



Equity Valuation: NOS SGPS, S.A.

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Abstract

Title: Equity Valuation: NOS SGPS

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This thesis presents a comprehensive valuation of NOS SGPS, the leading Portuguese telecommunications, entertainment, and media group. The primary objective is to estimate the company's fair share price at the end of 2024. To achieve this, the analysis relies mainly on the Discounted Cash Flow (DCF) methodology, employing the Free Cash Flow to Firm (FCFF) approach, complemented by a Relative Valuation based on market multiples. Furthermore, particular attention is given to the acquisition of Claranet Portugal in 2025, a cloud computing and IT services provider, whose valuation is estimated by using comparable companies. In addition, a Sensitivity Analysis was conducted to evaluate the impact of variables on the model.

The findings provide insights into the drivers of NOS's enterprise value and highlight the relevance of combining different valuation methodologies to ensure robust and reliable results. According to the valuation performed, the fair value of NOS's shares is EUR 4.51 which indicates that at the end of 2024, the company is undervalued. Therefore, the final recommendation is to buy NOS's shares.

Keywords: NOS, Telecommunications, Discounted Cash Flow (DCF), Free Cash Flow (FCF), Relative Valuation

Abstrato

Titulo: Equity Valuation: NOS SGPS

Autor: Salvador Valada

Esta tese apresenta uma avaliação abrangente da NOS SGPS, o principal grupo português de comunicações, entretenimento e media. O objetivo principal é estimar o justo valor da ação da empresa no final de 2024. Para tal, a análise baseia-se principalmente na metodologia do Discounted Cash Flow (DCF), utilizando a abordagem do Free Cash Flow to Firm (FCFF), complementada por uma Avaliação Relativa com base em múltiplos de mercado. Adicionalmente, é dada especial atenção à aquisição da Claranet Portugal em 2025, uma empresa de serviços de tecnologias de informação focada em soluções de cloud computing, cuja avaliação foi estimada através de empresas comparáveis. Foi ainda realizada uma Análise de Sensibilidade para avaliar o impacto das variáveis mais significativas do modelo.

Os resultados obtidos permitem compreender os principais fatores que influenciam o valor empresarial da NOS e evidenciam a relevância de combinar diferentes metodologias de avaliação para assegurar resultados robustos e fiáveis. De acordo com a avaliação efetuada, o justo valor das ações da NOS é de EUR 4.51, o que indica que, no final de 2024, a empresa se encontrava subavaliada. Assim, a recomendação final é a compra das ações da NOS.

Palavras-Chave: NOS, Telecomunicações, Discounted Cash Flow (DCF), Free Cash Flow (FCF), Relative Valuation

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1. Introduction

Valuing a company is a fundamental aspect of corporate finance, as it provides a clear understanding of a firm's potential, which is essential for informed decision-making by investors, managers, and other stakeholders. In consequence, the process of valuing a company can be used for different purposes such as M&A transactions, Initial Public Offering, strategic decisions, and strategic planning.

In this report, the main goal is to estimate the fair value of NOS SGPS shares as of the end of 2024. The estimated value will then be compared to the actual closing share price to assess whether the shares were trading in line with their fair value or if there was a discrepancy.

NOS SGPS is the largest telecommunications and entertainment group in Portugal, founded in 2013 through the merger of Zon Multimédia and Optimus Telecomunicações, two of the biggest players at that time. The company offers services in both fixed and mobile services across Television, Internet, Voice, and Data, in addition to offering Cinema and Audiovisual solutions. These services are offered to a diverse customer base, including residential, individual, corporate, and wholesale segments. Currently, NOS is the largest group of Communications, Entertainment & Media in Portugal, with a consolidated EBITDA of EUR 767.6 million in FY24, corresponding an increase of 7.1%. The company is traded on the Euronext Lisbon stock exchange and closed the financial year of 2024 with a stock price of EUR 3.33. Regarding the stakeholder structure of the company, Sonaecom SGPS SA and ZOPT SGPS SA are two major shareholders, with 37.37% and 26.07% share capital, respectively.

Following the introduction, chapter two consists of a Literature Review, in which the most relevant valuation methods will be discussed. After that, chapter three will provide a global overview of the sector, while a more detailed analysis of NOS and its activities will be described in section four. The fifth section presents the assumptions underlying the forecasts that enable the company's valuation through the Discounted Cash Flow and Relative Valuation methods. Within this section, a robust valuation of Claranet, a recent acquisition of NOS, was performed. This section also includes a sensitivity analysis and a discussion of the results. In the final chapter, the main conclusions will be presented, and a final recommendation will be given to investors on whether they should sell, hold, or buy the shares of the company.

2. Literature Review

Determining a company's fair market value is an essential finance skill for business leaders looking to thrive in today's fast-paced market. Whether planning to buy, sell, or simply enhancing your business's strategic planning, understanding valuation is key to make informed decisions. Given this, a company valuation is the process of assessing the total economic value of a business and its assets. Beyond its critical role in mergers and acquisitions, valuation also serves as an important tool to identify economic value creation and destruction within a company and its various business units (Fernández, 2007).

Nevertheless, valuation is not a linear and straightforward process; it requires careful consideration of numerous factors that can influence a company's performance and market perception. The valuation of a company can vary across buyers, as each may adopt different assumptions and perspectives regarding the asset's ability to generate future cash flows. Over the years, a wide range of valuation models has been developed to address different financial contexts and objectives. Understanding the strengths and limitations of each model is essential for conducting accurate and effective valuations.

As mentioned before there are several methods available to estimate the fair value of a company's shares, each with its advantages and drawbacks. These models include discounted cash flow analysis, comparable company analysis, and precedent transaction analysis, which provide different perspectives on valuation depending on the specific context and available data. Understanding these methodologies is essential for accurately assessing the value of a company's shares. According to Pretto (2001), the choice of models can significantly influence investment decisions and corporate governance, as each method may yield varying results based on underlying assumptions and market conditions. Thus, a comprehensive understanding of these valuation techniques is crucial for stakeholders involved in share transactions. In particular, the discounted cash flow analysis is often favored for its ability to incorporate future cash flow projections, while comparable company analysis offers a market-based perspective. Each method's effectiveness can vary significantly depending on the specific characteristics of the company being evaluated and the prevailing economic environment (Brennan & Hennessy, 2001).

The following sections describe the three approaches to valuation considered by Damodaran (2012) and provide insights into their applications.

2.1. Discounted Cash Flows

The main idea behind the Discounted Cash Flow model is the time value of money, which can be explained, in simple words, that the same amount of money today is worth more today than tomorrow. By discounting future cash flows to their present value, the DCF model allows investors to make informed decisions based on expected financial performance and risk assessment (Kumar, 2016).

The model is built on several key assumptions that are crucial for its application and accuracy. The past performance of a company is used to derive critical financial ratios, which are a starting point in making predictions for the same financial ratios. This reliance on historical financial statements can introduce biases if the data does not accurately reflect future performance. It is widely presumed within the financial literature and economic theory that the asset in question will, throughout its operational lifespan, produce a series of positive cash flows.

The model is based on the principle that money today holds greater value than the same amount in the future, a difference addressed by discounting expected cash flows to their present value (Götze et al., 2015; Doganova, 2013). The choice of discount rate is crucial, as it captures the investment's risk profile, which varies across sectors and economic conditions (Ulbert et al., 2017).

The general formula for this method can be seen below:

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

Where,

- FCF_t = Free Cash Flow generated by the company at time t
- r = discount rate, which accounts for the cash flow's risk
- TV = Terminal Value, considering a perpetual duration of cash flows and a constant growth rate after year n
- t = period of the FCF
- n = period corresponding to the last forecasted cash flow

Nevertheless, the DCF basis principles mentioned above can lead to a diverse list of adapted models focused on determining the fair value of an asset that generates cash flows, which according to Damodaran (2006) four variants can be exploited. One example is the use of both

Free Cash Flow to Firm and Free Cash Flow to Equity when valuing a company. While the first one focuses on the cash flows available to all capital providers, the second specifically addresses the cash flows available to equity shareholders after accounting for debt obligations.

Throughout this project, the valuation will be carried out using the Discounted Cash Flow model by discounting the expected cash flows to a Weighted Average Cost of Capital (WACC), implicating the use of the Free Cash Flow to Firm (FCFF).

2.1.1 Free Cash Flow to Firm

Free Cash Flow to Firm (FCFF) represents the cash generated by a company's operations that is available to all capital providers, including debt and equity holders. It is a measure of a company's financial performance and is used to assess its value by discounting future cash flows to their present value. This value includes the tax benefits of debt and any expected risk that might be associated with it. As said before, the value of the company is computed by discounting the Free Cash Flows to Firm at the Weighted Average Cost of Capital (WACC), allowing for the cost of the different financing components to be proportionally weighed in accordance with their market value (Damodaran, 2012).

The formula for Free Cash Flow to Firm is the following:

$$FCFF = EBIT * (1 - t) - D\&A - CapEx \pm \Delta WC$$

Where,

- $EBIT$ = Earnings Before Interest and Taxes
- t = Corporate Tax rate
- $D\&A$ = Depreciation and Amortization
- $CapEx$ = Capital Expenditures
- ΔWC = Changes in Working Capital

There is a wide range of interpretations on how to calculate Free Cash Flow to the Firm (FCFF), with some approaches incorporating balance sheet items that may not accurately reflect actual cash flows, leading to inconsistencies and potential discrepancies in valuation (Velez-Pareja, 2005). Moreover, the relationship between FCFF and firm value is complex and can be influenced by factors such as dividend policies and investment opportunities; for example, high levels of free cash flow may result in overinvestment, which does not necessarily lead to an increase in firm value (Dewi et al., 2019).

2.1.2 Enterprise Value

The discounted cash flow (DCF) method is a prevalent approach for calculating Enterprise Value (EV). It involves projecting the company's free cash flows and discounting them to their present value using the weighted average cost of capital (WACC). The formula can be seen below:

$$EV = \sum_{t=1}^n \frac{FCFF_t}{(1 + WACC)_t} + \frac{TV_n}{(1 + WACC)_n}$$

Where,

- EV = Enterprise Value
- FCFF_t = Free Cash Flow at time t
- WACC = Weighted Average Cost of Capital
- TV_n = Terminal Value at time n

Enterprise Value is the sum of all expected cash flow generated by the company discounted back to their present value, providing a comprehensive measure of a firm's total value. It is important to mention that the formula is divided into two components. The first part corresponds to the present value of all cash flows forecasted while the second includes the Terminal Value (TV) discounted at WACC.

The Terminal Value is a critical component that estimates the value of a business beyond the explicit forecast period, often representing a significant portion of the total valuation. It is calculated under the assumption that the company will continue to operate indefinitely, with stable growth and profitability.

The formula of the Terminal Value is as follows:

$$TV_n = \frac{FCFF_n}{(WACC - g)}$$

Where,

- TV_n = Terminal Value
- FCFF_n = Free Cash Flow at time
- WACC = Weighted Average Cost of Capital
- g = Growth rate

Nevertheless, the formula includes a growth rate that should reflect realistic expectations of the company's growth potential and industry conditions. According to Damodaran (2012), a company's growth rate should not exceed the long-term growth rate of the overall economy, and the firm's characteristics must be coherent with the underlying assumptions of a stable growth environment.

After computing the Enterprise Value (EV), to reach the Equity Value (EQV), non-operating assets (NOA) must be added while non-equity claims must be subtracted from the EV. The goal behind this step is to isolate the portion held by the shareholders (Koller et al., 2020).

$$EEEV = EV + NOA - Non - Equity Claims$$

2.1.3. Weighted Average Cost of Capital (WACC)

As mentioned in the previous sections, the WACC is the discount factor in DCF models to value a company's future cash flows, providing a present value that reflects the risk and time value of money. WACC represents the average rate of return a company is expected to pay its security holders to finance its assets. It is a composite of the cost of equity and the cost of debt, weighted by their respective proportions in the company's capital structure.

The formula for the WACC can be seen below:

$$MACC = \frac{E}{E + D} * K_e + \frac{D}{E + D} * K_d * (1 - t)$$

Where,

- E = Market Value of Equity
- D = Market Value of Debt
- K_e = Cost of Equity
- K_d = Cost of Debt
- t = Corporate Tax rate

The two primary components of WACC are the cost of equity and the cost of debt, with their respective weights determined by the company's capital structure. The cost of equity and cost of debt are the returns required by shareholders and creditors, respectively, to compensate for the risks associated with their investments (Kumar, 2016; Velez-Pareja & Tham, 2010).

The following sections provide an overview and detailed analysis of the components of WACC, focusing on the cost of equity and cost of debt, and their role in company valuation.

2.1.3.1. Cost of Equity

The cost of equity represents the return demanded by shareholders for investing in the company. It is the most challenging component of WACC to estimate because it is not directly observable, unlike the cost of debt. The cost of equity is obtained through the Capital Asset Pricing Model (CAPM). Investors use CAPM to evaluate portfolio performance and assess the risk-adjusted returns of their investments (Fama & French, 2003). The model developed by Sharpe (1964) and Lintner (1965), is a cornerstone of modern finance. It posits that the expected return on an asset is a function of its systematic risk, measured by the beta coefficient (β). The model is expressed as:

$$K_e = r_f + \beta * (E(R_m) - r_f)$$

Where,

- K_e = Cost of Equity
- R_f = risk free rate
- β = Systematic Risk
- $E(R_m)$ = Expected Market Return

However, The CAPM is grounded in portfolio theory and the concept of efficient capital markets. It assumes that investors are rational, risk-averse, and aim to maximize utility (Fama & French, 2003).

Therefore, the next section will describe each component of the cost of equity.

2.1.3.2. Risk Free Rate

The risk-free rate plays a crucial role in the calculation of the cost of equity, primarily through its influence on the market risk premium and the Capital Asset Pricing Model (CAPM). It serves as a baseline return that investors expect from a risk-free investment. According to Damodaran (2012), a risk-free asset needs to meet two basic conditions: there can be no default risk; and there can be no reinvestment risk.

Given this, when doing investment analysis on the long-term, the risk-free rate should be the long-term government bond rate denominated in the same currency as the company being analyzed. In this case, I will use the 10-year German Eurobond since its investment grade classification is an AAA country.

2.1.3.3. Market Risk Premium

The market risk premium (MRP), also known as equity risk premium, corresponds to the extra return investors expect to receive for investing in the market portfolio (a risky asset) compared to a risk-free investment. Simply, it's the compensation that investors demand for bearing the risk of market fluctuations. The MRP can be estimated by analyzing the historical returns that stocks have generated more than the risk-free assets (Damodaran, 2008).

2.1.3.4. Beta

Beta is a measure of systematic risk, which is the risk of an investment that cannot be eliminated through diversification. In other words, in CAPM context, this component measures the sensitivity of a security's returns relative to the overall market returns. It can be estimated through Ordinary Least Squares (OLS) regression, where the security returns are regressed against the market returns. This method assumes a linear relationship between security and market returns (Du & Lu, 2015).

According to Damodaran (2012), the sensitivity to the market returns can be calculated by dividing the covariance of each asset with the market portfolio by the variance of the market portfolio, through the following equation:

$$\beta_i \equiv \frac{COV_{i,m}}{\sigma_m^2}$$

Since Beta is calculated using historical data, it may not accurately predict future market conditions. This makes beta estimates volatile and potentially. Nevertheless, it is important to mention that Beta can be expressed as either levered or unlevered, depending on whether the effects of a company's debt are included. Adjusting between these forms is necessary when comparing companies with different capital structures (Thompson, 2020).

2.1.3.5. Cost of Debt

The last component of the WACC calculation is the cost of debt that corresponds to the return required by creditors for lending money to the company. It is typically easier to estimate than the cost of equity since it is based on observable market rates. If a company has outstanding traded bonds, the YTM on its long-term bonds is a direct measure of the cost of debt. The YTM reflects the total return expected by bondholders, including both interest payments and capital gains or losses (Kumar, 2016). Additionally, the author states that companies without traded

bonds, their cost of debt can be estimated using synthetic ratings based on credit ratings and default spreads.

Nevertheless, it is important to mention the effect of Tax Shields. Interest payments on debt are tax-deductible, reducing the effective cost of debt, making debt more attractive. This tax benefit is a key driver of the trade-off theory of capital structure (Velez-Pareja & Tham, 2010).

Therefore, the after-tax cost of debt is calculated as:

$$\text{After - Tax Cost of Debt} = \text{Cost of Debt} * (1 - t)$$

2.2 Adjusted Present Value (APV)

The Adjusted Present Value model is an alternative DCF model to the FCFF-based approach, particularly useful in scenarios where the capital structure of a company is expected to change. This method separates the value of the firm into the value of an unlevered firm and the value of tax shields from debt, allowing for a more accurate reflection of the financial benefits of debt financing (Koller et al., 2020).

The general formula for APV is presented below:

$$APV = V_u + PV(\text{Tax Shields}) - PV(\text{Bankruptcy Costs})$$

The first component of the formula corresponds to the value of unlevered firm (V_u), which is the same as an entity entirely equity financed. This provides a baseline value that is not influenced by the firm's financing decisions (Brick & Weaver, 2010). The formula for calculating this value can be seen below:

$$V_u = \frac{FCFF * (1 + g)}{k_u - g}$$

Where,

- V_u = value of Unlevered firm
- FCFF = Free Cash Flow to Firm
- k_u = unlevered cost of equity
- g = growth rate

The second component of the APV method corresponds to the Present Value of Tax Shields. The tax shields arise from the tax deductibility of interest payments on debt. The value of these

tax shields is calculated by discounting the expected tax savings from interest payments (Fernandez, 1997).

$$ECCpected TaCC Benefits = t * D$$

Where,

- t = tax rate
- D = Debt

The third, and last step, is the estimation of the present value of the expected costs of bankruptcy. This cost rises when companies increase their debt levels leading to higher probabilities of defaulting. This element of APV method can be obtained through the general expression:

$$PV (Bankruptcy Costs) = PD * BC$$

Where,

- PD = Probability of Default
- BC = Bankruptcy Costs

While these methods differ in their approach, they are equivalent under certain assumptions. The WACC method discounts the firm's cash flow using a weighted average cost of capital, while the APV method separates the value of the unlevered firm and the tax shields. Despite these differences, all DCF methods yield the same firm value when the assumptions are consistent (Fernandez, 2007).

2.3 Relative Valuation

As mentioned before in the previous sections of the literature review, it is possible to calculate the value of a company through different models. From all that I have already described, the last one is the use of valuation multiples. In relative valuation, the value of an asset is compared to the values assessed by the market for similar or comparable assets.

According to Damodaran (2002), there are two requirements to apply this method: the first one, we need to standardize the values of the company being analyzed since absolute prices are not directly comparable; the second one is the need to identify a group of firms with similar characteristics and obtain the market value for these assets.

According to Fernández, P. (2001), multiples can be divided into three main groups, as shown in the table below:

Multiples Based on Equity Value	• Price to Earnings Ratio (PER) • Price to Sales • Price to Book Value
Multiples Based on Enterprise Value	• Enterprise Value to EBITDA • Enterprise Value to Free Cash Flow • Enterprise Value to Sales
Growth-Referenced Multiples	• Price earnings to Growth (PEG) • Enterprise Value to EBITDA Growth

Table 2.1: Group of Multiples, Fernández, P. (2001)

Equity value multiples relate to the market price of a company's equity to a financial metric, such as earnings or book value. Equity value multiples, such as the P/E ratio, have been found to outperform other multiples in terms of valuation accuracy. However, they can be affected by firm-specific factors and may not always account for differences between firms, leading to potential valuation errors (Henschke & Homburg, 2009).

Enterprise value (EV) multiples consider the total value of a company's operating assets. Common examples include EV/EBITDA and EV/sales providing a more comprehensive view of a company's value by incorporating debt and other liabilities (Grbenic, 2021).

Growth-referenced multiples incorporate growth expectations into the valuation process. These multiples are useful for evaluating companies with high growth potential, as they provide a more refined view of value by considering future growth prospects (Schreiner & Spremann, 2007).

According to Koller et al. (2020), an ideal peer group should include between 8 and 15 comparable companies. However, most experts agree that it is preferable to use a smaller, more precisely matched set of firms rather than expand the sample with companies that differ significantly from the target being valued.

3. Market Overview

The analysis begins with the macroeconomic outlook and then narrows to the telecommunications industry, considering both historical trends and future forecasts that shape the company's valuation.

3.1 Macroeconomic Outlook

The last couple of years have been marked by a mixture of resilience and uncertainty, with a projected slowdown in global growth compared to previous years. Key factors influencing the outlook include the impact of trade policies, geopolitical risks, and the ongoing adjustment of monetary policy in response to inflation.

After the COVID-19 pandemic, the year 2022 was marked by Russia's invasion to Ukraine. This geopolitical conflict caused an energy crisis in Europe after Russia suspend the supply of natural gas to the rest of Europe. Europe was still recovering from the COVID-19 related economic shocks but saw inflation rising again. According to the European Central Bank, inflation increased from 2.6% in 2021 to 8.4% in 2022, where energy and food accounted for more than half of this record-high inflation in 2022.

Recently, the world witnessed the reelection of the president of United States of American, Donald Trump, who has already implemented policy changes that disrupted international markets. The first semester of 2025 was marked by the imposition of high tariffs by USA to China and Europe impacting exportations and investment in euro zone. Despite this tension, global GDP is projected to grow 3.4% in 2025, consistent with expectations for 2024, and to moderate slightly to 3.2% in 2026 and 2027, according to the European Central Bank.

The upcoming years are expected to be shaped by an escalating tariff war between the U.S. and China, which will continue to realign global trade flows, disrupt supply chains, and increase economic uncertainty. In parallel, the ongoing war in Ukraine, following Russia's invasion, shows no sign of resolution, further weighing on geopolitical stability, energy markets, and European fiscal priorities.

3.2 Portugal today

Over the last years, the Portuguese economy has been marked by a gradual recovery from the COVID-19 shock, followed by periods of solid growth supported by EU recovery funds, resilient domestic consumption, and a rebound in tourism. However, this recovery has been

tempered by external shocks, including the energy price crisis triggered by the war in Ukraine and the tightening of monetary policy across the Eurozone in response to rising inflation. Recently, the uncertainty in trade policy has re-emerged, predominantly as consequence of the declaration of protectionist strategies by the US Administration.

Despite being affected by all the events previously mentioned, the Portuguese economy is expected to gradually grow in the mid-term. According to the Portuguese Public Finance Council, the economy is projected to grow 2.2% in 2025 (1.9% in 2024). For the years 2026 and 2027, a deceleration in the growth rate of real Gross Domestic Product (GDP) to 2.0% and 1.6%, respectively, is anticipated. In the medium term, economic activity is expected to align with the potential growth rate, estimated at 1.8%. Private consumption is expected to continue benefiting from growth in real wages while the projected acceleration in the implementation of the Recovery and Resilience Plan is set to boost investments.

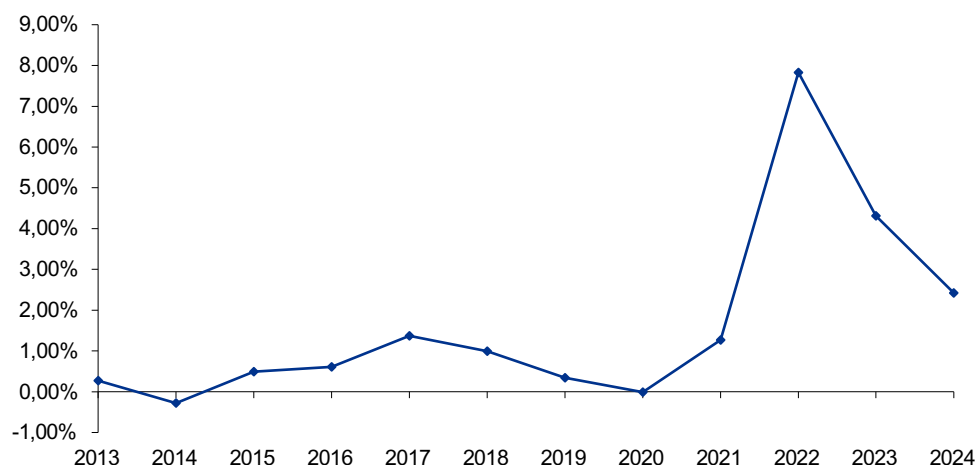


Figure 3.1: *Harmonized Index of Consumer Prices in Portugal, Instituto Nacional de Estatística (INE)*

Looking at the figure above, is possible to see inflation rate spiked in 2022 in consequence of what has already been said, reaching 7.83% according to the Portuguese Instituto Nacional de Estatística (INE). Additionally, according to studies developed by Banco de Portugal, it is expected that inflation rate decreases from 2.7% in 2024 to 2.3% in 2025 and gradually converging to 2.0% in the following years.

3.3 Industry Overview

The telecommunications sector has undergone significant phases of revenue expansion throughout the past century and more recently by the provision of mobile connectivity and broadband internet services. Conversely, the sector is perceived as gradually progressing,

characterized by modest revenue growth rates in the single digits, robust dividend yields, averaging approximately 4% globally. This shows the ability to implement cost reductions that enable profitability to increase at a rate slightly higher than the revenue growth. Telecoms are expected to keep cutting costs, keep capital expenditure under control, monetize their past investments, and use mergers and acquisitions (M&A) to drive value.

According to a comprehensive analysis conducted by PWC, the total revenue generated by the global telecommunications sector in the year 2023 amounted to USD 1.14 trillion, which corresponds to an increase of 4.3% when compared to the previous year. Furthermore, it is anticipated that the revenue generated by the industry will experience a steady growth trajectory, with an expected compound annual growth rate of 2.9% over the next five years, culminating in the year 2028 when the total revenues are projected to reach USD 1.4 trillion.

The expansion of the digital has been observed on a global scale, with Portugal being no exception, as the internet constitutes the most sought-after individual telecommunication service within the country. In 2024, the telecommunications industry yielded a revenue of EUR 4 billion, the predominant portion of which was sourced from service bundles that includes internet connectivity, showing an increase of 6.6%. Nonetheless, mobile telephony exhibited the highest level of penetration within Portugal, indicating the consumers inclination towards this service. According to the Autoridade Nacional de Comunicações (ANACOM), regulator authority in the telecommunications sector, in 2024, 93% of the households had some form of fixed electronic communications service.

	2024	2023	% Change
Bundled service revenues	2 245	2 107	6.6%
Customized mobile services	1 372	1 345	2.0%
Fixed service revenues	470	457	2.9%
Other retail revenues	1	1	23.9%
Total Revenue	4 088	3 910	4.6%

Table 3.1: Evolution of the main retail revenues of electronic communications (EUR thousand), ANACOM

According to Eurostat, over the preceding twelve months in Portugal, the average rate of change was 5.2% for bundled services and 9.2% for mobile telecommunications. Given that, the agreements of the three companies with the highest market shares in the electronic communications sector allowed for the potential annual adjustment of prices tied to the Consumer Price Index (CPI) of the preceding year. Following the high inflation of 2022 and 2023, providers independently raised service prices, creating a time lag between the rise in CPI and the subsequent increase in telecommunications prices.

According to ANACOM, at international level, the average rate of variation in telecommunications prices in Portugal during the last year exceeded the European Union by 7.4%, while Europe Union recorded -0.5%. Portugal achieved the third highest price variation among the EU27 member states.

The largest players in the sector include MEO, NOS and Vodafone, which account for nearly 98% of market share of service packages in 2024.

Service Providers	2024	2023	% Change
Meo	37.1%	37.5%	-0.4%
Nos Group	31.6%	31.2%	0.4%
Vodafone	28.9%	28.9%	0.0%
Grupo DIGI / NOWO	1.5%	1.6%	-0.1%
Other Providers	0.9%	0.8%	0.1%

Table 3.2: *Market share of main electronic communications retail revenues, ANACOM*

The sector in Portugal is one of the most mature and well-developed market, with high penetration of fixed and mobile broadband services. Looking at the figure above, it is possible to see the market share of each player based on the total revenue. MEO is the largest telecommunications company in Portugal, in 2024, with a market share of 37.1% showing a slightly decrease compared to 2023. On the other hand, NOS saw its market share increasing by 0.4%, ending 2024 with 31.6% of the market share. Nevertheless, NOS continues to hold the preeminent position in the sectors of Communications, Entertainment, and Media within Portugal.

The year of 2024 was marked by the entrance of a new competitor in the market, Digi Portugal, LDA. The company acquired the exclusive control of Cabonitel, S.A., who controls NOWO Communications S.A. Major players were required to adapt the increase in competition while simultaneously addressing the evolving demands of a growing client base within an expanding market.

4. Company Overview

4.1 Company Profile

NOS SGPS is a group within the communications and entertainment sector, established in 2013 through a merger involving Zon Multimédia and Optimus Telecomunicações, which were at that time regarded as two of the most significant entities within the Portuguese communications landscape. The announcement of the transaction occurred in 2012, subsequently transforming the telecommunications environment in Portugal. This merger facilitated the consolidation of two industry big players, engendering synergies between the pre-existing enterprises, thereby ultimately solidifying NOS's position as one of the principal contenders in the industry.

The group's operations can be categorized into three main core businesses: Telecommunications, Media and Entertainment (M&E), and its Joint Ventures. In the first one, NOS is the leader in mobile network quality and 5G coverage. It provides a cohesive and pioneering ecosystem of fixed and mobile solutions in television, internet, voice, entertainment and data, for both residential and business customers. In addition to this, NOS has been developing services to enhance its principal business operations, primarily through the establishment of "NOS alarmes" in collaboration with Securitas Portugal, the inception of an advertising enterprise known as "Playce," and the introduction of a range of insurance services.

Regarding M&E, NOS Cinemas holds the top position in the realm of domestic cinema exhibition as well as in showcasing alternative content in cinema. NOS Audiovisuais marks its presence strongly in the audiovisual distribution landscape, serving as the primary content distributor in the Portuguese market. Finally, the most relevant joint ventures are Sport TV, holding a 25% stake and strengthening its content portfolio, and holds 30% of ZAP Media, the largest Telco operator in Angola and Mozambique.

Recently, on 27 January of 2025, NOS SGPS, S.A. completed the acquisition of 100% of Claranet Portugal, S.A.'s share capital for EUR 152 million, expanding its capabilities in the rapidly growing technology sector.

In total, NOS is composed by 16 companies, which most of them are either 100% owned or have a significant participation in the subsidiary. By looking at the figure below, it is notorious the diversity of companies allowing synergies between them.

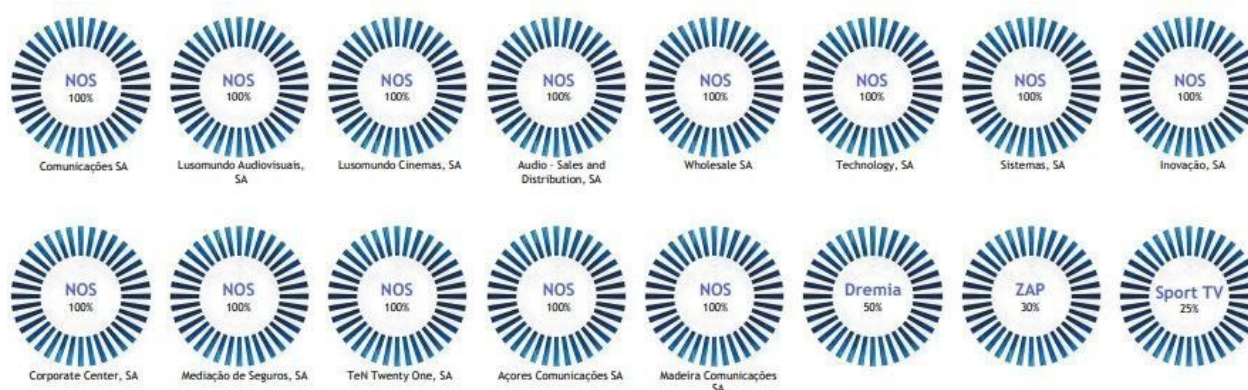


Figure 4.1: NOS Group Composition, Annual Report NOS (2024)

Despite the diversity of the group, in 2024, NOS registered a consolidated EBITDA of EUR 767.6 million, an increase of 7.1%, driven by revenue growth and proactive, company-wide cost base management. A big portion of the EBITDA comes from the Telco business, corresponding to EUR 720.9 million, an increase of 7.5%, while Audiovisuals and Cinema recorded an EBITDA of EUR 46.7 million, an increase of 1.0%.

4.2 Business Areas

As mentioned before, telecommunications is the core business of NOS, generating most of the company's revenue and serving both residential and business customers. NOS offers a full ecosystem of fixed and mobile services, including internet, voice, television, and data. In the residential market, it stands out for its innovation in entertainment services, such as NOS TV App, as well as new technologies. In addition, the company reinforced its leadership in network infrastructure. NOS achieved 99.6% of the national 5G population coverage and reached 5.7 million households with its FTTH network, covering 82.5% of those with gigabit connectivity.

In 2024, NOS served 6.2 million mobile clients, 1.58 million broadband clients, 1.68 million Pay TV clients, and 1.19 million convergent clients. According to ANACOM, NOS held a 30.2% market share in mobile, 33.7% in broadband, 36.1% in Pay TV, and 35% in convergent services.

In the other's businesses segments, NOS offers integrated digital solutions including cloud services, IoT, cybersecurity, and smart city projects. The company is expanding into new markets that complement its core telecom business, driving innovation and diversification. In 2022, NOS developed, in partnership with Securitas Portugal, an advanced security solution for homes and small businesses. Later in 2023, the company launched the new concept of NOS Smart Home seeking to transform the experience of living in a smart home. Lastly, NOS has

partnered with Playce, a digital advertising platform that merges advanced digital segmentation with the reach of television advertising. This initiative supports a more data-driven approach to marketing and reflects NOS’s innovation strategy.

The company kept investing in research and development in 2024, positioning itself as the leading private investor in innovation in Portugal. The NOS Hub 5G supported more than 600 innovation projects in various sectors, including healthcare, manufacturing, and smart cities. The acquisition of Claranet announced in 2025 will help expand its capabilities in enterprise technology and digital transformation reflecting Nos’s commitment to technological innovation.

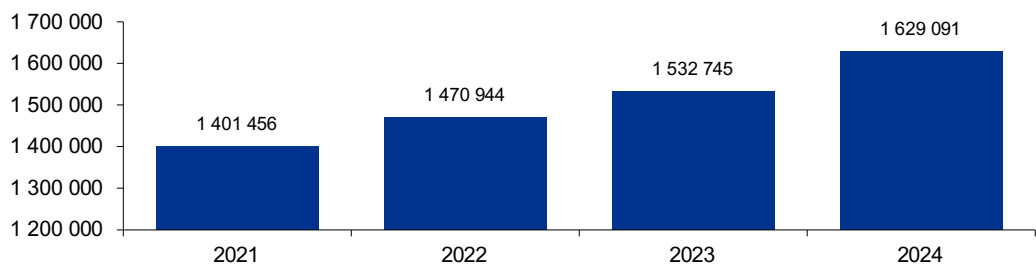


Figure 4.2: Evolution of Tecomunications revenue 2021-2024, Annual Report NOS (2024)

Regarding the Media & Entertainment segment, this domain can be divided into NOS Cinemas and NOS Audiovisuais, which includes the marketing of video productions, distribution of films, presentations in cinemas, as well as the procurement and negotiation of television rights for subscription services and video-on-demand (VOD) offerings.

NOS Cinemas is the national leader in cinema exhibition, operating 218 screens across Portugal. It has been a pioneer in integrating technologies such as IMAX, 4DX, XVision, and ATMOS. NOS Audiovisuais distributes films and series in Portugal and Portuguese-speaking African countries, securing rights from both independent producers and major international studios.

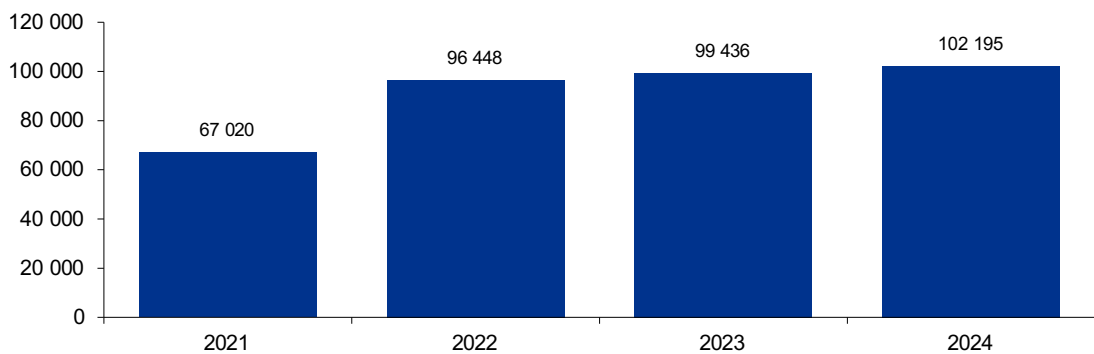


Figure 4.3: Evolution of M&E revenue 2021-2024, Annual Report NOS (2024)

The Media and Entertainment segment generated EUR 102.2 million in revenue and EUR 46.7 million in EBITDA in 2024.

In addition to wholly owned operations, NOS holds equity in several joint ventures:

- **Sport TV:** 25% ownership; leading Portuguese sports broadcaster with EUR 213.4 million in revenue.
- **ZAP:** 30% ownership; satellite and fiber TV operator in Angola and Mozambique with EUR 31.7 million in revenue.
- **Dreamia:** 50% ownership; manages TV channels such as Hollywood, Panda, and Biggs, with EUR 16.7 million in revenue.

4.3 Shareholder Structure

As of December 31, 2024, the total share capital of the group amounted to EUR 855 million comprehending a total of 515 161 380 ordinary shares. The shareholder structure can be seen as follows:

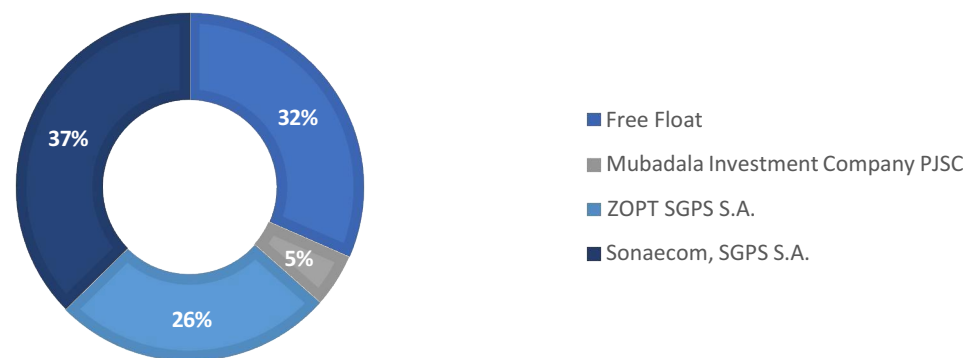


Figure 4.4: NOS's Shareholder Structure, Annual Report NOS (2024)

It is possible to see above that the majority of the company's shares are owned by Sonaecom, SGPS S.A. with 37% of total shares. On the other hand, 32% of total shares are publicly traded on the Euronext Lisbon Market, corresponding to the Free Float. ZOPT SGPS, S.A. is responsible for 26% of the company's shares but until December of 2022, ZOPT used to be a subsidiary of Sonae meaning that at one point the group held around 60% of NOS.

Finally, the last 5% is held by Mubadala Investment Company which is a state-owned global investment firm and a sovereign wealth fund of the Government of Abu Dhabi.

4.4 Financial Analysis

As already mentioned, 2024 represents a pleasant year in terms of revenue for NOS SGPS. This next section, I intend to analyze these results and evaluate their quality, and the possibility of translating them into growth, making it possible to have an overview of some key indicators.

	2021	2022	2023	2024
Telcommunications	1 401 456	1 470 944	1 532 745	1 629 091
Audiovisuals	67 020	96 448	99 436	102 195
Eliminations	-38 177	-46 385	-34 727	-35 023
Total	1 430 299	1 521 007	1 597 454	1 696 263

Table 4.1: NOS's revenue by segment (EUR thousand), Annual Report NOS (2024)

Firstly, looking at Table 4.1, it's notorious that since 2021 consolidated revenues have been showing a growing trend over the years. On average, the group's total revenues have increased each year by 6%. This is mainly due to the strong contribution of the Telecommunications and IT segment, recording a total EUR 1.629 million. The audiovisuals segment recorded a total amount of EUR 102.2 million, corresponding to an increase of 2.77% compared to last year.

Despite this evolution in revenues, it is also important to look at the profitability of the group. Looking at the evolution of EBITDA in Table 4.2, in 2024, this value increased 7.1% driven by revenue growth and proactive, company-wide cost base management.

Regarding operating costs, compared to the previous year, the group saw this value increasing by 5.43% to EUR 928.7 million mainly due to higher commercial activity and electricity costs, which reflects the increase of energy prices in Portugal. Concluding, in 2024, we can conclude that NOS slightly improved its operational efficiency.

	2021	2022	2023	2024
EBITDA	617 961	651 060	716 669	767 624
EBITDA Margin (%)	43.21%	42.80%	44.86%	45.25%

Table 4.2: NOS's EBITDA margin (EUR thousand), Annual Report NOS (2024)

Looking at the Net Income, the company registered a total amount of EUR 273.1 million in 2024 corresponding to an increase of 50.59%. This result was mainly due to the positive operational contribution and capital gains from the sale of a small tower portfolio to Cellnex.

	2021	2022	2023	2024
Net Income	143 853	224 444	181 334	273 074

Table 4.3: NOS's Net Income (2021-2024), Annual Report NOS (2024)

Regarding other profitability measures, such as the Return on Assets (ROA) and Return on Equity (ROE), we can conclude that these values show similar trends. In 2021, the ROA was

4.41% and increased to 8.13% in 2024 mainly driven by good results since the total assets have been quite constant in the last four years. Nevertheless, ROE also increased in line with ROA but on a greater scale, recording a 25.12% in 2024 which is a good sign for shareholders and investors.

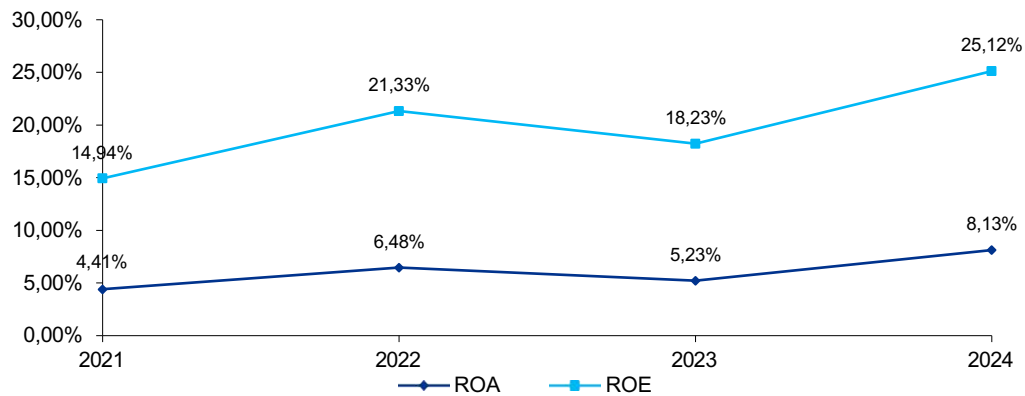


Figure 4.5: Return on Assets and Return on Equity (2021-2024), Annual Report NOS (2024)

Another aspect to take into consideration is the firm's capacity to liquidate responsibilities in a short period. Given this, the next figure illustrates the behavior of liquidity ratios over the years.

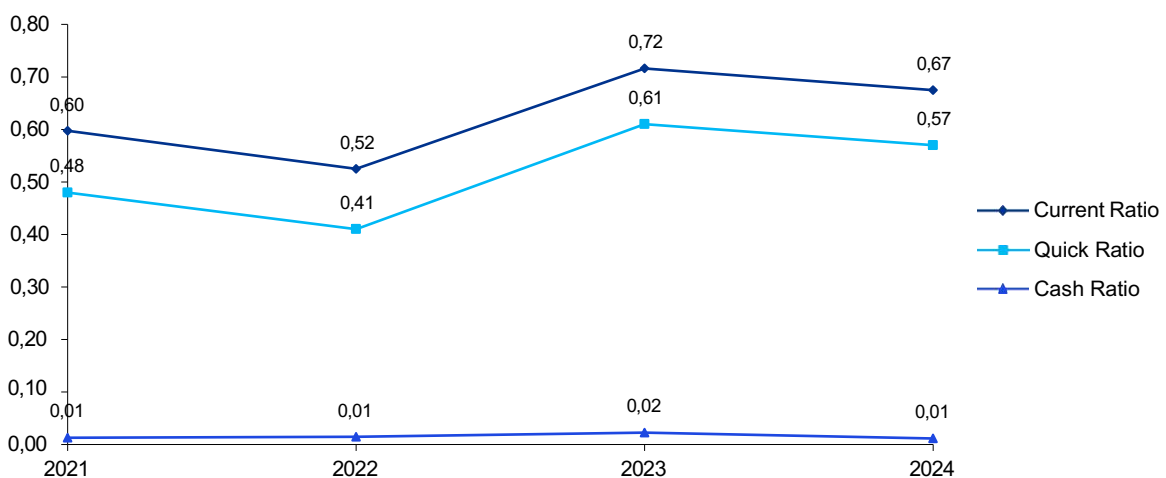


Figure 4.6: Cash, Current and Quick Ratio (2021-2024), Annual Report NOS (2024)

Looking at Figure 4.6, it is possible to conclude immediately that NOS's lacks sufficient current assets on its balance sheet to adequately address the short-term liabilities, particularly as evidenced by the fact that these ratios consistently remain significantly below 1.00 throughout the duration of the analysis.

The current ratio measures the capacity of the company to liquidate all its short-term liabilities with their current assets. Looking at the figure, NOS's current ratio has been lower than 1.00.

This is due to the high levels of CAPEX in previous years and the fact that investments were financed with short-term debt.

Similarly to the current ratio, quick ratio has the same behavior but on a smaller scale. This occurs because it quantifies liquidity with identical principles; nevertheless, it delves even further into what are classified as assets that possess the capacity to convert them into cash. This ratio shows values below 1.00 even though it is possible to see an increase since 2021 in this ratio.

Finally, the cash ratio measures the ability of NOS covering its current liabilities using only cash. Given the scale of business, this is very difficult to occur. Looking at the figure above, over time, NOS holds low levels of cash showing no ability to cover short term liabilities. On the other hand, when companies hold small amounts of cash, this indicates that money is being distributed to shareholders or being invested to generate higher future returns.

To conclude the financial analysis of previous years, we should focus on looking at the capital structure of NOS over the years. The next figure illustrates the evolution of debt and equity.

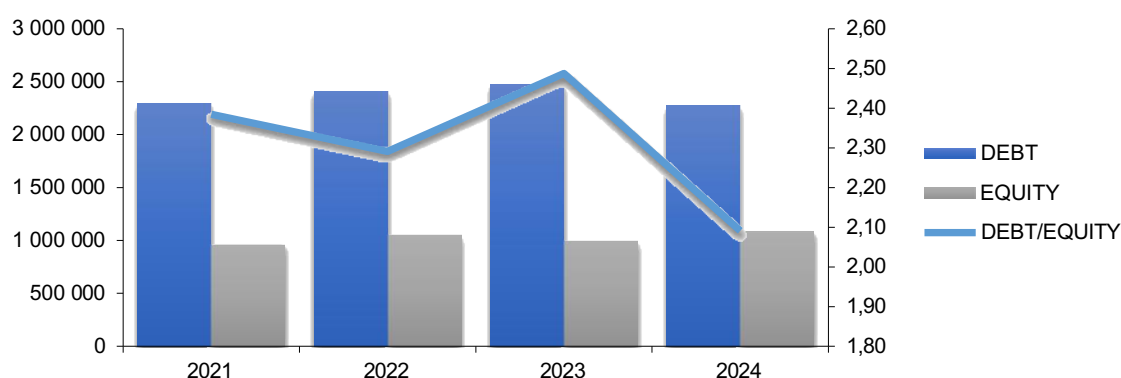


Figure 4.7: NOS's Capital Structure (2021-2024), Annual Report NOS (2024)

Concerning the level of debt, it is possible to see that until 2023 it kept a growing trend, ending the year with EUR 2 475 million. In 2024, this value decreased by 8.14% corresponding to EUR 2 273 million mainly due to payments of short-term loans. Regarding equity, the main driver of the increase in 2024, is the good results of the period that were incorporated in balance sheet. This value ascended to EUR 1 087 million, corresponding to an increase of 9.28% compared to the previous year. Lastly, the Debt-to-Equity ratio has been decreasing since 2021 even though NOS still presents high levels of debt. These levels are expected in this industry since investments in infrastructure and equipment are very expensive and capital-intensive.

4.5 Stock Performance

The figure below shows the performance of NOS's share price during the year 2024. At the end of the year, NOS's stock price closed at EUR 3.33, corresponding to an increase of 4.1% compared to the previous year. Compared to PSI20, which reflects of the top 20 stocks of Portugal, NOS outperformed by 4.4%. On the other hand, the company underperformed Euro Stoxx Telco Index by 12.2% influenced by the 32.83% appreciation of Deutsche Telekom.



Figure 4.8: Stock performance comparison between PSI20 and SXKP, Annual Report NOS (2024)

In addition, the company has kept a constant dividend per share over the years. According to the annual report of 2024, the company decided to distribute EUR 206 million in dividends to shareholders representing EUR 0.40 per share. This reinforces the company's commitment to a stable and predictable dividend policy, which may signal confidence in its long-term financial health and provide reassurance to income-focused investors

5. Valuation

This project aims to determine the fair value of NOS SGPS's, share price at the end of 2024, primarily through a valuation based on the Free Cash Flow to Firm (FCFF) model. Following the FCFF analysis, a sensitivity analysis will be conducted to assess how variations in the Weighted Average Cost of Capital (WACC) and the Terminal Growth Rate (TGR) affect the valuation. To further validate and complement the results, a Relative Valuation approach using market multiples will also be presented.

5.1 Assumptions

While developing the model to reach the fair value of the company, several assumptions were made and will be discussed in the following sections. Nevertheless, it is important to mention that the historical performance of the company used corresponds to the interval of 2021 to 2024, representing solid foundations for the forecast period, 2025 to 2029.

As mentioned in previous sections, in the beginning of 2025, NOS acquired 100% of Claranet Portugal. The company's main activity is the provision of information technology services, focusing mainly on cloud computing solutions. In 2024, the company presented a total of EUR 205 million in revenue and an EBITDA of EUR 15 million. The acquisition was fully completed in March with a view to strengthening the Group's position in the IT segment. For this project, I decided to make a robust valuation of Claranet Portugal since it's a new segment for the group. As expected, the company's accounts, in 2024, were not integrated into NOS SGPS accounts which led me to make a second valuation. However, the availability of financial information was very limited and because of that, I decided to build this valuation based on comparable firms, which were extracted from Refinitiv. The data used was related to components of FCFF disregarding other financial information. The present value of FCFF was calculated using NOS's WACC since I didn't have access to debt and equity values. Given this, I only used one WACC for this project. Further ahead in this section, the process of Claranet Portugal valuation will be explained in detail.

5.2 Discounted Cash Flow model

EBITDA

To provide a comprehensive valuation of NOS, it is necessary to project the expected EBITDA for its main business segments, considering both internal performance trends and external

market factors. Given this, I estimated separately EBITDA for each different segment as it can be seen in Table 5.1.

	2021	2022	2023	2024	2025F	2026F	2027F	2028F	2029F
Telecommunications	566 738	600 882	670 389	720 903	735 321	750 027	772 528	795 704	819 575
Audivisuals	51 223	50 178	46 280	46 721	47 848	49 046	50 317	51 663	53 088
Cinema	25 597	32 858	33 543	33 753	35 205	36 719	38 297	39 944	41 662
Audivisuals	25 626	17 320	12 737	12 968	12 643	12 327	12 019	11 719	11 426
Total	617 961	651 060	716 669	767 624	783 169	799 073	822 845	847 367	872 663

Table 5.1: NOS's EBITDA forecast by segment (EUR thousands), Own Sources

Telecom segment is the most significant segment in NOS activity leading to careful analysis and therefore EBITDA estimation. It is crucial to account for both industry dynamics and external macroeconomic risks. The entry of DIGI into Portuguese market is expected to increase price competition, leading to potential margin compression. DIGI as shown, in other cases, an aggressive strategy by offering mobile services at low cost gaining market share in Portugal. Additionally, it is important to consider the uncertainty of Trump's tariffs that started at the beginning of 2025. Even though, NOS's majority activity takes place in Portugal, these regulations may increase the cost of telecommunications equipment and consequently reduce margins.

Despite the projection of CAGR of 6.5% growth in the telecom market between 2025-2030 and considering all factors mentioned above I believe that NOS's EBITDA growth rate should be lower. It has been very difficult for NOS to expand its telecom segment to new countries due to strong competition and to reflect this, I adjusted the growth rate to the Portuguese market.

Considering all the factors mentioned above, I decided to apply different growth rates over the forecast horizon. To reflect DIGI's aggressive entrance in Portuguese market and the instability of Trump's administration, I assumed a growth rate of 2% in 2025 and 2026. For period 2027-2029, I assumed a rate of 3% which is lower than the CAGR of telecom market, after adjusting for Portuguese market.

To estimate Cinema's EBITDA, the growth rate disclosed in NOS's 2024 Annual Report was applied over the forecast period, corresponding to 4.30%, reflecting the recovery of sales to pre-pandemic levels. NOS carried out several sensitivity analyses considering variations in the projected number of tickets sold, the average revenue per ticket, and different levels of future investment expenditure.

Over the last years, Audiovisual's EBITDA has been gradually decreasing showing a shift focus to telecom and cinema developments. In addition, the increase in content costs and the change of consumer behavior have contributed to this decline. Given this, I assumed a growth rate of -2.5%, per year, reflecting NOS's strategic focus on telecom and cinema segments.

Revenue

After estimating NOS's EBITDA, it is possible to forecast the revenues based on the historical levels of EBITDA as % of revenues (Table 5.2). Consequently, I performed an average of EBITDA's weight on total revenues between 2021 and 2024, corresponding to 44.03% which was assumed for the subsequent years. After determining this rate, revenues can be forecasted by reversing the calculation, using the formula: $\text{Revenues}_n = \text{EBITDA}_n / 44.03\%$.

	2021	2022	2023	2024	2025F	2026F	2027F	2028F	2029F
Revenues NOS	1 430 299	1 521 007	1 597 454	1 696 263	1 778 651	1 814 770	1 868 758	1 924 450	1 981 899
% Growth		6.34%	5.03%	6.19%	4.86%	2.03%	2.97%	2.98%	2.99%
EBITDA NOS	617 961	651 060	716 669	767 624	783 169	799 073	822 845	847 367	872 663
% of Revenues	43.21%	42.80%	44.86%	45.25%	44.03%	44.03%	44.03%	44.03%	44.03%
Total Revenue	1 430 299	1 521 007	1 597 454	1 696 263	1 778 651	1 814 770	1 868 758	1 924 450	1 981 899

Table 5.2: NOS's revenue forecast (EUR thousands), Own Sources

Capital Expenditures

The last couple years were marked by an intense investment in 5G towers which went in accordance with NOS's strategy. In Portugal, 5G was released in 2021, two years after the release in the US, becoming one of the last countries to have access to 5G network. It is expected that 6G will be launched in 2030, eleven years after the release of 5G worldwide. Given this, I expect the same situation to happen again, and Portuguese companies might start implementing 6G only by the 2032.

I assumed Capex will decelerate until 2026 in the telecom segment after a period of high investments. For the years of 2026-2029, I projected capex to increase as it gears up for the development of 6G technology. According to NOS strategy, they plan to allocate a lower percentage of their segment revenue toward this initiative compared to the launch of 5G. They expect to repurpose the existing infrastructure used for 5G to support the development and deployment of 6G.

	2021	2022	2023	2024	2025F	2026F	2027F	2028F	2029F
Telecommunications	588 928	596 866	438 206	412 400	392 446	400 295	491 256	551 171	614 240
% of Revenue segment	42.73%	41.27%	28.99%	25.66%	23.50%	23.50%	28.00%	30.50%	33.00%
Audivisuals	20 893	28 948	36 638	33 845	43 338	44 423	45 574	46 793	48 084
% of Revenue segment	40.09%	38.78%	42.58%	38.08%	39.88%	39.88%	39.88%	39.88%	39.88%
Total of CAPEX	609 821	625 814	474 844	446 245	435 784	444 718	536 829	597 964	662 323

Table 5.3: Capex forecast (EUR thousand), Own Sources

For the calculations of this component, it was based on the average percentage of each business segment's revenue (see Table 5.3 above). As mentioned before, capex in telecom segment will gradually decrease, maintaining 23.50% of telecom revenue in 2025 and 2026. In 2027, I considered capex would be 28% of telecom revenues to better prepare for 6G technology. The weight of capex over telecom revenue, in the following years, I considered an increase of 2.5% in each year. Regarding the audiovisuals and cinema segment, it is expected to follow the same weight of revenue as the past years. Consequently, I used the average percentage weight of capex over audiovisuals revenue, which corresponds to 39.88%.

Depreciation and Amortization (D&A)

Due to high investments in infrastructures, the company has consequently high amounts of depreciation. As a telecommunications company, NOS primarily depreciates network infrastructures, IT systems and software, broadcasting equipment, logistics centers, etc. Given this, the forecasted depreciation expenses were based on the historical ratio of depreciation to total revenues, using an average of 30% (Table 5.4).

	2021	2022	2023	2024	2025F	2026F	2027F	2028F	2029F
Revenues NOS	1 430 299	1 521 007	1 597 454	1 696 263	1 778 651	1 814 770	1 868 758	1 924 450	1 981 899
D&A	419 467	480 887	483 638	498 842	536 385	547 278	563 559	580 354	597 678
% of Total Revenue	29,33%	31,62%	30,28%	29,41%	30,16%	30,16%	30,16%	30,16%	30,16%

Table 5.4: Depreciation & Amortization forecast (EUR thousand), Own Sources

Working Capital

The company publishes the data related to working capital, and it is possible to establish that in all periods the current assets are superior to the current liabilities. Given this, we can conclude

that the current assets are growing at a higher rate than current liabilities. The forecasts for this component were obtained through the historical average weight on the company revenues, as is possibly seen in Table 5.5.

	2021	2022	2023	2024	2025F	2026F	2027F	2028F	2029F
Total Revenues	1 430 299	1 521 007	1 597 454	1 696 263	1 778 651	1 814 770	1 868 758	1 924 450	1 981 899
Op Current Assets	403 156	423 269	450 111	444 525	528 906	539 647	555 700	572 261	589 345
% of revenues	28.19%	27.83%	28.18%	26.21%	29.74%	29.74%	29.74%	29.74%	29.74%
Op Current Liabilities	364 699	364 679	352 386	280 563	402 667	410 845	423 067	435 675	448 681
% of revenues	25.50%	23.98%	22.06%	16.54%	22.64%	22.64%	22.64%	22.64%	22.64%
Working Capital	38 457	58 590	97 725	163 962	126 238	128 802	132 634	136 586	140 664
Δ Working Capital	-141 594	20 133	39 135	66 237	-37 724	2 564	3 832	3 953	4 077

Table 5.5: *Working Capital forecast (EUR thousands), Own Sources*

Effective Tax Rate

NOS, like many other telecommunications companies in Europe, operates within a complex and stringent tax environment. The company has historically been subject to a corporate tax rate of 22.5%, a rate consistently applied in all financial forecasts. This rate reflects Portugal's corporate tax framework, which, while competitive compared to some European markets, still imposes significant fiscal responsibilities on large enterprises such as NOS.

Free Cash Flow to Firm (NOS)

Considering all the previous components in which the drivers of the FCFF's model are detailed, the projected FCFF between the period of 2025 and 2029 can be seen, in Table 5.6 below.

	2021	2022	2023	2024	2025F	2026F	2027F	2028F	2029F
EBITDA	617 961	651 060	716 669	767 624	783 169	799 073	822 845	847 367	872 663
D&A	-419 467	-480 887	-483 638	-498 842	-536 385	-547 278	-563 559	-580 354	-597 678
EBIT	198 494	170 173	233 031	268 782	246 784	251 796	259 286	267 013	274 984
Taxes	-44 661	-38 289	-52 432	-60 476	-55 526	-56 654	-58 339	-60 078	-61 871
NOPLAT	153 833	131 884	180 599	208 306	191 258	195 142	200 947	206 935	213 113
D&A	419 467	480 887	483 638	498 842	536 385	547 278	563 559	580 354	597 678
Operating Cash Flow	573 300	612 771	664 237	707 148	727 643	742 419	764 506	787 289	810 791
Capex	-609 821	-625 814	-474 844	-446 245	-435 784	-444 718	-536 829	-597 964	-662 323
ΔWC	141 594	-20 133	-39 135	-66 237	37 724	-2 564	-3 832	-3 953	-4 077
FCFF	105 073	-33 176	150 258	194 666	329 582	295 138	223 844	185 372	144 391

Table 5.6: *NOS's Free Cash Flow to Firm forecast (EUR thousand), Own Sources*

Free Cash Flow to Firm (Claranet)

As said in the beginning of this section, NOS acquired Claranet Portugal in 2025 reinforcing its position in IT segment. Because of that, I built a robust valuation based on comparable firms to calculate the future FCFF of Claranet. After reading Portuguese newspapers and consulting the company's website, it was only possible to obtain financial information of 2023 and 2024. In 2024, the company reported EUR 205 million in revenue, an increase of 15%, and an EBITDA of EUR 15.4 million. To estimate Claranet's EBITDA, a growth rate of 8% was assumed. While the IT services and consulting sector typically reports growth rates between 12% to 13%, these values represent global averages, which are challenging to replicate within the Portuguese market due to its reduced scale and maturity. Therefore, I believe that an EBITDA growth rate of 8% is suitable and reflects the effects mentioned above. Consequently, it was possible to compute revenue by applying the same formula used before for NOS. The EBITDA Margin corresponds to 7.72% which is the average of 2023 and 2024.

	2023	2024	2025F	2026F	2027F	2028F	2029F
Total Revenue	178 261	205 000	215 470	232 707	251 324	271 430	293 144
Claranet's EBITDA	14 128	15 400	16 632	17 963	19 400	20 952	22 628

Table 5.7: Claranet's Revenue and EBITDA forecast (EUR thousand), Own Sources

Regarding the selection of peers, it was extracted from Refinitiv Eikon a total of 380 companies in the IT Services and Consulting industry. However, to be more accurate, I decided to filter this sample by two conditions: revenue must be lower than 500 million and must have positive EBITDA. In the end, I removed outliers to achieve reasonable values. The final sample included 93 companies.

After selecting Claranet's peers, I extracted information to compute the FCFF components. The financial ratios extracted were Total Revenue to Working Capital and CAPEX to Revenue. I conducted an average for each variable and applied it to the estimated revenue. The value achieved for each financial ratio was 5.42% and 3.63%, respectively. Regarding depreciations, I assumed that it would be 5% of total revenues and a corporate tax rate of 22.50%. In Table 5.8, it is possible to see the forecast FCFF. Throughout this period, Claranet's FCFF is expected to gradually increase until 2029. Table 5.8 illustrates the FCFF.

	2023	2024	2025F	2026F	2027F	2028F	2029F
EBITDA	14 128	15 400	16 632	17 963	19 400	20 952	22 628
D&A	-8 913	-10 250	-10 773	-11 635	-12 566	-13 571	-14 657
EBIT	5 215	5 150	5 859	6 327	6 833	7 380	7 970
Taxes	-1 173	-1 159	-1 318	-1 424	-1 538	-1 661	-1 793
NOPLAT	4 042	3 991	4 540	4 904	5 296	5 720	6 177
D&A	8 913	10 250	10 773	11 635	12 566	13 571	14 657
Operating Cash Flow	12 955	14 241	15 314	16 539	17 862	19 291	20 834
Capex	-6 472	-7 442	-7 822	-8 448	-9 124	-9 854	-10 642
ΔWC	0	-4 934	-1 932	-3 181	-3 435	-3 710	-4 007
FCFF	6 483	1 865	5 560	4 910	5 303	5 727	6 185

Table 5.8: *Claranet's Free Cash Flow to Firm (EUR thousand), Own Sources*

Consolidated FCFF

After calculating the FCFF for NOS SGPS and Claranet, I consolidated the FCFF by summing each parameter of the companies to reach the final FCFF. By looking at Table 5.9, it is important to mention that FCFF of 2025 witnessed a significant drop due to Claranet's acquisition. To reflect this transaction, I simply subtracted EUR 145.4 million, which is the amount of the acquisition. Over the next years of the forecasted horizon, it is notable that there is a decrease in FCFF mainly due to Capex due to investments in new infrastructure to prepare for 6G technology.

	2021	2022	2023	2024	2025F	2026F	2027F	2028F	2029F
EBITDA	617 961	651 060	716 669	767 624	799 801	817 036	842 245	868 319	895 291
D&A	-419 467	-480 887	-483 638	-498 842	-547 159	-558 913	-576 125	-593 925	-612 336
EBIT	198 494	170 173	233 031	268 782	252 643	258 123	266 120	274 394	282 955
Taxes	-44 661	-38 289	-52 432	-60 476	-56 845	-58 078	-59 877	-61 739	-63 665
NOPLAT	153 833	131 884	180 599	208 306	195 798	200 045	206 243	212 655	219 290
D&A	419 467	480 887	483 638	498 842	547 159	558 913	576 125	593 925	612 336
Operating Cash Flow	573 300	612 771	664 237	707 148	742 957	758 958	782 368	806 580	831 626
Capex	-609 821	-625 814	-474 844	-446 245	-443 607	-453 166	-545 954	-607 819	-672 966
ΔWC	141 594	-20 133	-39 135	-66 237	35 792	-5 744	-7 267	-7 663	-8 084
FCFF	105 073	-33 176	150 258	194 666	189 742	300 048	229 147	191 099	150 576

Table 5.9: *Consolidated Free Cash Flow to Firm (EUR thousand), Own Sources*

Weighted Average Cost of Capital

According to the methodology mentioned in the Literature Review, the following sections describe the computation of the WACC's components.

Risk Free Rate and Country Risk Premium

As discussed earlier in the dissertation, the risk-free rate is commonly proxied by the yield on a 10-year government bond in mature markets. To increase accuracy, the daily average of the German 10-year Bund yield for 2024 was calculated, resulting in a risk-free rate of 2.34% used in this valuation.

The Country Risk Premium (CRP) is a variable that accounts for the supplementary risk an investor incurs when committing capital in a country with a higher level of macroeconomic risk factors. Given this, the CRP was computed through the difference between the risk-free rate and the daily average of the Portuguese 10-Year Government Bond Yield in 2024. Below is possible to see the outcome.

Risk Free Rate	2.34%
Portugal Government Bond	2.95%
Country Risk Premium	0.61%

Table 5.10: Country Risk Premium, Own Sources

Cost of Debt

The cost of debt was, firstly, computed based on the interest coverage ratio which then matches with the table on Damodaran website (see Annex F). Looking at Table 5.11, we can observe that over the last two years, NOS has had an ICR of around 3.20. However, according to NOS's annual report of 2024, the credit rating was reaffirmed at BBB which matches a credit spread of 1.2%. Although the ICR method gives a higher credit rating, taking into consideration the increase in interest rates I considered a credit rating of BBB for calculations.

	2021	2022	2023	2024
EBIT	198 494	170 173	233 031	268 782
Interest Expenses	37 712	37 010	72 862	80 711
Interest Coverage Ratio	5.26	4.60	3.20	3.33
Credit Rating	A2/A	A2/A	A3/A-	A3/A-
Credit Spread	0.85%	0.85%	0.95%	0.95%

Table 5.11: Interest Coverage Ratio calculations (EUR thousand), Own Sources

The formula used to compute the cost of debt can be seen below:

$$\text{Cost of debt} = \text{Risk free Rate} + \text{CRP} + \text{Credit Spread} = 2.34\% + 0.61\% + 1.20\% = 4.15\%$$

The tax rate used in the model corresponds to the statutory tax rate of 22.5%. Given this, the after-tax cost of debt which was used in WACC computation is 3.22%.

Capital Structure

The capital structure is a key component to estimate the WACC. NOS's capital structure has been fluctuating, with constant decreases and increases in the corresponding weights of debt and equity (market values). It seems NOS' capital structure has been shifting back to pre-pandemic levels, using more equity than debt, which makes sense as debt has been becoming more expensive with consistent interest rate hikes. The market value of equity was computed by multiplying the number of shares outstanding with the share price on the last day of trading of each year. Below it's possible to see the historical D/E ratio which served as a basis for the assumption.

In addition, between 2020 and 2022, balance sheet debt has peaked due to high capex investments in 5G leadership, which are expected to slow down. As such, I expect D/V ratio to come back to pre-2020 levels, as Capex investments will decrease, allowing NOS to generate more cashflow, and pay its debt back. Considering this, I assumed a D/E ratio of 0,90 in perpetuity.

	2021	2022	2023	2024
# Outstanding shares	515 161 380	515 161 380	515 161 380	515 161 380
Share price	3.36	3.78	3.17	3.33
Market value of Debt	1 576 609	1 637 634	1 733 969	1 548 230
Market value of Equity	1 733 003	1 949 371	1 633 076	1 715 487
D/E ratio	0.91	0.84	1.06	0.90

Table 5.12: NOS's Capital Structure and D/E ratio (EUR thousand), Own Sources

Market Risk Premium (MRP)

The MRP was extracted from Damodaran's website, where he presents a table that systematizes the bond ratings with default spreads for different countries. According to the author, MRP of Portugal corresponds to 5.93%.

Betas

To obtain the unlevered beta (β_u) for the telecommunications industry, I consulted the available data by Professor Aswath Damodaran on his website at New York University's Stern School of Business. According to this source, the unlevered beta (β_u) for telecom industry stands at 0.51.

After consulting the Unlevered Beta, it was necessary to compute the Levered Beta (β_l), which was computed according to the following equation:

$$\beta_l = \beta_u \times (1 + (1 - t) \times D/E) = 0.51 \times (1 + (1 - 22.5\%) \times 0.90) = 0.87$$

Cost of Equity

After estimating all parameters, it was possible to compute the cost of equity. Considering the CAPM, the cost of equity is as follows:

$$R_e = (r_f + CRP) + \beta_l \times MRP = (2.34\% + 0.61\%) + 0.87 \times 5.93\% = 8.08\%$$

WACC Computation

After computing all parameters, it is now possible to compute NOS's WACC used in this valuation. Nevertheless, it is important to mention that the weights of Debt and Equity used in calculations were derived from the Debt-to-Equity ratio mentioned before, corresponding to 47% and 53% respectively. Table 5.13 shows briefly the inputs to achieve a WACC of 5.78%.

WACC	
Weight of Debt	47.37%
Weight of Equity	52.63%
After-Tax Cost of Debt	3.22%
Cost of Equity	8.08%
Weighted Average Cost of Capital	5.78%

Table 5.13: WACC calculations, Own Sources

Terminal Growth Rate (TGR)

The terminal growth rate reflects the perpetual growth of the company's cash flow, which in this valuation was considered from 2029 onwards. For this component, it was taken into consideration the GDP growth rate of Portugal, which according to the Portuguese Public Finance Council in 2029 it will be 1.8%. This value can be explained by the increase in private consumption rates in Portugal and Eurozone. In addition, inflations rates have been gradually decreasing in last couple years and it is expected to stabilize over the next years.

As said in the Literature Review, the TGR cannot exceed the growth rate of the economy in which the firm operates. Therefore, I considered 1.8% as the TGR to be used in the valuation.

Enterprise Value

After estimating the FCFF between 2025 and 2029, the WACC and TGR, it is now possible to proceed with Enterprise Value of NOS.

To estimate this key metric, the present value of each yearly FCFF was determined using the WACC as the discount rate. Additionally, the terminal value was calculated according to

equation and then discounted to its present value. Finally, as described in equation, the Enterprise Value (EV) was obtained by adding all present values of the FCFF and the Terminal Value, resulting in EUR 3 817 million, as shown in Table 5.14.

	2025F	2026F	2027F	2028F	2029F	PERPETUITY
FCFF	189 742	300 048	229 147	191 099	150 576	
Terminal Value						3 785 131
Present Value	179 377	268 163	193 610	152 643		3 023 416
EV	3 817 209					

Table 5.14: Enterprise Value of NOS (EUR thousand), Own Sources

Equity Value

After calculating the Enterprise Value, it is now possible to reach the final goal of this project, which is to find the fair value of shares at the end of 2025. To do this, it is necessary to calculate the Equity Value which is given by adding the non-operating assets and subtracting non-equity claims.

For the calculations of non-operating assets, it included: Cash and Cash Equivalents, Investment Properties, investments in joint ventures and associates and Other non-current financial assets which amounts to EUR 56 639. Non-equity claims were assumed to be equivalent to the Market value of Debt which corresponds to EUR 1 548 million.

	EUR Thousand
EV	3 817 209
NOA	56 639
Market Value of Debt	1 548 230
EQV	2 325 618
Shares Outstanding	515 161
Fair Price	4.51

Table 5.15: Fair Value of NOS (EUR thousand), Own Sources

By looking at Table 5.15, it demonstrates that the fair value per share can be derived by dividing the Equity Value by the number of Outstanding shares. Based on this calculation, the resulting fair price is EUR 4.51 at the end of 2024, implying an upside of 35.57% relative to the market price of EUR 3.33 on the same date.

5.3 Sensitivity Analysis

The assumptions assumed in this section have a significant influence on the company's share fair value. Accordingly, a sensitivity analysis was performed to assess how variations in key variables affect the estimated share price. The chosen variables correspond to the WACC and

the TGR, as these are the most influential drivers of the DCF model. Table 5.16 below shows the impact on the share price each time one of the two variables changes by $\pm 0.25\%$.

TGR	WACC					
		5.28%	5.53%	5.78%	6.03%	6.28%
	1.30%	4.64	4.23	3.86	3.53	3.23
	1.55%	5.05	4.58	4.17	3.80	3.47
	1.80%	5.50	4.98	4.51	4.11	3.74
	2.05%	6.03	5.43	4.91	4.45	4.05
	2.30%	6.65	5.96	5.36	4.84	4.39

Table 5.16: Sensitivity Analysis (EUR), Own Sources

TGR	WACC					
		5.35%	5.60%	5.85%	6.10%	6.35%
	1.30%	2.88%	-6.33%	-14.52%	-21.84%	-28.44%
	1.55%	11.76%	1.43%	-7.69%	-15.79%	-23.05%
	1.80%	21.93%	10.23%	0.00%	-9.03%	-17.06%
	2.05%	33.66%	20.30%	8.72%	-1.41%	-10.36%
	2.30%	47.37%	31.92%	18.69%	7.22%	-2.81%

Table 5.17: Sensitivity Analysis (%), Own Sources

As illustrated in Table 5.16, fluctuations in WACC range from 5.28% to 6.28% and in the terminal growth rate from 1.30% to 2.30% yield fair values varying from EUR 3.23 to EUR 6.65 per share. The relative sensitivity, as delineated in Table 5.17, demonstrates that slight reductions in WACC or increases in the terminal growth rate significantly enhance the estimated fair value, with potential upsides surpassing 30%. Conversely, increases in WACC or lower terminal growth assumptions quickly drain value, resulting in potential downsides exceeding 20%.

These results demonstrate that the valuation is particularly more sensitive to the discount rate, underlining the importance of accurately estimating NOS's cost of capital, while TGR only has an impact on the Terminal Value.

5.4 Relative Valuation

As mentioned in the Literature Review, multiples valuation is mostly used as “back test” of the obtained results. It allows the analyst to verify and assess the DCF approach estimates, while reinforcing and complementing the overall valuation outcomes. For this part of the analysis, I selected three multiples to complement and cross-check my valuation: EV/Revenue, EV/EBITDA and Price-to-Earnings.

The first step is to identify a suitable peer group, meaning a set of companies with comparable characteristics and operational performance. As shown in Table 5.18 below, a peer group of 9

companies from the telecommunications industry was considered for this analysis. The data regarding multiples used was sourced from Refinitiv, with 2024 as the reference period.

Comparable Firms	Ratios	
Name	EV/EBITDA	P/E
Vodafone Group Limited Company	4.95x	10.46x
DEUTSCHE TELEKOM AG	6.26x	12.73x
Telefonica SA	4.62x	10.83x
Elisa Corporation	10.89x	18.74x
Orange SA	4.26x	11.79x
Cellnex Telekom	13.46x	0x
KPN	7.59x	17.58x
Telecom Italia	3.58x	60.56x
Swisscom AG	9.22x	16.95x
Average	7.20x	19.96x
Median	6.26x	14.84x
Deviation	3.38x	16.72x
Median + Deviation	9.64x	31.56x
Median - Deviation	2.88x	0.00x

Table 5.18: Comparable Firms, Refinitiv Eikon

To guarantee reliability, outliers were excluded whenever multiples were situated beyond the interval [Median – Deviation; Median + Deviation]. Consequently, two firms were excluded from the EV/EBITDA ratio analysis and two from the EV/EBITDA multiple assessment, culminating in peer group multiples of 5.78x and 11.45x, respectively.

	EV/EBITDA	P/E
Peer Group Multiple	5.78x	11.45x
EBITDA	767 624	
Net Income		273 074
Enterprise Value	4 439 060	
Equity Value	2 947 469	3 127 380
# Shares Outstanding	515 161	515 161
Implied Share Price	5.72	6.07
Upside / Downside potential	71.82%	82.30%

Table 5.19: Relative Valuation Results (EUR thousand), Own Sources

By looking at Table 5.19, the multiples selected demand different approaches to reach the implied share price, which was obtained by dividing the Equity Value for the outstanding shares. For the EV/EBITDA multiple, it was calculated by multiplying the peer group multiple by the EBITDA of NOS. Consequently, to reach the EQV, it was required to add NOA and deduct the debt value corresponding to an implied share price of EUR 5.72. On the other hand, the P/E ratio was calculated by multiplying the net income of NOS by the peer group multiple achieving an implied share price of EUR 6.07.

5.5 Valuation Results

Figure 5.20 summarizes the results, presenting NOS's fair value estimated through both a DCF valuation and a Relative valuation as of the end of 2025.

Valuation Method	Share Price (EUR)
FCFF	4.51
P/E	6.07
EV/EBITDA	5.72
Relative Valuation (average)	5.90
Market Value (31/12/2024)	3.33

Table 5.20: *Valuation Final Results, Own Sources*

The DCF valuation based on the FCFF method results in a share price estimate of EUR 4.51, representing an upside of 35.57% relative to the market price on 31/12/2024. This upside indicates that NOS's shares were undervalued at the end of the year, supporting a buy recommendation.

On the other hand, the results of the Relative Valuation approach were considerably different from the ones obtained in the DCF approach. Based on the P/E multiple, it suggests an upside of 82.30% compared to the market share price at the end of 2024, which confirms the recommendation of buy. Regarding the EV/EBITDA multiple, it is in line with the previous multiple, suggesting a share price of EUR 5.72, slightly lower than P/E, corresponding to an upside of 71.82%.

Overall, relative valuation presents higher share prices when compared to FCFF method. Despite its wide application, the relative valuation approach presents several limitations that must be considered, highlighting that FCFF is the most reliable method.

Its reliability depends on selecting truly comparable peers, which often differ in size, growth, or risk. As a result, selecting an unsuitable peer group can easily distort the company's final share valuation. Peer's multiples are derived from market prices, which may reflect market sentiment or sector-wide mispricing rather than fundamentals. As such, relative valuation is best seen as a market benchmark and should be complemented with intrinsic methods like DCF for a more robust assessment.

6. Conclusion

As stated in the Introduction of this project, the main goal was to determine the fair value of NOS SGPS at the end of 2024, which was obtained through a valuation method.

The literature review provided a theoretical foundation that supported all the concepts applied in the valuations using the methods mentioned above. Consequently, a structured framework was established to enhance comprehension of the organization's operational dynamics, as well as the entire external environment that can affect the valuation made.

The valuation of the company was performed using two complementary methodologies, Discounted Cash Flow (DCF) and Relative Valuation. The DCF methodology, utilizing the Free Cash Flow to Firm approach, was considered the most suitable due to NOS SGPS persistently stable capital structure throughout the years. Under this method, several assumptions were developed to project the company's financial performance, considering macroeconomic forecasts, industry trends, and company-specific challenges. These projections were then used to calculate the enterprise value by discounting the forecasted cash flow over a five-year period, along with the terminal value, at the company's weighted average cost of capital. Relative Valuation was employed as a complementary approach to benchmark NOS SGPS against comparable companies, providing additional context and validation for the DCF-derived valuation.

After performing the valuation, it was possible to obtain the fair value of the company. Through the DCF it was possible to obtain a share price of EUR 4.51, representing an upside potential of 35.57% compared with the price at the end of 2024. Regarding the Relative Valuation approach, the P/E multiple yielded an implied share price of EUR 6.07 while EV/EBITDA produced a share price of EUR 5.72.

Concluding, the valuation methods performed suggest that the share price of the company is undervalued with reference to 2024. Therefore, the final recommendation is to buy NOS SGPS shares.

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- Investing.com: <https://www.investing.com/>
- Portuguese Public Finance Council: <https://www.cfp.pt/en/cfp>
- Statista: <https://www.statista.com/>
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Reports

- NOS, SGPS 2024. *Annual Report 2024*
- NOS, SGPS 2023. *Annual Report 2023*
- NOS, SGPS 2022. *Annual Report 2022*

Annexes

1Annex A: Historical Balance Sheet (2021-2024), EUR thousand

Descrição	2021	2022	2023	2024
Assets				
Non-Current Assets				
Tangible Fixed Assets	1 041 100	1 107 052	1 093 584	1 092 809
Investment Properties	621	514	349	143
Intangible Assets	1 205 031	1 209 558	1 207 946	1 145 612
Charges for Contracts with Clients	162 118	160 594	158 406	159 671
Rights of Use	236 063	297 723	307 090	306 631
Investments in joint ventures and associates	18 091	38 961	29 440	37 650
Accounts Receivables - other	5 914	4 758	4 364	3 911
Recoverable taxes	149	369	51	149
Other non-current financial assets	2 074	5 248	6 028	9 762
Deferred tax assets	81 390	89 554	81 906	66 255
Derivative Financial Instruments	361	11 249	5 583	2 484
Total Non-Current Assets	2 752 912	2 925 580	2 894 747	2 825 077
Current Assets				
Inventories	44 014	67 223	48 215	41 236
Accounts Receivables - trade receivables	323 934	319 441	340 780	331 461
Customer contract assets	61 764	60 095	47 011	31 696
Accounts Receivables - other	18 392	16 632	38 594	58 833
Recoverable Taxes	2 538	6 906	37 050	5 979
Deferred Costs	44 878	52 232	44 425	55 610
Derivative Financial Instruments	61	0	0	811
Cash and equivalents	10 902	15 215	18 158	9 084
Total Current Assets	506 483	537 744	574 233	534 710
Total Assets	3 259 395	3 463 324	3 468 980	3 359 787
Liabilities				
Non-Current Liabilities				
Borrowings	1 275 541	1 210 181	1 496 900	1 306 276
Provisions	82 516	81 267	80 154	83 867
Accounts Payable - other	38 502	42 128	44 726	42 109
Taxes Payable	4 727	2 824	44 009	41 311
Derivative Financial Instruments	0	0	1 036	0
Deferred tax liabilities	47 326	50 125	5 498	6 803
Total Non-Current Liabilities	1 448 612	1 386 525	1 672 323	1 480 366
Current Liabilities				
Borrowings	301 068	427 453	237 069	241 954
Accounts Payable - suppliers	279 993	253 355	243 991	190 158
Accounts Payable - other	35 639	53 789	50 349	35 086
Taxes Payable	19 359	38 842	23 213	59 048
Accruals	175 784	212 430	203 943	219 496
Deferred Income	35 603	38 190	42 964	46 517
Derivative Financial Instruments	337	397	441	184
Total Current Liabilities	847 783	1 024 456	801 970	792 443
Total Liabilities	2 296 395	2 410 981	2 474 293	2 272 809
Equity				
Share Capital	5 152	855 168	855 168	855 168
Share Premium	854 219	4 202	4 202	4 202
Own Shares	-12 353	-15 968	-15 059	-15 002
Legal Reserve	1 030	1 030	4 374	4 692
Other Reserves	-35 586	-22 914	-41 578	-41 738
Net profit/loss	144 159	224 574	180 995	272 259
Equity Excluding non-controlling Interests	956 621	1 046 092	988 102	1 079 581
Non-controlling Interests	6 379	6 251	6 585	7 397
Total Equity	963 000	1 052 343	994 687	1 086 978
Total Equity & Liabilities	3 259 395	3 463 324	3 468 980	3 359 787

Annex B: Historical Income Statement (2021-2024), EUR thousand

Descrição	2021	2022	2023	2024
Revenue:				
Services Rendered	1 295 248	1 362 741	1 451 987	1 529 704
Sales	109 186	128 044	116 277	131 881
Other Income	25 865	30 222	29 190	34 678
	1 430 299	1 521 007	1 597 454	1 696 263
Costs, Losses and Gains:				
Payroll	82 036	85 898	90 206	92 167
Direct Costs	339 179	345 019	354 391	373 445
Cost of Products Sold	99 075	114 562	104 411	111 522
Marketing and advertising	28 621	34 748	38 960	34 220
Support Services	84 857	83 466	91 634	87 921
External Supplies and Services	137 220	155 238	153 529	168 154
Other operating costs / (gains)	518	798	1 056	1 263
Indirect Taxes	31 153	34 985	35 713	32 132
Provisions and Adjustments	9 679	15 233	10 885	27 815
Depreciation, amortisation and impairment losses	419 467	480 887	483 638	498 842
Restructuring costs	8 539	4 001	3 605	11 337
Losses / (gains) or disposal of assets, net	19	-100 423	-851	-35 181
Other non-recurring costs / (gains), net	1 279	-3 613	-33 935	-86 829
	1 241 642	1 250 799	1 333 242	1 316 808
Profit/ loss before losses / (gains) in subsidiaries, financial results and taxes:	188 657	270 208	264 212	379 455
Losses / (gains) in subsidiaries, net	-3 601	-22 123	-5 081	-8 258
Financing costs	34 118	31 578	65 293	70 017
Foreign exchange losses / (gains), net	-631	224	88	-322
Losses / (gains) on financial assets, net	12	103	217	-1 051
Other financial costs / (income), net	3 123	3 319	3 607	3 537
	33 021	13 101	64 124	63 923
Profit before Tax:	155 636	257 107	200 088	315 532
Income Tax	11 783	32 663	18 754	42 458
Net Consolidated profit/loss:	143 853	224 444	181 334	273 074

Annex C: Historical Cash Flow Statement (2021-2024), EUR thousand

Descrição	2021	2022	2023	2024
Operating activities				
Collections from clients	1 642 771	1 805 986	1 836 611	2 051 007
Payments to suppliers	-820 060	-953 908	-895 357	-973 694
Payments to employees	-113 771	-107 520	-118 306	-124 709
Receipts / (payments) relating to income taxes	-712	-27 613	-58 496	27 648
Other cash receipts / (payments) related with operating activities	-2 090	-74 523	-35 742	-76 897
Cash Flow from operating activities	706 138	642 422	728 710	903 355
Investing activities				
Cash receipts resulting from:	6 770	143 257	10 012	83 696
Financial investments	1 072	1 100	1 150	1 342
Alienation of discontinued operational unit	0	0	0	0
Tangible assets	1 976	136 317	1 562	71 532
Intangible assets	4	1	0	0
Interest and related income	3 718	5 839	7 300	10 822
Payments resulting from:	-678 771	-474 098	-452 250	-460 465
Financial investments	-1 469	-3 147	-1 629	-2 690
Borrowings	0	0	-129	0
Tangible assets	-271 223	-226 574	-231 616	-213 237
Intangible assets and contract costs	-406 079	-244 377	-218 876	-244 538
Cash Flow from investing activities	-672 001	-330 841	-442 238	-376 769
Financing activities				
Cash receipts resulting from:	288 000	478 693	700 822	332 203
Borrowings	288 000	478 693	700 200	332 200
Dividends			622	3
Payments resulting from:	-463 055	-792 374	-986 881	-858 553
Borrowings	-199 833	-520 533	-606 600	-507 300
Lease rentals (principal)	-78 270	-79 877	-105 796	-89 206
Interest and related expenses	-40 507	-42 520	-49 327	-78 828
Dividends	-142 376	-142 357	-219 987	-178 958
Acquisition of own shares	-2 069	-7 087	-5 171	-4 261
Cash Flow from financing activities	-175 055	-313 681	-286 059	-526 350
Change in Cash and Cash equivalents	-140 918	-2 100	413	236
Effect of exchange differences	74	9	-2	-2
Cash and Cash equivalents at the beginning of the year	151 015	10 170	8 079	8 490
Cash and Cash equivalents at the end of the period	10171	8079	8490	8724

Annex D: Operating Revenue per Business Area, EUR thousand

Descrição	2021	2022	2023	2024
Services Rendered				
Telecommunications	1 273 248	1 325 968	1 404 144	1 480 331
Audiovisuals	59 466	82 372	81 633	84 162
Eliminations	-37 466	-45 599	-33 790	-34 789
Group Total	1 295 248	1 362 741	1 451 987	1 529 704
Sales				
Telecommunications	103 467	115 823	100 161	115 209
Audiovisuals	5 829	12 404	16 393	16 877
Eliminations	-110	-183	-277	-205
Group Total	109 186	128 044	116 277	131 881
Other operating revenues				
Telecommunications	24 741	29 153	28 440	33 551
Audiovisuals	1 725	1 672	1 410	1 156
Eliminations	-601	-603	-660	-29
Group Total	25 865	30 222	29 190	34 678

Annex E: Breakdown of Operating Revenue, EUR thousand

Descrição	2021	2022	2023	2024
Services rendered	1 295 248	1 362 741	1 451 987	1 529 704
Communications service revenue	1 226 432	1 276 828	1 351 252	1 412 940
Revenue distribution and cinematographic exhibition	19 139	35 539	45 449	46 365
Advertising revenue	20 745	19 883	21 734	25 540
Production and distribution of content and channels	26 074	25 767	23 678	24 671
Others	2 858	4 724	9 874	20 188
Sales	109 186	128 044	116 277	131 881
Telco	103 404	115 771	100 117	115 157
Audiovisuals and cinema exhibition	5 782	12 273	16 160	16 724
Other operating revenues	25 865	30 222	29 190	34 678
Telco	24 741	29 150	28 440	33 551
Audiovisuals and cinema exhibition	1 124	1 072	750	1 127
Total operating revenues	1 430 299	1 521 007	1 597 454	1 696 263

For large non-financial service firms

<i>If interest coverage ratio is</i>			
<i>></i>	<i>≤ to</i>	<i>Rating is</i>	<i>Spread is</i>
-100000	0.199999	D2/D	19.00%
0.2	0.649999	C2/C	15.50%
0.65	0.799999	Ca2/CC	10.10%
0.8	1.249999	Caa/CCC	7.28%
1.25	1.499999	B3/B-	4.42%
1.5	1.749999	B2/B	3.00%
1.75	1.999999	B1/B+	2.61%
2	2.2499999	Ba2/BB	1.83%
2.25	2.49999	Ba1/BB+	1.55%
2.5	2.999999	Baa2/BBB	1.20%
3	4.249999	A3/A-	0.95%
4.25	5.499999	A2/A	0.85%
5.5	6.499999	A1/A+	0.77%
6.5	8.499999	Aa2/AA	0.60%
8.50	100000	Aaa/AAA	0.45%