figure 4.1.: Sensitivity Analysis

Figure 4.2.: Frequency Chart

List of Abbreviations

CAPEX - Capital Expenditures

CAPM – Capital Asset Pricing Model

CRP – Country Risk Premium

D - Debt

DCF – Discounted Cash Flow

DPS – Dividends per Share

D&A – Depreciations and Amortizations

E - Equity

EBITDA – Earnings before Interests, Taxes, Depreciations and Amortizations

EBIT – Earnings Before Interests and Taxes

EBT – Earnings before Taxes

EQV – Equity Value

E (R_m) – Equity Market Return

EV – Enterprise Value

FCF - Free Cash Flow

FCFE – Free Cash Flow to Firm

FCFF – Free Cash Flow to Equity

g – Growth Rate

GDP – Gross Domestic Product

NOPLAT - Net Operating Profit Less Adjusted Taxes

NPV - Net Present Value

NWC - Net Working Capital

OECD – Organisation for Economic Co-Operation and Development

PER – Price to Earnings Ratio

PP&E – Property, Plant and Equipment

R_d – Cost of Debt

R_e – Cost of Equity

R_f – Risk free rate

ROIC – Return on Invested Capital

t - Tax Rate

TV – Terminal Value

WACC – Weighted Average Cost of Capital

β - Beta

1.Introduction

Cofina SGPS S.A. is a well-known Portuguese company which acts in the media sector, owner of numerous newspaper such as market leader “Correio da Manhã”, multiple magazines and a television channel, “Correio da Manhã TV”.

Cofina SGPS S.A. is listed on the Euronext Lisbon stock exchange and, as of 31/12/2022, their shares were trading at 0.243€ a share.

This dissertation begins with the literature review, where the different valuation methods are detailed alongside with their theoretical background and correspondent variables. The valuation methods described in the literature review are the Discounted Cash Flow approach, the Dividends Discounted Model, and the Multiples valuation method.

The following chapter relates to the overview of the company as well as the industry. Inside this chapter, we detailed a brief company history, followed by the firm’s shareholder structure. Afterwards, we explained the company structure and how it is divided taking into account the segments in which it acts. In addition, an analysis of the company performance was conducted in order to understand how the different indicators performed, as well as the different media products. Finally, we conducted of study not only to better understand the industry in which Cofina acts but also the future trends predicted for said industry.

The last chapter refers to the valuation itself. There were two methods applied in order to conduct the valuation process, the discounted cash flow method and the relative valuation. Inside the first method, the two approaches were put into practice, the FCFE (free cash flow to firm) and the FCFE (free cash flow to equity), discounted at the WACC and cost of equity, respectively. Regarding the second method, the relative valuation, three multiples were used, the Price to Earnings ratio (PER), the Enterprise Value to EBITDA ratio (EV/EBITDA) and the Enterprise Value to Sales ratio (EV/Sales). In addition, we conducted a sensitivity analysis using the Monte Carlo simulations to understand how the final share price can vary. This method aims to determine how certain inputs affect chosen variable. To do so, ranges are set for the different inputs in order to determine how the final share price value varies. This way, we are able to measure the impact of each of the inputs of the final share price.

Lastly, based on a comparison between all the share prices obtained through the different valuation methods, a recommendation was made to buy Cofina shares.

2. Literature Review

2.1. Introduction

The Valuation process is seen by most, at the core of finance. In corporate finance, we think about the best ways to modify a company's financing, investment, and dividend policies in order to maximize its value. When it comes to portfolio management, we invest resources in locating companies that trade below their true value in the hopes of making money when prices eventually converge on that value. With this in mind, it is fundamental to understand what determines the true value of an asset or a company and how we can measure that exact value (Damodaran, 2006).

To answer the question on how to evaluate and measure the value of companies and assets, there are numerous methods used namely the Discounted Cash Flow method, the Dividends Discounted model, the Multiples or Relative Valuation, the Economic Value Added and the Adjusted Present Value. Throughout this stage of my dissertation, I will focus on the first three valuation methods mentioned.

2.2. Discounted Cash Flow Valuation

In this form of valuation, we reach the value of a certain asset by discounting the expected cash flow generated by that same asset at a rate which reflects its riskiness. It is important to take into consideration the expected lifetime of the asset in question, the expected growth associated with the expected cash flows, and again, the level of risk associated with such asset. The complexity of this method also comes from the need to estimate the cashflows from future investments as well as measure current ones.

This method starts by predicting future cashflows while computing an appropriate discount rate. Afterwards, the terminal value is identified and lastly, the sum of the net present values is determined and added to the terminal value.

$$Company\ Value = \sum_{t=0}^n \frac{FCF_t}{(1+r)^t} + Terminal\ Value$$

Equation 1

The Discounted Cash Flow Method has two approaches in order to compute the free cash flows. The first one is the free cash flow to the firm (FCFF) and the second is the free cash flow to equity (FCFE). By using the first approach as the basis for the valuation, it will lead

to the enterprise value of the company whereas by using the second approach, the equity value is attained.

2.2.1. The Free Cash Flow to Firm Approach

The free cash flow to the firm (FCFF) is an approach that represents the cash flow available to equity and debt holders.

To compute the FCFF, we take the Earnings Before Interest and Taxes and deduct taxes in order to obtain the Net Operating Profit less Adjusted Taxes (NOPLAT):

$$NOPLAT = EBIT * (1 - t)$$

Equation 2

Where “t” represents the appropriate company tax rate.

The increase in non-cash working capital and the gap between capital expenditures and depreciation show the investments made by the company to spur future growth.

After this, all cost that do not constitute cash flows are added back, such as depreciations and amortizations. The capital expenditure (Capex) is also deducted as it constitutes an outflow that is not present in the income statement. Lastly, the increase in net working capital (NWC) is also deducted given it doesn't represent an actual cash flow. All of this translates into the following equation:

$$FCFF = NOPLAT + D\&A - Capex - \Delta Working Capital$$

Equation 3

2.2.2. The Free Cash Flow to Equity Approach

The free cash flow to equity (FCFE) is the approach in which the company's valuation is based solely on its equity, meaning it takes into account all cash flow that remains after meeting all debt and tax related expenses (Damodaran, 2015). The FCFE is obtained by the following equation:

$$FCFE = Net Income + Depreciation - CAPEX net of Disposals \\ - \Delta Working Capital + \Delta Debt$$

Equation 4

2.2.3. Discount Rates

As it was explained before, the Discounted Cash Flow Method is divided into two different methodologies, the FCFF and the FCFE. Given that both methods establish their valuation on the equity and the firm as a whole, it only makes sense to have distinct discount rates as they represent different levels of risk.

In the first method, the FCFF, the valuation is based upon the equity and the debt of the firm, which will result in a lower discount rate as equity holders are subject to a higher risk than debt holders. The discount rate used in this method is translated into the **Weighted Average Cost of Capital** (WACC). Regarding the FCFE, the valuation must be subject to a higher discount rate given that there is no debt to “dilute” the risk. This risk is translated into the cost of equity, **Re**.

2.2.3.1. Weighted Average Cost of Capital

As mentioned before, the discount rates used in this valuation method play an extremely important role in reaching a fair result for the firm’s value. The Weighted Average Cost of Capital (WACC) takes into account both equity and debt and consequently, seen as important input factor. The formula is as follows:

$$WACC = \frac{Equity}{Debt + Equity} * r_e + \frac{Debt}{Debt + Equity} * r_d * (1 - t)$$

Equation 5

Where:

r_e = cost of equity

r_d = cost of debt

t = appropriate tax rate

2.2.3.1.1. Cost of Debt

The cost of debt is essentially, the interest rate applicable to the firm’s outstanding debt. The most influential element to the cost of debt is the company’s credit rating. For example, a company with a Moody’s Aaa rating is likely to be subject to a lower interest rate than a company with a B rating.

The first proposition with taxes by Modigliani and Miller asserts that companies with greater debt in their capital structure are more valuable or have a higher market value than companies without debt because interest is excluded from taxation. However, this proposition might not

always apply since the increase in debt also increases the firm's financial risk, resulting in investor demanding a higher return.

2.2.3.2. Cost of Equity

The cost of equity or the return on equity translates the rate of return that a business must offer investors in order to persuade them to buy or hold the company's stock. Companies with erratic cash flows and volatile earnings have higher discount rates than more stable companies. This is because investors demand higher returns to offset the greater likelihood that the volatile company's results will worsen in the future. Consequently, organizations that successfully reduce business risk see a decrease in discount rates and an increase in valuations. (Havnaer, 2013).

2.2.3.2.1. Capital Asset Pricing Model

The return on equity is achieved with the *capital asset pricing model* (CAPM), a model that is able to quantify risk in order to translate it into an expected return. This Model is based on the assumptions of no transaction costs or private information (Damodaran, 1999). The CAPM model translates into the following formula:

$$R = Rf + \beta * (E(Rm) - Rf) + CRP$$

Equation 6

2.2.3.2.1.1. Risk free rate

A risk-free rate translates the return of an asset considered to be risk free. For an asset to be risk free, it means that the expected returns for said asset must be equal to the actual returns. For this to take place, there are two conditions that must be met. Firstly, there can be no default risk, meaning that risk free assets cannot be issued by private entities as, even the safest firms present some default risk. With this in mind, only securities issued by governments are able to translate a risk-free investment. Secondly, there cannot be reinvestment risk, meaning investors must be able to reinvest at a comparable rate as the current expected return. To conclude, according to Damodaran, the reference for the risk-free rate is a 10-year treasury bond rate¹ for countries that are default free, that is, countries with a high rating according to the different rating agencies (Damodaran, 2008).

¹ According to this author, the reference for the risk free rate is a long-term bond, despite there being some divergence in opinion regarding whether the risk-free rate should translate the return of a short-term or long-term government bond, precisely due to the risk of reinvestment risk that exists on long term paying bonds and not on short term zero coupon bonds. For a further comprehension of this topic, research "Estimating Risk free rates" by Aswath Damodaran, where he discusses the process of selection of risk free rates.

2.2.3.2.1.2. Beta

The Beta refers to the systematic risk and translates how the company return reacts to the market return (Kivedal & Borgersen, 2018). It is able to measure the risk added on by a certain asset to a diversified portfolio (Damodaran, 1999). This indicator comes from a linear regression that relates the excess return of the stock (dependent variable) and the excess market return (independent variable) over a reasonable period of time. The slope from these two variables constitutes the β (Steiger, 2008). If $\beta > 1$, it means the share is exaggerating the market's movements, but if the $\beta < 1$, it means the share is more stable (Dimitriou, 2012).

It is important to take into consideration that β estimates can vary from valuation to valuation due to factors such as the choice of the market index, the time period and the choice of the return interval (Damodaran, 1999)

2.2.3.2.1.3. Market Risk Premium

The capital asset pricing model defines the market risk premium as the difference between the expected market return and the risk free rate. The expected market translates the hypothetical return of a portfolio made up of every kind of asset accessible on the market. The market risk premium is the incremental return demanded by investors on stocks, above that of risk free investments (Fernández, 2004).

The conventional approach to measure the risk premium is to use historical returns on equity and government securities, however, according to Damodaran, there are many weaknesses related with this technique. The alternative approach, according to the author, consists of estimating the equity premium implied by equity prices.

According to Damodaran, there are two approaches to measure the market risk. Firstly, the *historical premium* approach, where over an extended period of time, the real returns on equities are assessed and contrasted with the real returns on a default-free investment (often a government security). The historical risk premium is calculated as the difference between the two returns on an annual basis.

The second approach is *implied equity premiums*. Although this approach does not imply the need of corrections for country risk or the need for historical data, it does presume that the market is correctly priced (Damodaran, 2019). This strategy has the benefit of being up to date, market-driven, and not requiring any historical data. As a result, it can be used to estimate implied equity premiums in any market. Its application is, however, limited by the

suitability of the valuation model that was employed as well as the accessibility and consistency of the model's inputs.

Alongside with the β estimate, the risk premium is also shaped by external factors such as the time period used, the choice of risk-free security and how the average return of stocks are computed, whether through the use of arithmetic or geometric averages (Damodaran, 1999).

2.2.3.2.1.4. Country Risk Premium

The Country Risk Premium represents the “excess political, economic, and financial risk relative to what is found in an integrated market” (Girard, 2018). While some argue that country risk is diversifiable and for that, there should be no country risk premium, other argue that country’s markets are correlated and consequently “country risk seems to be systematic and non-diversifiable even in a global portfolio” (Damodaran, 2019).

The easiest way to measure country risk is to find the rating assign to that country’s debt according to ratings agencies such as Moody’s and Standard and Poor’s. These ratings are able to measure default risk but are still influenced by certain factors such as stability of a country’s currency, political stability and more (Damodaran, 2019). While the default spread is an important step, it is only able to measure the premium for default risk. The following expression is able to compute the Country risk premium from the country’s default spread:

$$\text{Country Equity Risk Premium} = \text{Country Default Spread} * \left(\frac{\sigma_{\text{Equity}}}{\sigma_{\text{Country Bond}}} \right)$$

Equation 7

2.2.4. Terminal Value

The Terminal value is the net present value (NPV) of all future cash flows that are expected to occur after the time period covered by the scenario analysis. Because it is extremely difficult to predict exact numbers that indicate how a business will develop over an extended period of time, average growth expectations—which are simpler to predict—are the foundation for the terminal value.

In order to compute the Terminal Value, one must assume a constant growth, meaning we must assume that the company will maintain a steady growth rate. It is important to take into consideration that this growth rate must not surpass the expected growth rate of the industry

as well as the country(ies) in which it acts. With this being said, the formula for the terminal value consists of a perpetuity assuming a constant growth rate and with the WACC as the discount rate (Steiger, 2008).

$$Terminal\ Value = \frac{FCFF_{n+1}}{WACC - g}$$

Equation 8

The growth rate can be computed using the following formula:

$$g = ROIC * (1 - Payout\ Ratio)$$

Equation 9

2.2.5. Enterprise Value

The Enterprise Value translates the total value of the business. It is computed by discounting the FCFF by the WACC, that is, it reflects the expected operational cash flows for the firm.

The formula is as follows:

$$EV = \sum_{t=1}^n \frac{FCFF_t}{(1 + WACC)^t} + \frac{Terminal\ Value_n}{(1 + WACC)^n}$$

Equation 10

2.2.6. Equity Value

The final step of the valuation process is to determine what remains for the shareholders. In order to compute said value, one must extract all expenses related to debt while adding non-operating assets, that is, assets that are not considered part of the firm's core business. With this in mind, the formula for the Equity Value is the following:

$$EQV = EV - Debt + Non\ operating\ assets$$

Equation 11

Under the FCFE approach, the firm's Equity Value is given by the formula showed below:

$$EQV = \sum_{t=1}^n \frac{FCFE_t}{(1 + Re)^t} + \frac{Terminal\ Value_n}{(1 + Re)^n} + Non\ operating\ assets$$

Equation 12

Lastly, for both approaches, the price of each share is obtained by dividing the Equity Value by the number of total outstanding shares:

$$Price\ per\ Share = \frac{Equity\ Value}{Number\ of\ outstanding\ shares}$$

Equation 13

2.3. Dividends Discounted Model

Associated with purchasing a stock, investors normally expect to receive in return two sorts of cash flows. Firstly, the dividends resultant from good performance of the company in question and the expected price at the end of the holding period.

Keeping in mind that the price for which the stock will be sold at the end is directly influenced by the dividends the stock distributed throughout time, the value of the share is translated into the present value of the dividends through infinity, discounted at an appropriate rate given the risk of the investment.

$$Share\ Value = \sum_{t=1}^{t=\infty} \frac{E(DPS)_t}{(1 + r_e)^t}$$

Equation 14

Where:

- $E(DPS)_t$ = Expected Dividends per share
- r_e = Cost of equity

As mentioned before, this model is dependent upon the expected dividends and the rate of return. To obtain the future dividends, certain assumptions must be made related to growth rates of earnings as well as payout ratios. The rate of return, on the other hand, is computed with the CAPM model.

Based on the assumptions regarding future growth, different models inside this valuation method have surfaced.

2.3.1. The Gordon Growth Model

This model is used to valuate firms that are growing at a steady pace, with its dividends growing at rate that can be sustained infinitely.

The equation of the model relates the dividends that are expected in the next period, the cost of equity and the expected growth rate.

$$\text{Value of a Stock} = \frac{DPS_1}{r_e - g}$$

Equation 15

Where:

DPS_1 = Expected Dividends in the next period

r_e = cost of equity

g = growth rate of dividends

The growth rate, given it is expected to last forever and remain constant, implies that the other measures of performance must follow the same growth rate otherwise, with dividends growing at a higher rate than equity, at a certain time, dividends will exceed equity. Secondly, the growth rate cannot surpass the growth rate of the economy in which the company operates.

2.3.2. The Two-stage Dividend Discount Model

This model is applied to firms that present two stages of growth. Firstly, a stage of unstable growth and a later stage of stable growth that is expected to remain for a long time. Commonly, the growth rate presented in the initial phase is higher than the one in the second phase. However, this model can also be applied to companies that expect a negative growth in the first phase followed by a positive and steady growth in the second phase.

Value of a Stock = PV of Dividends during extraordinary phase + PV of terminal price

$$P_0 = \sum_{t=1}^{t=n} \frac{DPS_t}{(1 + r_{e,hg})^t} + \frac{P_n}{(1 + r_{e,hg})^n} \text{ where } P_n = \frac{DPS_{n+1}}{(r_{e,st} - g_n)}$$

Equation 16

Where:

DPS_t = Expected dividends per share in year t

r_e = cost of equity

P_n = Price (terminal value) at the end of year n

g = Extraordinary growth rate for the first n years

g_n = steady state growth rate forever after year n

2.4. Relative Valuation

“A multiple is simply the ration of a market price variable (e.g. stock price) to a particular value driver (e.g. earnings) of a firm” (Milicevic, 2009).

The Multiples valuation method is based upon the idea of valuating assets in a comparable manner as similar assets in the market. Based on how the market valuates certain companies, with the use of multiples, analytics can easily reach an estimation for a firm’s equity value.

This valuation method begins with the election of relevant measures and drivers followed by the selection of comparable firms that act in the same industry and with a similar structure. Then, analysts focus on estimating synthetic peer group multiples in order to aggregate these multiples into single figures. Lastly, the appropriate value driver of the firm being valued must be applied to the synthetic peer group multiples in order to ascertain the target firm's worth (Milicevic, 2009).

As part of this method, there are two fundamental components. Firstly, assets must be expressed in a relative way, as opposed to a nominal way. For example, as percentage of earnings, sales, or another indicator. Secondly, as mentioned before, it is crucial to find a similar firm which is not always an easy task given that no two firms are identical. Firms who appear similar still differ in terms of risk, growing potential, etc.

This valuation method, while being extensively used by analysts, is extremely subject to an incorrect implementation of the method. The use of different value drivers and a diverse set of comparable firms leads to different estimates within the same model (Henschke and Homburg, 2009).

According to author Pablo Fernandez, multiples can be divided into three categories, multiples based on capitalization, on the company’s value and growth-referenced multiples.

2.4.1. Multiples based on Capitalization.

Table 2.1.: Multiples based on Capitalization

<u>Price to Earnings Ratio</u>	<u>Price to Cash Earnings</u>	<u>Price to Sales</u>
$PER = \frac{\text{Market Capitalization}}{\text{Total Net Income}}$	$P/CE = \frac{\text{Market Capitalization}}{\text{Net Income before Depreciation and Amortization}}$	$P/S = \frac{\text{Market Capitalization}}{\text{Sales}}$

2.4.2. Multiples based on the Company's Value.

The enterprise value is the sum of the firm's market capitalization and the financial debt. If, in case, there are preferred shares and minority interests, they must be added to the enterprise value.

Table 2.2.: Multiples based on the Company's Value

<u>EV to EBITDA</u>	<u>EV to Sales</u>	<u>EV to FCF</u>
$\frac{\text{EV/EBITDA} = \frac{\text{Enterprise Value}}{\text{Earnings before Interest, Tax, Depreciation \& Amortization}}}{}$	$\frac{\text{EV/Sales} = \frac{\text{Enterprise Value}}{\text{Sales}}}{}$	$\frac{\text{EV/FCF} = \frac{\text{Enterprise Value}}{\text{Free cash flow to firm}}}{}$

It is important to note that there are some constraints related to the use of the EBITDA given that it does not consider the changes in working capital requirements as well as capital investments.

2.4.3. Growth referenced Multiples.

Table 2.3.: Growth referenced Multiples

<u>P/EG</u>	<u>EV/EG</u>
$\text{P/EG} = \frac{\text{PER}}{\text{Growth of Earnings per share in the next few years}}$	$\text{EV/EG} = \frac{\text{Enterprise Value}}{\text{Earnings Growth}}$

This category of multiples is mainly used in growth industries such as healthy, telecommunications and luxury goods.

2.5. Discounted Cash Flow vs Relative Valuation

When comparing the two main valuation methods, there are pros and cons to using both methods. The valuation through the use of multiples is based on far less assumptions, and consequently, accomplished quicker than the discounted cash flow method. In addition, it is much easier for customers to comprehend a valuation made over multiples in comparison to a discounted cash flow, while at the same time being able to, more accurately, translate the current state of the market.

On the other hand, there are some negative aspects to using the multiples method. The fact that the valuation method is based on finding what seems to be a similar firm might result in unequal variables to be ignored such as risk, cash flow growing potential and more, resulting in inaccurate estimates. Furthermore, the fact that multiples reflect the current state of the market might result in misevaluation since often, the market over values and under values comparable firms. Lastly, the lack of transparency in respects to the assumptions made for the valuation exposes itself to a certain degree of manipulation.

3. Market and Company Overview

3.1. Company History

Cofina SGPS S.A. was founded in 1990 by Portuguese businessman Paulo Fernandes. Currently, its business activity is focused on media and content production under the wing of Cofina Media S.A..

The company's portfolio includes the daily newspaper "Correio da Manhã", daily sports related newspaper "Record", Economy related newspaper "Negócios" and free newspaper "Destak". As for magazines, Cofina Media S.A. owns "Sábado", a weekly magazine and "TV Guia", a weekly television magazine. In a digital format, Cofina Media S.A. also owns "Flash" and "Máxima". Lastly, a television channel which is distributed on all cable platforms, "Correio da Manhã TV" (CMTV). Not related with the media industry, Cofina partakes in the organization and management of events as well as the exploitation of various products on digital platforms.

Correio da Manhã newspaper continues to establish itself throughout the years as the best-selling daily newspaper in Portugal, with an average of 43 thousand printed copies sold per edition in 2022, reaching a market share of 61.3 % inside the generalist daily newspaper market as of August 2023².

3.2. Shareholder Structure

Cofina's shareholder structure is composed of five main shareholders. Firstly, Pedro Miguel Matos Borges de Oliveira, through "Valor Autêntico S.A." owns 10,277,248 shares, which translates into 10.02% of share capital. Secondly, Domingos José Vieira de Matos, dominant shareholder, and director of "Livrefluxo S.A" through which he owns 12,395,257 shares amounting to 12.09% of share capital.

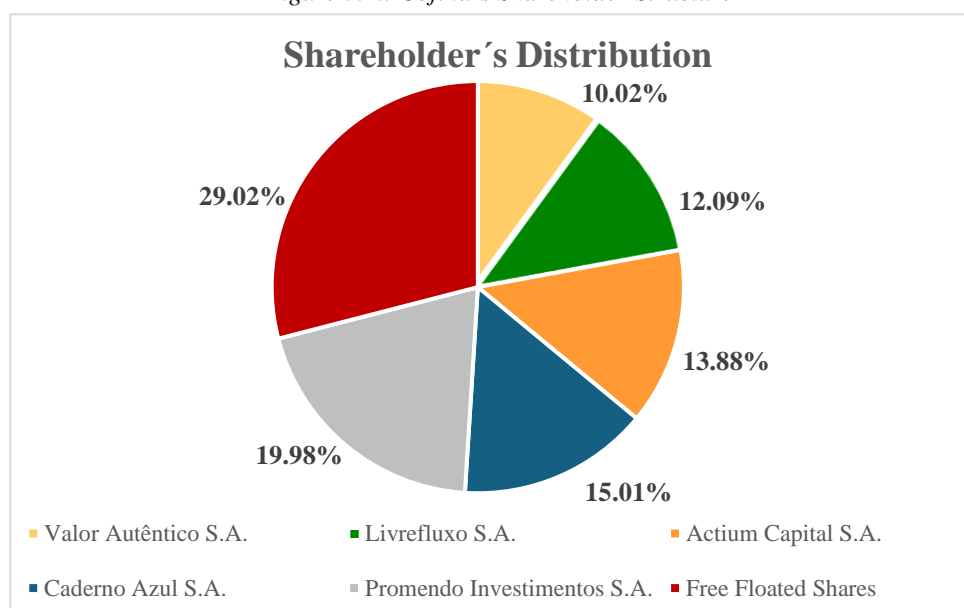
Thirdly, Paulo Jorge dos Santos Fernandes, one of Cofina Media S.A.'s founders, by intermediate of "Actium Capital S.A.", owns 14,235,474 shares corresponding to 13.88% of share capital. By means of "Caderno Azul S.A", João Manuel Matos Borges de Oliveira owns 15,400,000 shares which translates into 15.01% of share capital.

² According to the 2022 Annual Report, Correio da Manhã newspaper's market share was 55%.

Lastly, Ana Rebelo Carvalho Menéres de Mendonça, the biggest shareholder, owns 20,488,760 shares of Cofina Media S.A. through “Promendo Investimentos S.A.” which reflects 19.98% of share capital owned.

The remaining 29.02% of share capital corresponds to free-floated shares listed on the Euronext Lisbon stock exchange as well as small shareholders.

Figure 3.1.: Cofina’s Shareholder Structure



Source: 2022 Cofina SGPS Annual Report

3.3. Company Structure

As mentioned before, Cofina Media operates at the intersection of two compelling realms, the Press segment and the Television segment.

3.3.1. The Press Segment

The press segment represents the group’s core business. As mentioned before, to perform in this segment Cofina Media S.A. owns Correio da Manhã, Record, Negócios, Sábado, Destak and TV Guia.

Gradually, as we can see by Annex A, the press segment has gradually represented a smaller percentage in terms of total revenue. In 2018, the sector in question accounted for 86% of the total revenue, whereas in 2022 it accounted for 73%.

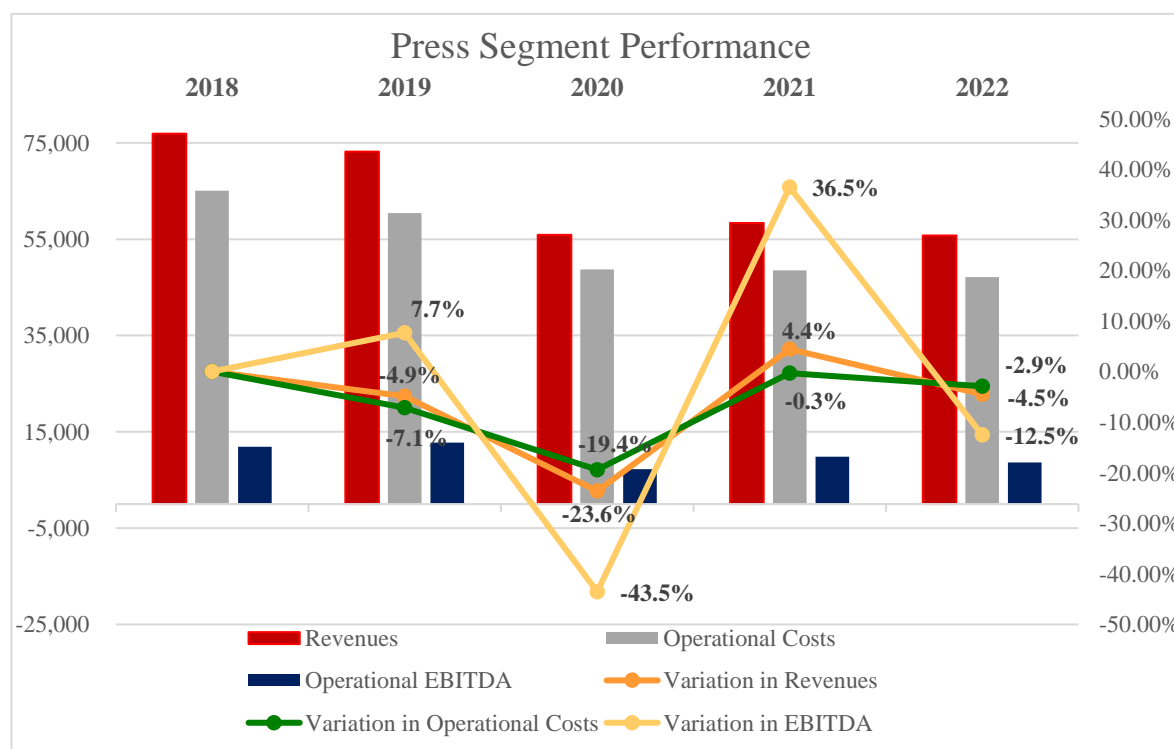
In 2022, the lowest value in terms of revenue was registered at 55,760 million euros. This value translates a 4.5% contraction in comparison to 2021, however the most significant

decrease was between 2019 and 2020, when revenues shrunk from 73,195 million euros to 55,911 million euros, translating a 23.6% loss.

In terms of operational costs, by analysing Annex B, there has been a consistent decrease since 2018 with 65,051 million euros until 2022 with 47,138 million euros, now accounting for 75% of the firm's total costs. The highest reduction in operational costs was in 2020, with a 19.4% cutback. The weight of this segment on the firm's total operational costs has been decreasing throughout the years, having started the period in analysis with an 87% impact on total costs and finishing 2022 with a 75% weight, as mentioned before.

Lastly, looking at the EBITDA presented in Annex C, we can see a somewhat inconsistent performance with a 7.7% increase in 2019, followed by a 43.5% decrease in 2020. In 2021, the group restored its positive performance with a 36.5% rise, resulting in an EBITDA of 9,854 million euros. Despite the previous positive performance, the group ended the period in analysis on a negative note with a 12.5% cutback, resulting in an EBITDA of 8,622 million euros in 2022. In terms of impact on the total EBITDA, the press segment presented quite an irregular performance as well, having started 2019 with an 80% weight, then decreasing to 76% and 60% in 2019 and 2020 respectively. Afterwards, it was able to expand back to 67%, however in 2022, it finished at a 64% magnitude.

Figure 3.2.: Performance of the Press Segment



Source: Cofina SGPS Annual Reports 2018-2022

3.3.2. The Television Segment

To partake in the television segment, as mentioned before, Cofina Media owns Correio da Manhã Television.

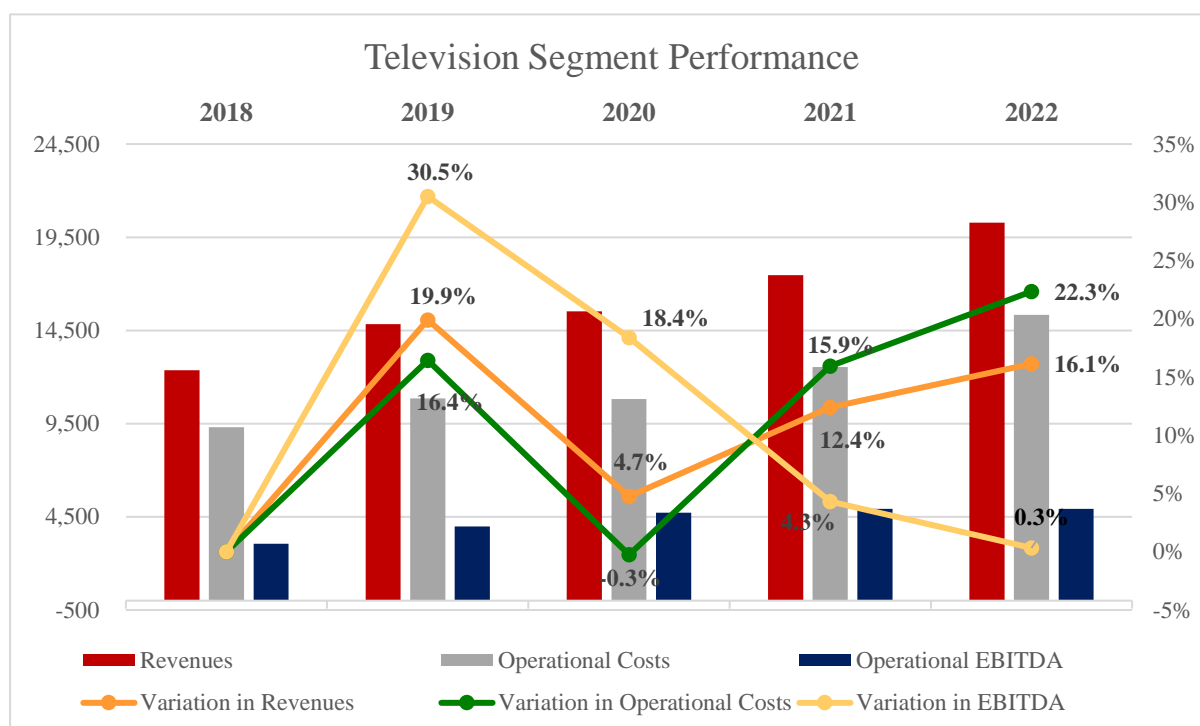
By analysing Annex A, we are able to conclude that revenues from the television segment presented an extremely positive performance throughout the years, having steady positive percentual variations throughout the years. The weight of this sector reached 27% in 2022, having started the period of analysis with a 14% importance.

The highest relative increase was registered in 2019, with a 19.9% growth, reaching revenues of 14,829 million euros. The year of 2020 presented a slowdown in relative growth, nevertheless, still translating an almost 5% improve, setting the revenues from this segment at 15,533 million euros. The following years represented a continuity in the rising tendency having increased 12.4% and 16.1% in 2021 and 2022, respectively, being able to finish the period in analysis with the highest value for revenues in the television segment at 20,277 million euros.

In terms of operational costs, as it is evident in Annex B, apart from 2020, when the segment registered a 0.3% decrease, it has been presenting a growing tendency with the highest increment taking place in 2022 at 22.3%, translating operational costs of 15,343 million euros. This outstanding increase was mainly caused by the war in Ukraine and subsequent coverage costs, as well as the increase in energy and paper prices. The weight of this segment in the firm's total operational costs has also been growing from 2018, with a 13% weight, to 2022 with a 25% weight. The lowest value for operational costs was registered in 2018 at 9,315 million euros.

Lastly, looking at Annex C, we can observe an extremely positive performance, nevertheless, with a noticeable slowdown in the rate at which the EBITDA is increasing. The period of analysis started with a 30.5% increase in 2019, however 2022 only presented a 0.3% increase despite still reflecting the highest nominal EBITDA at 4,934 million euros. In terms of impact of the total EBITDA, this segment as well as the previous one performed quite irregularly, with its weight fluctuating from 20% in 2018 and increasing until 2020 with a 40% weight, but in 2021 cutting back to 33% and finishing 2022 with a small increase, reaching 36%.

Figure 3.3.: Performance of the Television Segment



Source: Cofina SGPS Annual Reports 2018-2022

3.3.3. Participations in outside companies

Outside of the group's core business, and through its fully owned Cofina Media S.A. the Cofina Group owns Grafedisport - Impressão e Artes Gráficas, S.A., an entity dedicated to printing newspapers. On September 1st of 2022, in a general meeting, it was made the decision to dissolve and liquidate the entity in question.

Cofina Media has a 50% participation of Mercados Globais – Publicação de Conteúdos, Lda, dedicated to management services and promotion of a financial forum on the internet and on VASP – Sociedade de Transportes e Distribuições, Lda. whose core business consists in the distribution of publications.

Lastly, Cofina Media held a 40% participation of A Nossa Aposta – Jogos e Apostas Online, S.A., Entity dedicated to online gambling and betting activities. This investment was sold in 2022 resulting in a gain recognized at the amount of 2,786,307 euros.

3.4. Company Performance

In 2022, as we can see from Annex D, Cofina's revenues reached 76 million euros which represents a 0.2% increase when compared to the previous year. The lowest value registered was in 2020, when Cofina presented revenues of almost 71.5 million euros. This accentuated

decrease of 18.8% (vs 2019) is mainly caused by a 20.71% decrease in revenues from circulation, a 19.43% decrease from advertisement and a 13.7% decrease of alternative marketing products and other. This phenomenon is explained by the Covid 19 pandemic. Given that citizens were forced to stay home, going out and purchasing the newspaper was not a reality. In consequence, given that people were not purchasing newspapers, advertisers didn't see them as a good investment, all of which translated a decrease in sales.

Regarding operational costs, last year costs increased by 2.3%, reaching almost 62,5 million euros, primarily explained by the coverage of the war in Ukraine and the costs associated as well as the increase in the prices of energy such as fuel and electricity and paper. Apart from 2022, the operational presented a negative evolution throughout the period being analysed, having decreased 5.2%, 13.8% and 0.5% in 2019, 2020 and 2021 respectively. The lowest value was recorded in 2021 at 61,077 million euros while the highest value was registered in 2018 with more than 75 million euros.

The EBITDA had somewhat of an inconsistent performance. In 2019, this indicator showed a positive performance with a 18.7% increment in comparison to 2018. The following year revealed a change in the positive tendency with a 40.1% cutback, setting the EBITDA at 10.041 million euros. Again, in 2021, the firm was able to salvage its performance with a 38% expansion of the EBITDA reaching almost 14 million euros. Maintaining the irregular performance of this indicator, in 2022 the EBITDA showed a decrease of 35,4% in comparison to the previous year, finishing the period in analysis with an EBITDA of 8,951 million euros.

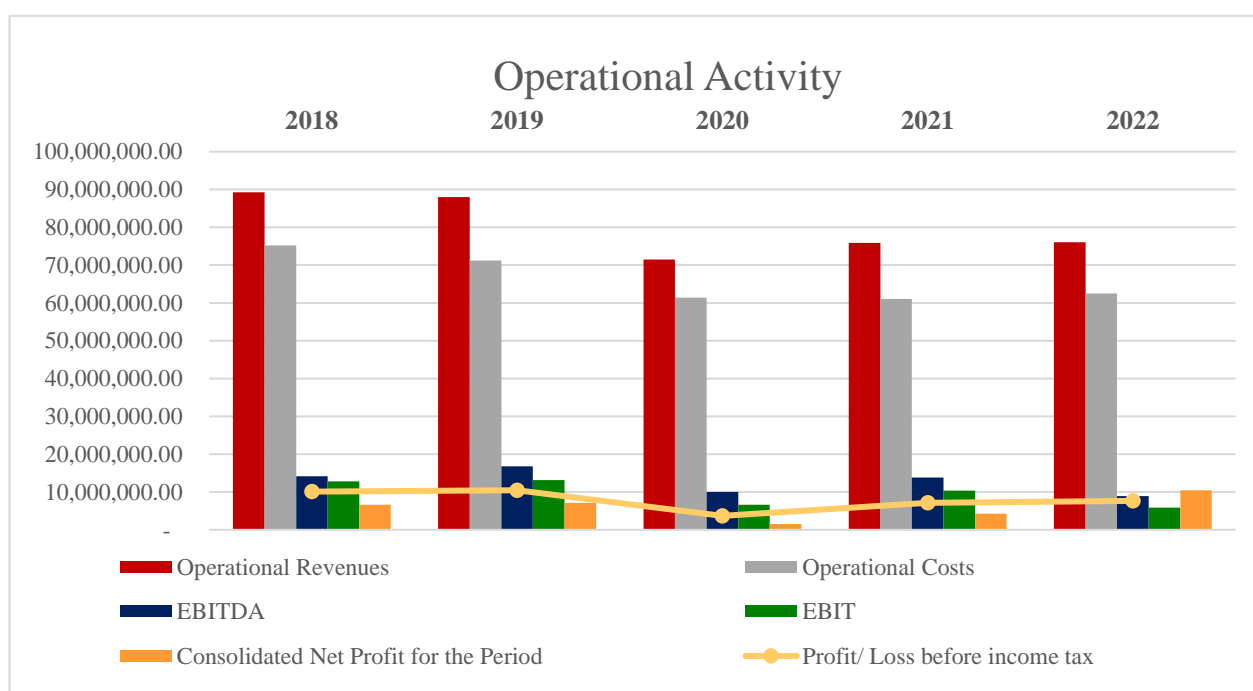
The earnings before interest and taxes (EBIT) followed the same irregular tendency as the EBITDA with inconsistent growth rates. The period in analysis started with a small growth of 2.6%, followed by an extremely significant downfall of 49.7% reaching the second lowest value of 6,627 million euros. In the next period of 2021, the firm was able to recover its positive performance with a 56.5% expansion of the earnings before interest and taxes. However, this indicator ended the analysed period on a negative note with a 43.7% contraction. The lowest nominal value was registered in 2022 with 5,836 million euros, whereas the highest value was recorded in 2019 with 13,178 million euros.

The profit before income tax, in discordancy with the two previous indicators, presented a somewhat positive performance apart from 2020. The first two years displayed a similar value with a small increase of 3.4% between 2019 and 2018. The following year, as

mentioned before, was the year with the poorer performance as it implied a 64.8% crash, resulting in a profit of 3,683 million euros. The two remaining years reclaimed the positive performance with a 94.8% and 7.0% increase in 2021 and 2022 respectively, which allowed the profit before income tax to recover back to 7,681 million euros in 2022.

The last indicator is the net profit for the period which reflected a similar behaviour as the Profit before income tax. The highest net profit of 10,451 million euros took place in 2022 due to the positive income tax as a result of favourable outcome of tax proceedings to the group. In terms of relative evolution, from 2018 to 2019 the firms registered a small yet positive variation of 7.5%. The following year was the only period with a negative fluctuation of 77.8%. In 2021 and 2022, Cofina regained its positive behaviour with a 165.9% increase in 2021 and 147.4% in 2022, translating a net profit of 4,225 million euros in 2021 and 10,451 million euros in 2022, as mentioned before. The lowest net profit was recorded in 2020 at 1,589 million euros.

Figure 3.4.: Cofina's Operational Activity



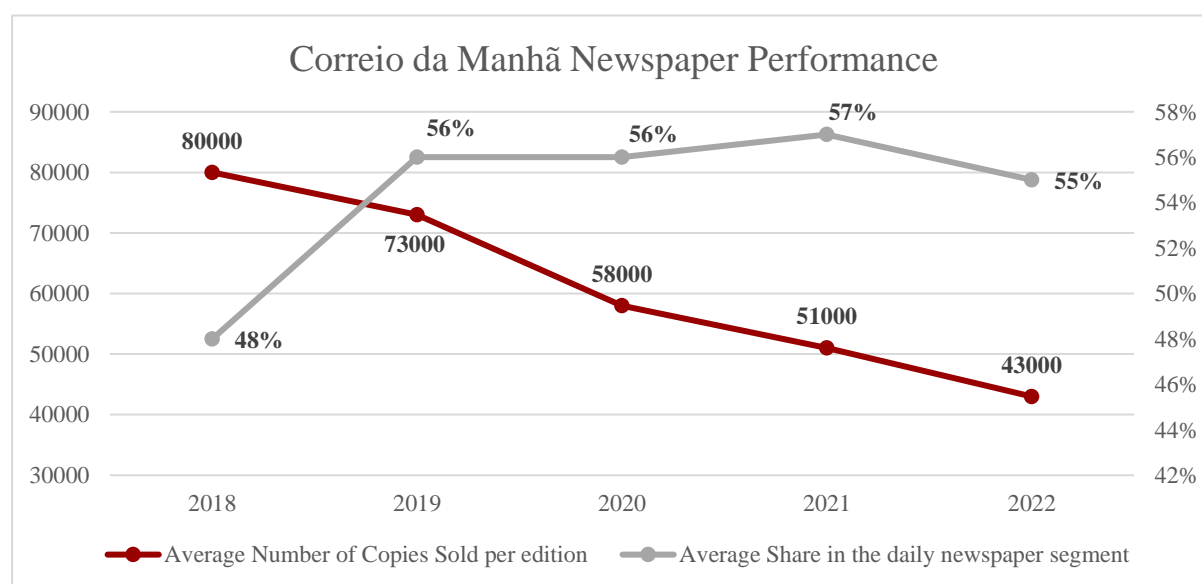
Source: Cofina SGPS Annual Reports 2018-2022

Now looking at the performance of the different media products that Cofina Media owns such as Correio da Manhã newspaper, TV Guia magazine and television channel Correio da Manhã TV.

From the graph below, we can observe a decrease in terms of average number of copies sold per edition. In 2018, Correio da Manhã newspaper was being sold at an average of 80,000 copies per edition, however it quickly presented an 8.75% retraction in 2019, followed by an even more accentuated decrease of 20.55% in 2020 setting at an average of 58,000 copies sold. The consecutive year reflected a slowdown in the descending tendency with a 12.07% cutback. The year of 2022, as mentioned before, presented an average of 43,000 copies sold per edition which express a 15.69% contraction in comparison to the preceding year.

In terms of average market share in the daily newspaper segment, the performance has been fairly consistent. In 2018, the group presented its lowest market share with a 48% weight. The following year showed an increase to 56%, chased by a stagnation in market share for 2020. In 2021, the group displayed an extremely small increase of one percent, setting at 57%. In 2022, there was a turnaround in the performance tendency, with the market share decreasing to 55%.

Figure 3.5.: Performance of Correio da Manhã Newspaper

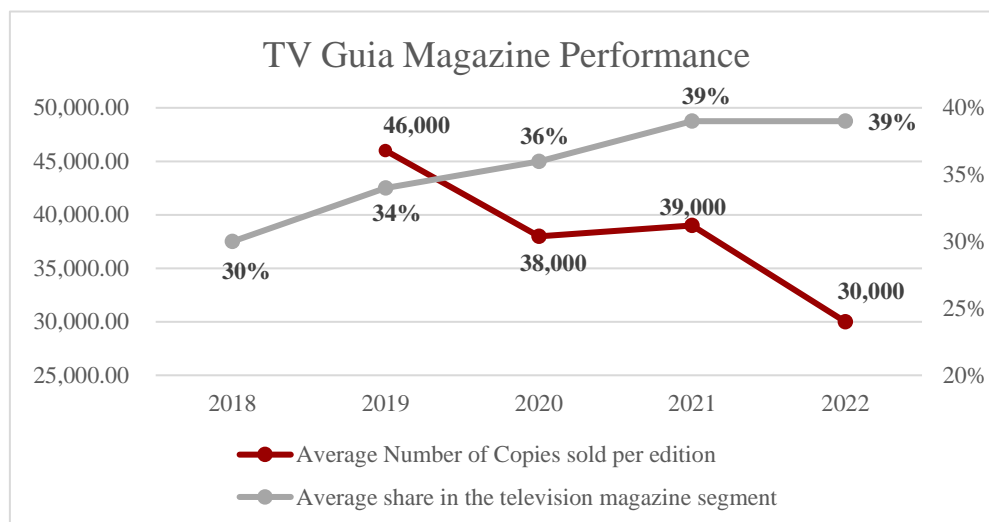


Source: Cofina SGPS Annual Reports 2018-2022

In respects to the magazine “TV Guia” which acts in the television magazine segment, we can observe an accentuated decrease from 2019 to 2020 in terms of average number of copies sold. This downfall from 46.000 copies in 2019 to 38.000 copies in 2020 reflected a 17.39% cutback. The following year of 2021 showed a slight increase of 2.63% reaching an average of 39.000 copies sold. Nevertheless, TV Guia ended 2022 on a negative note at 30.000

copies, translating a 23.08% loss. The market share, on the other hand, showed a positive performance with a continuous increase from 2018 with 30% market share, increasing to 34% in 2019 and further to 36% in 2020 until 2021 with a 39%. The year of 2022 interrupted the increasing tendency as the market share stagnated at 39%.

Figure 3.6.: Performance of TV Guia Magazine

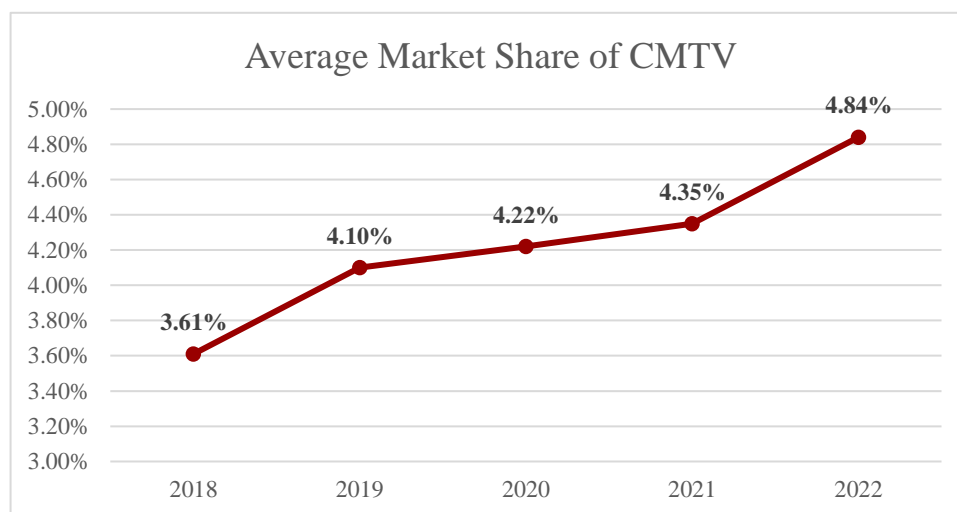


Source: Cofina SGPS Annual Reports 2018-2022

Note: There was no information regarding the average number of copies sold for the year of 2018.

In regard to Correio da Manhã TV, apart from SIC, TVI and RTP1, which are all channels part of Portuguese free-to-air television, CMTV is the fourth most watched television channel in Portugal. From the graph below, we can analyse the evolution of the channel's share throughout the years. The lowest value was registered in 2018 with a 3.61% share. The following year the television channel experienced a spur in market share, reaching a 4.10% weight. In 2020 and 2021, the market share escalated to 4.22% and 4.35% respectively. In 2022, the highest value was registered, with a share of 4.84%, maintain the status of fourth most watched Portuguese channel.

Figure 3.7.: Performance of Correio da Manhã Television



Source: Cofina SGPS Annual Reports 2018-2022

3.5. Media Industry Analysis

The media environment in Portugal is both diversified and pluralistic. The press market is dispersed among numerous, largely local and regional newspapers that often have modest circulation and reach. According to a report conducted by Entidade Reguladora para a Comunicação Social, companies with revenues that surpass the 10 million mark only account for 4% of total entities.

When analysing the most important players in the industry, it is crucial to distinguish between the companies listed on the stock market and those that aren't. There are three media groups listed in the stock market, **Grupo Impresa**, owner of the newspaper Expresso and Tv channel SIC, **Grupo Media Capital**, owner of TVI and lastly, **Cofina SGPS**. Regarding non quoted groups, there are five main competitors, **Global Notícias**, owner of Diário and Jornal de Notícias, **Renascença Group**, **Público**, **Observador** and **Trust in News**, owner of Visão, Caras and Exame. The remaining two players, RTP and Agência Lusa present particular conditions given they are public owned enterprises.

The Media consumption in Portugal is still very focused towards television and radio. In a report published by “Entidade Regulador para a Comunicação Social” in 2016, entity responsible for supervising and regulating all enterprises inside the media industry, 99% of those surveyed watch television on a regular basis, whereas 73% listen to radio regularly.

3.5.1. Print

As mentioned before, the media industry in Portugal is characterized for having many players, mostly with a regional reach.

The Portuguese Press segment has been experiencing a crisis due to a reduction in revenues from circulation and advertising. The Covid 19 pandemic intensified this phenomenon even more because people were forced to stay home, preventing them from purchasing print version of newspapers. Media companies had to reinvent themselves and turn to digital subscriptions, however this new revenue source still hasn't been able to match the loss in sales from circulation.

The weekly newspaper “Expresso” and the daily newspaper “Correio da Manhã” are the most sold newspapers in Portugal. According to the APCT (Associação Portuguesa para o Controlo de Tiragem e Circulação), Expresso has an average of 46,500 copies sold per edition, whereas Correio da Manhã presents an average of over 43,000 copies sold. It is important to note that Correio da Manhã, as mentioned before, is a daily newspaper in comparison to Expresso, a weekly newspaper.

3.5.2. Television

As mentioned before, Television is the media outlet with the highest engagement from the Portuguese population.

The Portuguese free to air television is composed of five channels. RTP 1, RTP 2, SIC, TVI and ARTV. The first two channels are public own by the Portuguese state and for that, subject to specific obligations such as limited amount of advertising broadcasted. SIC is owned by the media group “Impresa” and TVI is owned by “Media Capital”.

Outside of the free to air TV, there has been a consolidation of pay-tv and as of 2021, 94.2% of Portuguese families had access to pay-tv. (Source: Anacom)

When analysing free to air TV, SIC is the channel with the highest market share at 16.7% as of 2022, followed by TVI with a share of 15.7% and lastly RTP 1 with 10.8%. Aside from free to air channels, CMTV is the fourth most watched channel with a daily average share of 4.84%. (Source: Meios e Publicidade, January 2023)

3.5.3. Digital Media

The growing digitalisation of the world, with more and more consumers accessing content in a digital form has resulted in a need from the media companies to reinvent the way they

conduct business. Consumers are less interested in purchasing a print version of a newspaper every day or week as they want to have access to information at fast pace with small costs involved. For that, publishers have invested in providing content specifically for tablets and smartphones as mobility plays a significant role in content reception modes.

The biggest example of this is “Expresso online”, a daily version of the weekly newspaper Expresso that consumers can have access to by paying a monthly subscription or buying the weekly printed version. According to Marktest, in December 2022 the Expresso website had 2.418.632 individuals visiting their website, with the majority of these visits being made through a mobile device as opposed to a computer.

3.6. Consumer Trends

In a time of swift technological progress and changing consumer preferences, the media sector is facing an unparalleled period of change. The media landscape is undergoing radical changes as we approach the next decade, spurred by breakthroughs that have the potential to completely transform how information is produced, received, and shared.

Consumers, nowadays demand a higher quality when it comes to content. Before, media and streaming companies would offer a higher number content but with fewer quality. In the current days, these companies focus on fewer production content but with a much higher quality. Another upcoming trend is focused on offering personalized content. In order to differentiate themselves, media firms must offer personalized suggestions to their subscribers as a way to create involvement with the brand. This strategy not only increases user experience but also raises willingness to pay from current and potential buyers.

One other trend is the growing importance of sport related content. More and more, consumers are interested in new sports such as basketball and formula 1. This is mainly due to extremely viral Netflix documentaries that opened the consumers eyes to new sport modalities. The increasing number of streaming platforms and illegal websites broadcasting different sports as only made the access to this type of content easier. With this being said, television channels can benefit extremely from broadcasting these types of content given its high demand.

The Reuters Institute, in collaboration with the University of Oxford conducted a survey in order to study the current and future trends regarding the Media Industry.

Russia's invasion of Ukraine and the consequent rise of the inflation rate resulted in a drawback from spending of advertisers as well as reduction in spending from households. This led to a big wave of layoffs in the industry and well as other cutting measures.

Noticeably, companies heavily dependent on print-based revenues were more affected, however digital companies are not exempt. With this in mind, it is expected for newspapers to reduce the number of print editions as well as move away from TV and radio broadcasts.

In addition, as media companies move towards digitalisation, it is clear that in order to grow the subscription base, it must be done through special price offers or bundling promotions with other brands, for example. This, however, might not be enough. In onerous times, it is expected that media publications focus more towards the quality of their journalism.

A further trend is a growing need for revenue diversification. Although sales from subscriptions remain the highest revenue stream followed by advertisement, many publishers agree that expanding the revenue streams and not relying heavily on only one source is fundamental for the longevity of the company. New streams can go from donations to funding.

One other trend consists of the increase of "news avoidance". This concept translates the act of purposely avoiding certain publications. According to the report, citizens often do this because they state that certain news can have a negative impact on their mood, or they don't feel they can do anything to change the situation in question. In order to overcome this phenomenon, certain journalists defend that articles should not just present problems but rather solutions. In addition, publishers intend to create sections of "positive news" as a way to allow consumers to take a step back break from negative stories when they feel like it.

Furthermore, there is a change in format of how news is delivered. The increase in quality of data usage and the rise of 5G as enabled the use of visual journalism like videos and other formats such as podcasts. This way, publishers can develop one-of-a-kind content which allows for them to build a deeper connection with the audience they are trying to reach.

Lastly, the use of Artificial Intelligence. This new tool not only accelerates some processes that before had to be done by a human being, but it can also help diversify content whether it be through pictures, videos or even written articles. In addition, this form of technology is able to offer immersive experiences that engage audiences in an enthralling manner.

4.Valuation

4.1. Introduction

The basis for the valuation process are the consolidated financial statements present in the annual reports with the year of 2022 as the last year for reference, meaning all values related to the years that follow constitute projections conducted based on performance indicators of the firm itself but also the industry in which it acts.

As mentioned before, Cofina acts solely in the Portuguese market, meaning all the values presented are in euros (€). There was only a need to consider currency exchange rates regarding the multiples valuation method.

The valuation itself will be conducted using two valuation methods: the Discounted Cash Flow Approach and the Multiples or Relative Valuation. The first method is divided into two approaches, the free cash flow to firm and the free cash flow to equity. The relative valuation was conducted with the aid of some of the most used multiples such as the price to earnings ratio (PER), the enterprise value to EBITDA ratio (EV/EBITDA) as well as the enterprise value to sales ratio (EV/Sales). In the literature review, we disclosed another valuation method, the dividends discount model, however it will not be put into practice as Cofina only distributed dividends in 2022.

4.2. Discounted Cash Flow Method- FCFF Approach

4.2.1. The Weighted Average Cost of Capital

As previously mentioned, the Discounted Cash Flow Method approach is divided into two perspectives, one based on the firm as a whole and one based solely on equity. Given that the foundation for both approaches varies, one must use different rates to discount the cash flows. As the first approach is based on the firm, the WACC must be used as it takes into account both equity and debt and since the second approach is based solely on equity, the cost of equity is applied, which is later implemented into the WACC, according to equation 5.

4.2.1.1. Discount rate - Cost of Equity

As mentioned before in the literature review, in order to reach the value for the cost equity, one must apply the capital asset pricing model, translated in equation 6.

4.2.1.1.1. Risk Free rate & Market Risk Premium

The first step is to find the risk-free rate for Portugal in 2022. As mentioned before, the risk-free rate should translate an investment with no risk involved whereas the market risk premium translates the return requested by investors for assets that are not risk free. Author Pablo Fernández conducts a survey every year in order to reach the risk free rate as well as the market risk premium for 95 different countries.

According to the author, the Portuguese risk-free rate in 2022 was 1.6%, while the market risk premium was 6.2%.

4.2.1.1.2. Tax Rate

According to the Portuguese legislation, the flat rate for all taxable income is 21%. In addition, companies are subject to a state tax, varying according to different taxable incomes. In Cofina's case, the 2022 taxable income was 7,681,274 €, meaning it was subject to a 5% state tax. For simplification purposes, we decided to maintain this rate for future projections. Lastly, Cofina is also exposed to a local surtax of 1.5%, given it is based in the municipality of Porto.

4.2.1.1.3. Capital Structure

The value of equity is achieved by multiplying the number of shares by the closing price for the year. As of 2022, the number of outstanding shares was 102,565,836 while the closing price for 2022 was 0.243€ per share, reaching an equity value of 24,923,498 €.

In regard to debt, by assuming the book value of debt is equal to its market value, Cofina has a net debt of 25 600 000 €.

From the values shown above, we can extract a D/E ratio of 1.027, which we assume will remain constant over time.

4.2.1.1.4. Beta

According to Damodaran, the unlevered beta for the Publishing & Newspaper industry for Europe in 2022 was 0.63. In order to reach the levered beta, we must apply the following equation:

$$\text{Levered Beta} = \text{Unlevered Beta} * (1 + (1 - \text{Tax Rate}) * \frac{\text{Debt}}{\text{Equity}}))$$

Equation 16

By applying the equation 16 showed above, we reach a levered beta of 1.099.

4.2.1.2. Cost of Equity Estimation

Based on the values previously presented, the cost of equity is 8.415%.

4.2.1.3. Discount rate - WACC

4.2.1.3.1. Cost of Debt

The cost of debt translates the amount of debt the firm pays on all the loans. In order to reach a value for the cost of debt, we decided to look into the company's debt rating according to the rating agencies. Given this information is not available, we make use of a technique developed by Aswath Damodaran called synthetic risk. This technique is used when there is no information regarding a company's credit rating. It relates the Earning before Interest and Taxes (EBIT) and the interest expenses, in order to determine the Interest Coverage Ratio. Afterwards, based on the ratio previously calculated, a credit rating is assigned, and consequently, a default spread. By adding the default spread with the current long term government bond rate as well as taking into account the country risk premium, we reach the cost of debt.³

For Cofina, the cost of debt is 6.63%

4.2.1.4. WACC Estimation

Based on the values previously presented, and applying equation 5, the WACC for Cofina is 6.587%

4.2.2. Revenues

The revenues from Cofina, as mentioned before, has quite an irregular performance, mainly caused by the Covid-19 pandemic, as we can conclude by annex D. With this in mind, if we take only into account the last two years, revenues have grown 3.2% on average.

According to Statista⁴, the industry is expected to grow 7.62% in 2023, followed by a 3.15% and a 2.40% increase in 2024 and 2025, respectively. In 2026 and 2027, the industry will keep growing, although at a lower rate, with a 2.01% and a 1.85% increase respectively.

Keeping this mind, and by looking at annex F, we can expect revenues to grow 5.41% in 2023, 3.18% in 2024, 3.18% in 2025 and 2.60% and 2.53% in 2026 and 2027, respectively.

³ The cost of debt computation was conducted through the "Estimating a synthetic rating and cost of debt" spreadsheet, found in <https://pages.stern.nyu.edu/~adamodar/>

⁴ Statista Data, 2023. Retrieved from: <https://www.statista.com/outlook/amo/media/portugal>

4.2.3. Operational Costs

In terms of operational costs, in order to reach a more accurate estimation, we decided to deconstruct the different constituents, as we can see from annex G. Firstly, to compute the cost of sales, we calculated the cost to revenue ratio for the previous years and reached an average of 9.02%. Afterwards, we applied this ratio on the total revenues for the forecasted years and attained the cost of sales.

In regard to the external supplies and services as well as payroll expenses, we increased them at the rate of inflation projected by “Banco de Portugal”⁵. Lastly, for other expenses and provisions and impairment losses, we made the decision to keep them constant throughout the projected years.

4.2.4. Depreciations and Amortizations

Apart from 2018, as we can see by annex H, where depreciations and amortizations accounted for only 1.4% of revenues, this indicator has always fallen inside the 4% weight of total revenues. For this, we expect Depreciations and Amortizations to represent 4.4% of total Revenues. Keeping this in mind, the expected values are shown below.

Table 4.1.: Depreciation and Amortization Projection

	2023	2024	2025	2026	2027
Depreciations and Amortizations	3,518,005.29	3,629,739.58	3,731,390.40	3,828,588.35	3,925,274.49
% of Revenues	4.40%	4.40%	4.40%	4.40%	4.40%

4.2.5. Capital Expenditures

Capital Expenditures involves all the investment made in order to buy or upgrade assets used by the firm for a long period of time. In practice, the CapEx formula is as follows:

$$CapEx = PP\&E_n - PP\&E_{n-1} + D\&A_n$$

In the case of Cofina, Capital Expenditures expenses were mainly related to machinery and equipment as well as office equipment and building and other edifications.

As in Depreciations and Amortizations, the CapEx values were fairly consistent, weighting around 4% of Revenues, apart from 2018, where it accounted for 1.60%. For this, we expect

⁵ Banco de Portugal, Economic Projections. Retrieved from <https://www.bportugal.pt/en/page/projecoes-economicas> (02/03/2024).

Capital Expenditures to represent 3.95% of revenues. The computation for the capital expenditures is reflected as follows:

Table 4.2.: Capital Expenditures computation

	2017	2018	2019	2020	2021	2022
Property, plant and equipment	2,610,984.00	2,747,887.00	2,628,257.00	2,079,102.00	1,555,739.00	1,417,894
Depreciations and Amortizations		1,288,309.00	3,594,048.00	3,414,659.00	3,487,718.00	3,115,002
CAPEX		1,425,212.00	3,474,418.00	2,865,504.00	2,964,355.00	2,977,157
% of Revenues		1.60%	3.95%	4.01%	3.91%	3.92%

The forecasted values are expressed in annex I.

4.2.6. Working Capital

The working capital relates the current assets as well as the current liabilities. In the case of Cofina, regarding current assets, we take into consideration the inventories, trade receivables and assets associated with contracts with customers. As for liabilities, we take into account trade payables, as well as liabilities associated with contracts with customers.

The weight of the working capital on total revenues throughout the past years has been somewhat inconsistent. Keeping this in mind, the average weight for the working capital is 1.82%, which we set as reference for future projections. The computations for the working capital are translated in annex J.

Table 4.3.: Working Capital Projection

	2023	2024	2025	2026	2027
Working Capital	1,454,906.81	1,501,115.66	1,543,154.39	1,583,351.59	1,623,337.12
% of Revenues	1.82%	1.82%	1.82%	1.82%	1.82%
Investment in Working Capital -	711,444.19	46,208.85	42,038.73	40,197.20	39,985.54

4.2.7. Terminal Value

As mentioned in the literature review, the terminal value is computed by discounting the free cash flow to firm by the difference between the WACC and the continuous growth rate.

By applying equation 8, we reach a growth rate of 6.17%, however, one of the assumptions of this model is that the growth rate used to discount the terminal value must not exceed the long term projected growth for the country in which the company acts. Keeping this in mind and knowing that the expected growth rate for Portugal is 2.028%⁶, we mustn't use the growth rate previously calculated but instead use the growth rate predicated for Portugal by the OECD.

⁶ OECD 2024. Real GDP long-term forecast. Retrieved from: <https://data.oecd.org/gdp/real-gdp-long-term-forecast.htm> (Accessed: 25/01/2024)

In order to compute $FCFF_{n+1}$, we decided to apply the increase rate expected for the industry for 2028, which is 0.29%. All computed, the $FCFF_{n+1}$ is 6,254,504.22 € and consequently, applying equation 7, the terminal value is 137,190,586.64 €.

4.2.8. Equity Value

In order to reach the equity value, one must first calculate the enterprise value. The EV is achieved by discounting all free cash flows by the WACC as well as the Terminal Value, as shown in equation 9. After all is discounted, we reach an Enterprise Value of 122,076,627.87 €. The next step is to subtract the net debt and non-controlling interests and add the non-business assets in order to achieve the equity value, which in the case of Cofina, was 96,483,703.87 €.

The table below reflects all the values previously mentioned as well as the final value per share of 0.941 €, computed by applying equation 12.

Table 4.4. : Cofina's projected values using the FCFE Approach

	2023	2024	2025	2026	2027
PV FCFE	4,816,541.50	4,155,015.65	4,369,516.20	4,476,231.53	4,533,216.47
PV TV	99,726,106.53				
Enterprise Value	122,076,627.87				
Net Debt	- 25,600,000.00				
Non-Business Assets	10,012,586.00				
Non controlling interest	- 10,005,510.00				
Equity Value	96,483,703.87				
Nº of Shares	102,565,836				
Value per share	0.941				
Closing Price 31/12/22	0.243				

4.2.9. Sensitivity Analysis

One of the biggest factors that one must take into consideration when conducting a valuation process is uncertainty. The level of uncertainty comes from the different assumptions made throughout the valuation. In order to measure the level of uncertainty for the different assumptions made, a sensitivity analysis was conducted. This way we can quantify the amount of uncertainty regarding the assumptions made but also to the model as a whole. To perform the sensitivity analysis, we made use of the “Crystal Ball” software, developed by Oracle. This programme makes use of the Monte Carlo method, a model that is able to predict a range of possible results for a defined variable based on a set of input values with a pre-defined range of variables. The set of inputs chosen were (i) Cost of Equity, (ii) Cost of Debt, (iii) Cost to Revenue Ratio, (iv) Tax Rate, (v) Capital Expenditures as a percentage of

Revenues, (vi) Working Capital as a percentage of Revenues and lastly (vii) Long Term growth rate (computed using the expected Portuguese GDP for 2028 according to OECD).

In terms of ranges set for each of the variables, given that all variables were set as a normal distribution, the range is calculated using the following formula:

$$\text{Range} = \text{Mean} \pm 2 * \text{Standard Deviation}$$

Equation 17

Keeping this in mind, the table that follows reflects the ranges for each one of the variables:

Table 4.5. : Ranges for the different variables

Variable	Range	
	From	To
Cost of Equity	8.2466%	8.5834%
Cost of Debt	6.498%	6.762%
Cost to Revenue Ratio	9.020%	9.380%
Tax Rate	22.000%	33.000%
CAPEX as a percentage of Revenues	3.92%	4.08%
Working Capital as a percentage of Revenues	1.7786%	1.8514%
Long Term growth rate	1.99%	2.07%

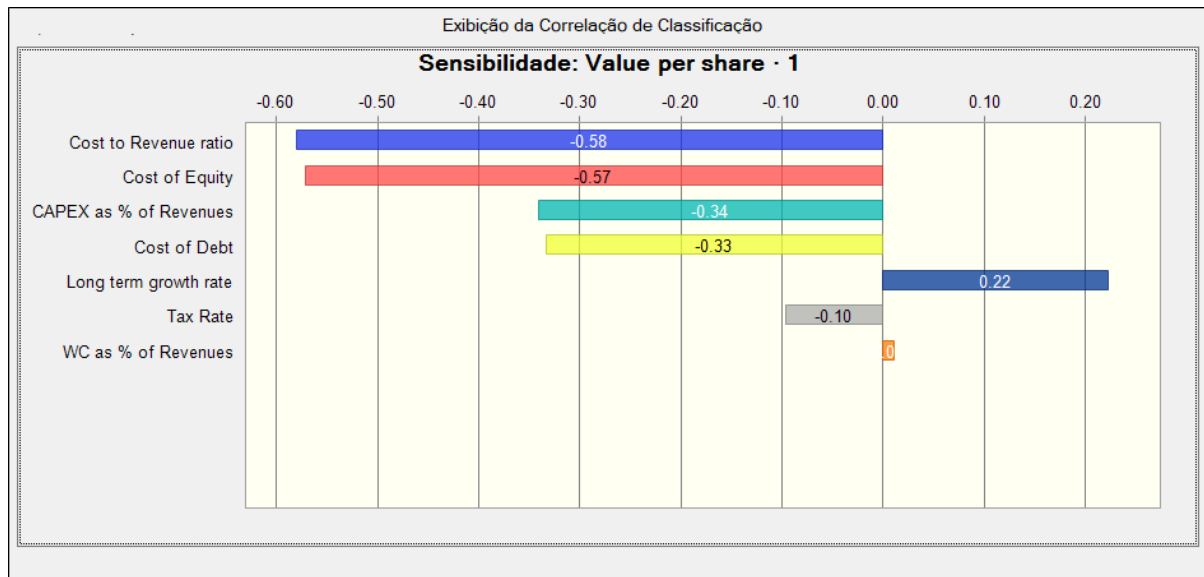
The graphic shown below reflects the correlation between the variables mentioned above and the final share price. From a first analysis, we can conclude that five out of the six variables used in the study present a negative correlation. This means that an increase in said variable results in a decrease on the final share price.

The variable with the strongest correlation is the cost to revenue ratio with a coefficient of -0.58, showing a moderately strong negative correlation with the final share price. The Cost of equity follows with an equally moderately strong negative correlation as its coefficient sets at -0.57. The capital expenditures as a percentage of sales and the cost of debt reflect extremely similar correlations with coefficients of -0.34 and -0.33, respectively. These variables reflect a weak and negative correlation.

The long-term growth rate is the only variable with a positive correlation, meaning that an increase in said variable results in an increase of the final share price. This variable reflects a weak positive correlation with a coefficient of 0.22.

Lastly, the Tax rate as well as the Working Capital as a percentage of revenues show a very weak negative correlation with its coefficients setting at -0.10 and -0.0034, respectively.

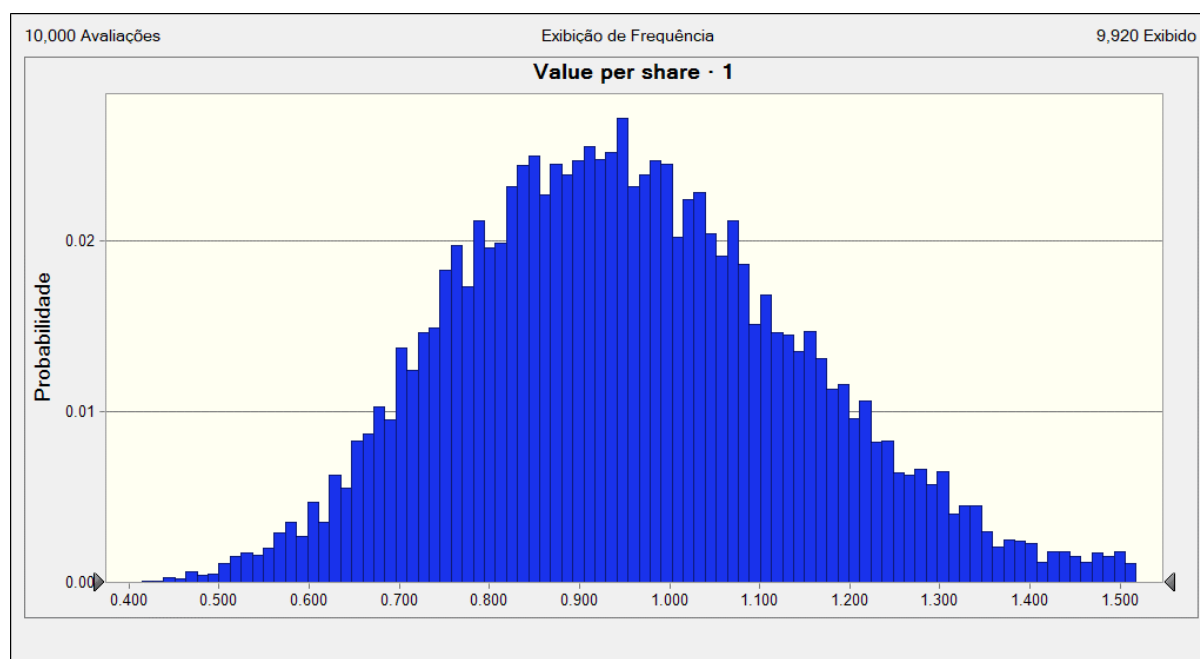
Figure 4.1.: Sensitivity Analysis



As another part of the sensitivity analysis, a frequency chart was produced. The histogram shown below translates the possible values obtained during the 10,000 iterations. The x axis shows the range of possible values for the share price, considering the seven variables chosen for this simulation. The y axis reflects the probability of each value to take place.

By analysing the chart we can observe a slight positive skewness, meaning that throughout the 10,000 iterations fewer results were found on the extreme right end of the distribution. The value with the highest probability of taking place is between 0.94 and 0.95.

Figure 4.2.: Frequency Chart



4.3. Discounted Cash Flow Method - FCFE Approach

As it was explained before, the *Free Cash Flow to Equity* approach is similar to the *Free Cash Flow to Firm* apart from the fact that the cash flows are discounted at the cost of equity and the computation starts with the Net Income. In addition, the net debt is also subtracted given that the basis for the valuation method is solely equity.

In order to calculate the Terminal Value, the same line of thought was applied as in the FCFE, with a 0.29% expected growth, which resulted in a terminal value of 75,950,331.62 €.

The closing price, as we can see from the results shown below, was 0.741 € per share.

Table 4.6.: Cofina's projected values using the FCFE Approach

	2023	2024	2025	2026	2027
PV FCFE	2,485,998.47	2,439,288.42	2,871,917.92	3,141,169.46	3,292,838.55
PV TV	51,706,532.80				
Non-Business Assets	10,012,586.00				
Equity Value	75,950,331.62				
Nº of Shares	102,565,836				
Value per share	0.741				
Closing Price 31/12/22	0.243				

4.4. Multiples or Relative Valuation

The multiples or relative valuation method is based on the idea of valuating a certain company in a similar manner as comparable companies. With this in mind, we gathered a peer group composed of five comparable firms. This group is made of **Informa** and **Future**, both British media enterprises, the **New York Times company**, an American media company, **Schibsted**, a Norwegian media conglomerate, and lastly, **Lagardère**, owner of multiples newspaper, magazines and radio stations in France. Given that Cofina is inserted in the media industry, it only makes sense to pick companies that act within the same industry.

Table 4.7.: Peer group and respective Market Capitalization

Company	Country	Market Capitalization (31-12-2022)
Informa	United Kingdom	10 237 million €
Future	United Kingdom	1 854 million €
New York Times	USA	4 966 million €
Schibsted	Norway	3 737 million €
Lagardère	France	2 817 million €

Source: Market Screener

4.4.1. The price to earnings ratio - PER

As previously demonstrated, the price to earnings ratio relates the Market Capitalization with the Net Income or, in a simplified equation, the share price with the earnings per share.

Table 4.8.: Market Capitalization and Net Income of the peer group

Company	Market Capitalization	Net Income	PER
Informa	10 237 million €	1 906 million €	5.372
Future	1 854 million €	143 million €	12.995
New York Times	4 966 million €	161 million €	30.873
Schibsted	3 737 million €	1 991 million €	-1.876
Lagardère	2 817 million €	161 million €	17.497
Average			12.972

Source: Market Screener

After computing the price to earnings ratio for each of the peer companies, we reach an average PER of 12.972. By computing the inverse equation, that is, multiplying the average PER by the earnings per share of Cofina in 2022, and keeping in mind that the earnings per share of Cofina in 2022 were 0.1 €, we reach a share price of 1.297 €.

4.4.2. The Enterprise Value to EBITDA ratio – EV/EBITDA

The Enterprise Value to EBITDA ratio translates the division between the Enterprise Value and the EBITDA of a certain company.

Table 4.9.: Enterprise Value and EBITDA of the peer group

Company	Enterprise Value	EBITDA	EV/ EBITDA
Informa	10 543 million €	661 million €	15.917
Future	2 349 million €	343 million €	6.848
New York Times	4 645 million €	322 million €	14.435
Schibsted	3 967 million €	212 million €	18.697
Largadère	4 530 million €	609 million €	7.438
		Average	12.667

Source: Market Screener

After we get an average for the EV/EBITDA ratio, we must multiply it for Cofina's EBITDA in 2022, which was 8 950 558 €, in order to reach the Enterprise Value. Afterwards, as in the DCF approach, we must deduct net debt, non-business assets and non-controlling interests in order to obtain the Equity Value. Finally, by dividing the Equity Value, by the number of outstanding shares, we attain the share price, which is 0.856€.

4.4.3. The Enterprise Value to Sales ratio – EV/Sales

The EV/Sales ratio, as the name suggests, relates the enterprise value with the company's sales.

Table 4.10.: Enterprise Value and Sales of the peer group

Company	Enterprise Value	Sales	EV/SALES
Informa	10 547 million €	2 642 million €	3.983
Future	2 355 million €	964 million €	2.438
New York Times	4 681 million €	2 135 million €	2.176
Schibsted	3 913 million €	1 347 million €	2.946
Largadère	4 530 million €	6 929 million €	0.654
		Average	2.439

After the average for the EV/Sales ratio is computed, we must apply the same line of thought as we did in the previous multiple, by multiplying for the sales value in 2022. In this multiple in particular we made a distinction, resulting in two EV/Sales ratios. This is because often times, in the financial statements of most companies, there is no division made between sales and revenues, which resulted in the use of revenues instead of sales in order to compute the

EV/Sales ratio. However, in the case of Cofina, the company differs between total revenues and sales from circulation, which is why we made the decision to compute two EV/Sales ratios, one using the total revenues of 2022 and another with the sales from circulation.

Afterwards, we subtract debt, non-business assets and non-controlling assets, and consequently divide by the number of outstanding shares. The Cofina share price according to this multiple is 0.454 € and 1.559 € per share, using the total revenues and sales respectively.

4.5. Valuation results

From the table below, we can see a summary of all the values obtained by applying the different valuation methods.

Table 4.11.: Summary of the different valuation methods

Method	Share Price (EUR)	Upside/Downside Potential
FCFF	0.941	287%
FCFE	0.741	205%
PER	1.297	434%
EV/EBITDA	0.856	252%
EV/Sales (1)	0.454	87%
EV/Sales (2)	1.559	542%
Average	0.982	304%

The highest value was obtained through the EV/Sales multiple computed using total revenues at 1.559 € per share, which translated a 542% valuation in comparison to the closing price at 31/12/2022. The second highest value was through the Price to earnings ratio, at 1.297 € per share, reflecting a 434% valuation.

The lowest value, and consequently, the one closest to the closing price in 2022, was the EV/Sales multiple computed using total sales. This multiple achieved a price per share of 0.454 €, indicating only an 86.8% valuation.

4.6. Final Recommendation

As mentioned before, the closing price for Cofina's shares at 31/12/2022 was 0.243 €. The closest value to the one obtained in 2022 was 0.454 € per share, obtained through the EV/Sales multiple computed using total sales, which translates an 86.8% potential. From the previous statement, we can conclude that all values obtained through the remaining methods led to prices per share higher than the closing price registered at 31/12/2022. For this, our

recommendation is for investors to buy Cofina SGPS shares given that a valuation of said assets is expected in the short term.

5. Conclusion

The purpose of this dissertation was to determine whether Cofina SGPS was under or overestimating their shares, keeping in mind the closing price at 31/12/2022 was 0.243€ a share.

In terms of company performance, the company's revenues grew 0.2% last year, reaching 76 million euros. On average, this indicator decreased 3.5%, however, as mentioned before, the Covid 19 pandemic had a fundamental negative impact on the performance of the sector. If we take into consideration solely the years with a positive growth, the firm grew on average 3.2%. In regard to operational costs, the indicator had been decreasing, on average, 6.5% until 2022, where it grew 2.3% mainly due to the coverage costs for the war in Ukraine but also the increase in energy and fuel related expenses. In terms of EBITDA, the performance was fairly inconsistent, decreasing 4.7%, on average. The EBIT, on the other hand, grew 41.4% despite having an irregular performance as well. Finally, the EBT and the Net Income increased 10.1% and 60.7% on average, respectively.

In regard to the performance inside the different segments in which it acts, Cofina has always presented higher income streams from the press segment than the television segment. It is important to highlight that the later segment has been growing in terms of weight of total revenues, having started the period of analysis with a 14% weight and finishing 2022 with a 27% importance.

In what concerns the valuation process, throughout the literature review, three methods were studied, the Discounted Cash Flow followed by the Dividends Discounted Model, and lastly, the Multiples Valuation. However, only the DCF and the Multiples valuation method were applied as Cofina only distributed dividends in 2022.

Inside the Discounted Cash Flow Method, both approaches that constitute this methodology were applied. According to the free cash flow to firm approach, a value of 0.941 € per share was obtained, translating a 287% increase in comparison to the closing price in 2022, whereas in the free cash flow to equity approach each share reached a value of 0.741€, which constitutes a 205% appreciation.

Looking at the Relative Valuation, three multiples were applied. Firstly, the PER ratio which relates the market capitalization with the net income of each peer company. The share price obtained through this multiple was 1.297 €, reflecting a 434% up potential in relation the company's closing price for 2022. The second multiple is the EV/EBITDA which, as the

name indicates, relates the enterprise value with the EBITDA, and resulted in a value of 0.856 € per share, translating a 252% increase. Lastly, the EV/Sales ratio, which, again, relates the enterprise value with the company's sales. As previously mentioned, a distinction in the computation of this multiple was made, resulting in two different EV/Sales multiples. The first approach used the total sales to compute the ratio and culminated in a share price of 0.454 € for each share, reflecting the lowest percentual up rise of all the valuation methods at 87%. On the other hand, the second approach where the total revenues were used to calculate the ratio resulted in a value per share of 1.559 €, indicating a 542% valuation.

For the final recommendation on how investors should act in regards to Cofina shares, given that all methods appoint to a higher share price than the one registered at the end of 2022, and taking into account that the average of all methods translates a share price of 0.982 €, reflecting a 304% valuation potential, we suggest investors to purchase Cofina shares given that a valuation of the company is expected, which translates a potential gain for investors.

6. Bibliography

Ahmeti, F. (2015, June 1). *A Critical Review of Modigliani and Miller's Theorem of Capital Structure*.

APCT. (n.d.). <https://www.apct.pt/analise-simples>

Bits, C. D., & Ferreira, C. A. (2021, September 16). TV por subscrição chega a 94,2% das famílias em Portugal. *SAPO Tek*. <https://tek.sapo.pt/noticias/telecomunicacoes/artigos/tv-por-subscricao-chega-a-942-das-familias-em-portugal>

Correio Da Manhã, (2023, August 31). Correio da Manhã atinge 61,3% de quota de mercado dos jornais diários. *Correio Da Manhã*. <https://www.cmjornal.pt/tv-media/detalhe/correio-da-manha-atinge-613-de-quota-de-mercado-dos-jornais-diarios>

Cofina SGPS (2018). *2018 Annual Report*

Cofina SGPS (2019). *2019 Annual Report*

Cofina SGPS (2020). *2020 Annual Report*

Cofina SGPS (2021). *2021 Annual Report*

Cofina SGPS (2022). *2022 Annual Report*

Damodaran, A. (1999). Estimating Equity Risk Premiums Aswath Damodaran Stern School of Business 44 West Fourth Street New York , NY 10012 Estimating Equity Risk Premiums. Business

Damodaran, A. (1999). Estimating Risk Parameters Aswath Damodaran Estimating Risk Parameters. Business

Damodaran, A. (2006). Valuation Approaches and Metrics: A Survey of the Theory and Evidence Aswath Damodaran Stern School of Business 44 West Fourth Street New York , NY 10012 Estimating Equity Risk Premiums. Business

Damodaran, A. (2008). What is the riskfree rate? A Search for the Basic Building Block. In SSRN Electronic Journal (Vol. 5).

Damodaran, A. (2015). In J. Hollenbeck (Ed.), *Applied Corporate Finance* (4th ed., pp. 515–577). essay, Wiley.

Damodaran, A. (2019, January 1). *Country Risk: Determinants, Measures and Implications – The 2019 Edition*. Social Science Research Network.

Damodaran, A. (n.d.). Estimating risk free rates. Aswath Damodaran Stern School of Business 44 West Fourth Street New York, NY 10012.

Damodaran, A. (2023). totalbetaEurope2022 [Microsoft Excel spreadsheet]. Damodaran Online. Retrieved from https://pages.stern.nyu.edu/~adamodar/New_Home_Page/dataarchived.html#capstru

Damodaran, A. (2023). ctryprem22 [Microsoft Excel spreadsheet]. Damodaran Online. Retrieved from https://pages.stern.nyu.edu/~adamodar/New_Home_Page/dataarchived.html#capstru

Damodaran, A. (2023). Ratings [Microsoft Excel spreadsheet]. Damodaran Online. Retrieved from <https://pages.stern.nyu.edu/~adamodar/>

Dimitriou, M. (2012). *Applying the Free Cash Flow to Equity Valuation Model in Coca-Cola Hellenic*

Eco. (2023, July 12). *Cofina*. ECO. <https://eco.sapo.pt/empresas/cofina/>

Electricity and gas prices stabilise in 2023. (2023, October 26). Eurostat. <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20231026-1>

- F. (n.d.). *Análise Económica e Financeira ao Setor de Media no ano 2022*. Flipsnack. <https://www.flipsnack.com/ercpt/an-lise-econ-mica-e-financeira-ao-setor-de-media-no-ano-2022/full-view.html>
- Fernández, P. (2001). Valuation Using Multiples: How Do Analysts Reach Their Conclusions? *SSRN Electronic Journal*, 1–13.
- Fernández, P. (2004). Market Risk Premium: Required, Historical and Expected. *Social Science Research Network*. Ahmeti, F. (2015, June 1). *A critical review of Modigliani and Miller's theorem of capital structure*.
- Fernández, P., De Santos, T. G., & Acin, J. F. (2022, January 1). *Survey: Market Risk Premium and Risk-Free Rate Used for 95 Countries in 2022*. Social Science Research Network.
- Fernando, J. (2022, May 4). *Reinvestment Risk Definition and How to Manage It*. Investopedia. <https://www.investopedia.com/terms/r/reinvestmentrisk.asp>
- Garfield, S. (n.d.). *Top 2023 digital trends fueling the future of media and entertainment*. <https://business.adobe.com/blog/the-latest/top-2023-digital-trends-fueling-the-future-of-media-and-entertainment>
- Girard, E. (2018, September 12). *How Does Country Risk Matter? The Journal of Global Business and Technology*, 14(1), p. 53-67. ResearchGate.
- Havnaer, K. (2013). Dcf vs. multiples. Jensen Investment Management
- Henschke, S., & Homburg, C. (2009). Equity valuation using multiples: Controlling for differences between firms. *Social Science Research Network*.
- IBISWorld - Industry Market Research, Reports, and Statistics. (n.d.). <https://www.ibisworld.com/portugal/industry-statistics/media-representation/3990/>
- Jain, C. Y. (2023, October 19). *All About Equity Research [The ONLY Guide You'll Need in 2023]*. QuintEdge.
- Journalism, media, and technology trends and predictions 2023*. (n.d.). Reuters Institute for the Study of Journalism. <https://reutersinstitute.politics.ox.ac.uk/journalism-media-and-technology-trends-and-predictions-2023>
- Kiveda, B. K., & Borgersen, T. A. (2018). Commercial Real Estate at the ZLB: Investment Demand and CAPM-WACC Invariance. *Nordic Journal of Surveying and Real Estate Research*.
- Media - Portugal | Statista Market Forecast. (n.d.). Statista. <https://www.statista.com/outlook/amo/media/portugal#revenue>
- Meios & Publicidade. (2023, January 3). *Audiências TV 2022: SIC lidera pelo quarto ano consecutivo. Pay TV ganha terreno aos canais FTA - Meios & Publicidade*. <https://www.meiosepublicidade.pt/2023/01/audiencias-tv-2022-sic-lidera-pelo-quarto-ano-consecutivo-pay-tv-ganha-terreno-aos-canais-fta/>
- Milicevic, B. (2009). The Standard Multiples Valuation Method and its Criticism. University of Niš, Faculty of Economics
- Mullins, D. W. (2014, August 1). *Does the Capital Asset Pricing Model Work?* Harvard Business Review.
- Portugal - Corporate - Taxes on corporate income. (n.d.). <https://taxsummaries.pwc.com/portugal/corporate/taxes-on-corporate-income>
- Portugal. (n.d.). Media Landscapes. <https://medialandscapes.org/country/portugal>
- Powell, S. (2023, October 5). *Equity Research Overview*. Corporate Finance Institute.

Ranking auditado netAudience de dezembro. (n.d.). <https://www.marktest.com/wap/a/n/id~295d.aspx>

Report on Media Consumption in Portugal. (2016). *Entidade Reguladora Para a Comunicação Social*.

Serra, R. G. (2018). Reconciling FCFF and FCFE in nominal and real models. *Social Science Research Network*.

Six shifts changing the future of media. (2021, August 11). Bain. <https://www.bain.com/insights/six-shifts-changing-the-future-of-media/>

Statista. (2023, November 6). *Internet usage reach in Portugal 2019-2028*. <https://www.statista.com/statistics/567558/predicted-internet-user-penetration-rate-in-portugal/>

Steiger, F. (2008). The Validity of Company Valuation Using Discounted Cash Flow Methods. European Business School

2023 Media trend predictions. (n.d.). KPMG. <https://kpmg.com/us/en/articles/2023/media-trend-prediction.html>

8 Trends that will Shape the media and entertainment industry in 2023 | TransPerfect. (2023, January 30). <https://www.transperfect.com/blog/8-trends-will-shape-media-and-entertainment-industry-2023>

7. Annexes

Annex A – Revenue evolution from the different segments (values expressed in million euros)

	2018	2019	2020	2021	2022
Press	76,926	73,195	55,911	58,390	55,760
% of total revenues	86%	83%	78%	77%	73%
Percentual Variation	-	-4.9%	-23.6%	4.4%	-4.5%
Television	12,367	14,829	15,533	17,459	20,277
% of total revenues	14%	17%	22%	23%	27%
Percentual Variation	-	19.9%	4.7%	12.4%	16.1%
Total	89,293	88,024	71,444	75,849	76,037

Annex B – Operational Cost evolution from the different segments (values expressed in million euros)

	2018	2019	2020	2021	2022
Press	65,051	60,407	48,691	48,536	47,138
% of total Op Costs	87%	85%	82%	79%	75%
Percentual Variation	-	-7.1%	-19.4%	-0.3%	-2.9%
Television	9,315	10,846	10,818	12,541	15,343
% of total Op Costs	13%	15%	18%	21%	25%
Percentual Variation	-	16.4%	-0.3%	15.9%	22.3%
Total	74,366	71,253	59,509	61,077	62,481

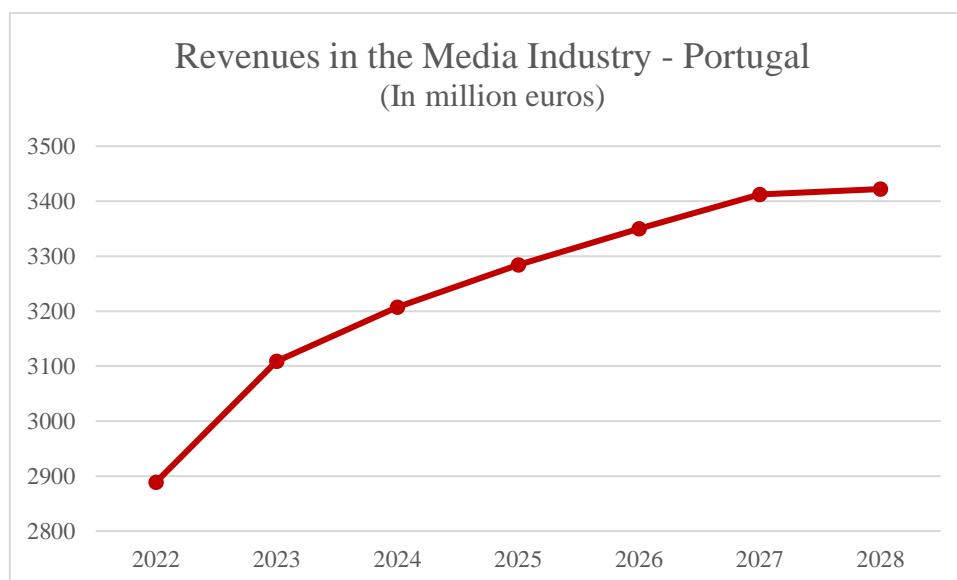
Annex C – EBITDA evolution from the different segments (values expressed in million euros)

	2018	2019	2020	2021	2022
Press	11,875	12,788	7,220	9,854	8,622
% of total EBITDA	80%	76%	60%	67%	64%
Percentual Variation	-	7.7%	-43.5%	36.5%	-12.5%
Television	3,052	3,983	4,715	4,918	4,934
% of total EBITDA	20%	24%	40%	33%	36%
Percentual Variation	-	30.5%	18.4%	4.3%	0.3%
Total	14,927	16,771	11,935	14,772	13,556

Annex D – Income Statement (values expressed in euros)

	2018	2019	2020	2021	2022
Operational Revenues	89,292,542	88,023,974	71,443,995	75,848,752	76,036,515
Sales/ Circulation	43,059,097	41,969,042	33,275,818	32,323,728	29,578,990
Services Rendered/ Advertising	28,115,533	27,562,941	22,208,139	26,812,244	28,164,084
Other Income/ Alternative Marketing products and others	18,117,912	18,491,991	15,960,038	16,712,780	18,293,441
Operational Costs	- 75,165,803	- 71,252,142	- 61,402,628	- 61,076,615	- 62,480,957
Cost of Sales	- 9,634,636	- 9,469,504	- 6,075,087	- 5,127,428	- 6,321,434
External supplies and services	- 37,683,404	- 35,436,124	- 26,473,432	- 27,903,046	- 29,678,782
Payroll expenses	- 27,599,669	- 27,183,975	- 26,085,626	- 27,649,613	- 27,454,897
Other expenses	- 127,268	- 272,776	- 684,483	- 164,661	- 254,580
Provisions and impairment losses	- 120,826	- 1,110,237	- 2,084,000	- 1,146,326	- 3,376,264
Operational EBITDA	14,126,739	16,771,832	10,041,367	14,772,137	13,555,558
Goodwill Impairment and non-recurrent costs	- 800	-	-	- 914,459	- 4,605,000
EBITDA	14,125,939	16,771,832	10,041,367	13,857,678	8,950,558
Amortisation and Depreciation	- 1,288,309	- 3,594,048	- 3,414,659	- 3,487,718	- 3,115,002
EBIT	12,837,630	13,177,784	6,626,708	10,369,960	5,835,556
Results related to associated companies and joint ventures	- 653,420	- 208,419	- 818,553	- 1,637,453	- 3,245,144
Financial Expenses	- 2,097,399	- 2,520,467	- 2,125,140	- 1,556,975	- 1,648,504
Financial Income	25,068	6,782	-	-	249,078
Profit/ Loss before income tax	10,111,879	10,455,680	3,683,015	7,175,532	7,681,274
Income tax	- 3,913,523	- 3,306,230	- 2,094,060	- 2,951,011	- 2,770,023
Net Profit from discontinued operations	454,249	-	-	-	-
Consolidated Net Profit for the Period	6,652,605	7,149,450	1,588,955	4,224,521	10,451,297

Annex E – Expected growth for the Media Industry in Portugal, according to Statista (values expressed in million euros)



Annex F – Projected operational Revenues

	2022	2023	2024	2025	2026	2027
Revenues	76,036,515	80,148,224.42	82,693,787.71	85,009,626.34	87,224,018.38	89,426,750.31
Expected variation		5.41%	3.18%	2.80%	2.60%	2.53%

Annex G – Projected Operational Costs

	2023	2024	2025	2026	2027
Cost of Sales	7,229,369.84	7,458,979.65	7,667,868.30	7,867,606.46	8,066,292.88
External supplies and services	31,251,757.45	32,158,058.41	32,801,219.58	33,457,243.97	34,126,388.85
Payroll expenses	28,910,006.54	29,748,396.73	30,343,364.67	30,950,231.96	31,569,236.60
Other expenses	254,580.00	254,580.00	254,580.00	254,580.00	254,580.00
Provisions and impairment losses	3,376,264.00	3,376,264.00	3,376,264.00	3,376,264.00	3,376,264.00
Total Operational Costs	71,021,977.83	72,996,278.79	74,443,296.54	75,905,926.39	77,392,762.33

Annex H – Projected Depreciations and Amortizations

	2018	2019	2020	2021	2022
Depreciations and Amortizations	1,288,309.00	3,594,048.00	3,414,659.00	3,487,718.00	3,115,002.00
% of Revenues	1.44%	4.08%	4.78%	4.60%	4.10%

Annex I – Projected Capital Expenditures

	2023	2024	2025	2026	2027
CAPEX	3,162,176.47	3,262,609.39	3,353,978.73	3,441,345.59	3,528,252.41
% of Revenues	3.95%	3.95%	3.95%	3.95%	3.95%

Annex J – Working Capital Computation

Current Assets	2018	2019	2020	2021	2022
Inventories	1,349,795.00	1,450,074.00	1,020,274.00	1,262,408.00	1,751,401.00
Trade Receivables	5,820,863.00	6,294,057.00	5,238,047.00	6,961,368.00	7,054,920.00
Assets associated with contracts with customers	4,149,321.00	4,355,623.00	3,130,363.00	3,517,885.00	3,406,633.00
Total	11,319,979.00	12,099,754.00	9,388,684.00	11,741,661.00	12,212,954.00
Current Liabilities					
Trade Payables	10,718,928.00	8,336,586.00	5,615,823.00	7,188,748.00	5,972,209.00
Liabilities associated with contracts with customer	3,027,856.00	3,282,531.00	2,257,761.00	3,913,711.00	4,074,394.00
Total	13,746,784.00	11,619,117.00	7,873,584.00	11,102,459.00	10,046,603.00
Working Capital	- 2,426,805.00	480,637.00	1,515,100.00	639,202.00	2,166,351.00
% of Revenues	2.72%	0.55%	2.12%	0.84%	2.85%
Investment in Working Capital		2,907,442.00	1,034,463.00	- 875,898.00	1,527,149.00

