UNIVERSITAT JAUME I

VALUATION OF MEDIASET ESPAÑA COMUNICACIÓN S.A.

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FC 1049 – End-of-degree project

Degree in Finance and Accounting

Course 2019/2020

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Abstract.

Value Investing is an investment strategy increasingly known and used by investors. Through this strategy, an investor can determine the theoretical value of a company through a thorough analysis of key aspects of the company, thus allowing investment decisions to be made based on the perception obtained.

The aim of this study is to determine a range of intrinsic values for Mediaset España Comunicación S.A., the main Spanish company producing and exhibiting audiovisual products. Through the analysis of the Spanish audiovisual industry and the particular situation and evolution of Mediaset, its strengths and weaknesses will be analysed in order to estimate its future evolution and, consequently, to estimate a set of values for this company by means of the Discounted Cash Flow model.

1. Introduction.

1.1. The concept of value over history.

Commonly confused with the concept of price, the concept of value has been studied throughout history. Although the development of theories associated with the concept of value is generally attributed to the 18th century with the birth of Classical economics, the value, as well as its possible origins, has been analyzed from certainly previous periods. MacIntryre (1988) explains how, in classical Greece, Aristotle maintained that the value of a good or service should reflect the amount of work involved in producing it. Seen in perspective, this Aristotelian perception of value is nothing more than a precursor vision of the labor theory of value. This perspective was supported by other later thinkers such as St. Augustine in the 4th century and, later, St. Albert the Great and St. Thomas Aquinas in the 13th century (Cachanosky, 1994)

During the 16th and 17th centuries, a new concept of value emerged in Spain with the so-called School of Salamanca. In contrast to the former generally accepted conception, this group of thinkers identified the origin of value of a good or service from a subjective point of view (Schumpeter, 1994). Belda (2016) describes how, according to Diego de Covarrubias, the value of an article depends on the estimation that men give to it. For his part, Domingo De Soto stated that it is the demand for the article that is responsible for assigning its value (Hernández, 2012). This way of identifying the value of a good or service coincides with the perception defended by the Austrian School from the 19th century onwards.

In the 18th century, the labor theory of value arose again with the birth of the Classical economics with additional considerations. According to this value approach, it is the factors of production that determine the value of a good, being labor the main factor. The return of this manner of understanding the value of an asset is mainly due to the dissertations of Adam Smith and David Ricardo. Smith (1776) considered two sources of value in a product according to the time horizon: in the short run the value (reflected in the price) would be determined by supply and demand, while in the long term the value of a product would be determined by the factors of production used in its creation. Ricardo (1817) complemented Smith's vision by taking into consideration two elements when determining the value of a good: the effort required by the factors of production to manufacture it and the scarcity. On his part, Marx (1867) complemented David Ricardo's consideration by stating that the value of a good is not determined by the effort necessary to produce it, but that the value of a good depends on the amount of socially necessary

labor to produce it. Socially necessary labor is, in synthesis, the average time required by companies to produce a given good.

In the late 19th and early 20th centuries, a group of economists developed a series of economic theories based on philosophical logic and human individualism. This school of thought is known as the Austrian School. The most renowned members of this school are Carl Menger, Ludwig von Mises and Fiedrich Hayek. The members of this school provided a definition of value that, although it draws from the considerations of the scholastics of the 16th and 17th centuries, has new elements to take into account. Menger (1871) was the first to move away from theories of value based on the application of production factors. In contrast, Menger established the value of a good as a direct consequence of the utility it provides to consumers, which was defended by his colleagues to a greater or lesser extent.

Thus, the disparity in the definition and sources of value is evident. On the one hand, classical and socialist-oriented economists conceive the value of a good as a direct consequence of the factors of production used in its creation. On the other hand, libertarian economists base the value of a good on a purely subjective aspect, where consumers attributing the value to goods.

1.2. The value as a central axis of Value Investing.

As has been seen, there has been and is a certain discrepancy in defining the value of a good. These value theories also define the concept of price and establish differences between the two concepts. Whereas the price of a good reflects to some degree the number of factors used in its creation and the utility that it provides to the consumer, the price of a good is usually more sensitive to exogenous fluctuations (e.g. macroeconomic factors, alterations in supply and demand, etc.). This difference between value and price is the core of the investment discipline known as Value Investing.

In a broad sense, Value Investing comprises an investment philosophy that seeks to acquire securities at a price below a certain theoretical value in order to obtain a long-term future return. This theoretical value is known as intrinsic value and reflects the real value that the financial instrument in question should have according to its characteristics. While in a broad sense Value Investing allows analysis of investments in other types of assets (e.g. real estate or commodities), corporate shares are the main asset to be considered due to their underlying characteristics. Furthermore, because of Value Investing's long-term perspective, combined with historical evidence of performance in a broad retrospective, stocks are the asset that best suits Value Investing's objectives.

Figure 1. Real returns on US stocks, gold, US dollar, US bonds and US Treasury Bills, 1802-2012.
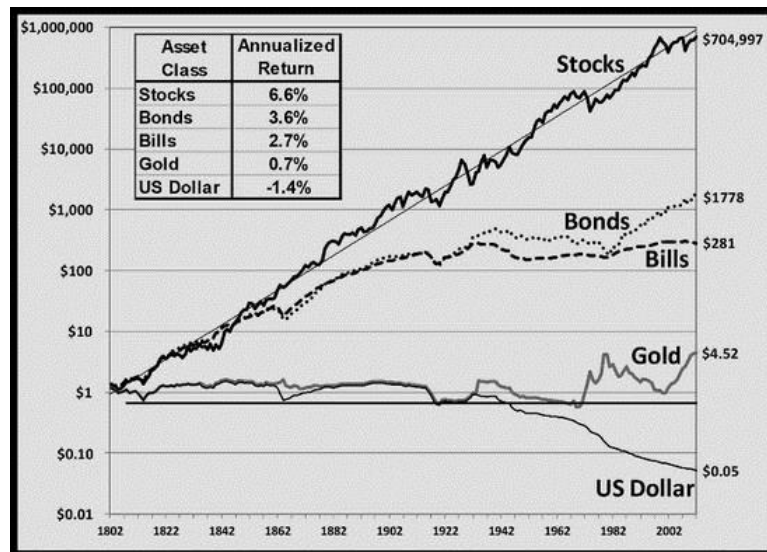
In order to find the intrinsic value of a company, it is essential to identify and analyze the possible value drivers it has. Rouse (2016) defines value drivers as the activities or capabilities of the company that add value to it. The correct identification and understanding of value drivers is essential for the investor. This allows two aspects of the company to be perceived: its capacity to grow and the risk involved in developing the company. The past, present and future trajectory of the company, as well as the risk it incurs, are the two most important factors in finding the intrinsic value of a company.

1.2.1. Beginnings of Value Investing.

The beginnings of Value Investing are relatively recent, being its beginnings attributed to the ideas reflected by Graham and Dodd (1934). These two investors laid the foundations of value investing, with caution and careful analysis of the situation of the assets being the most important principle to follow. Graham defined and highlighted the importance of the safety margin, which is simply the difference between the market price of an asset and its intrinsic value.

Similarly, Graham (1942) defined more precisely a series of aspects to be taken into account to becoming to what he called the intelligent investor:

- A stock is a share in the ownership of a company, so its underlying value differs from its market price.

- Markets develop cyclically. This fluctuates in periods of optimism and pessimism, so the investor must be able to sell in periods of optimism and buy in periods of pessimism.

- The future value of shares depends directly on their current price. Therefore, the higher the price, the lower the future return.

- The investor cannot completely eliminate the risk of making a mistake in an investment. Consequently, special attention must be paid to the safety margins of the stock to minimize the probability of error.

- Investor discipline and temperance is crucial for making rational investments away from the general investment climate.

In this work, Graham infers on the importance of understanding the oscillatory behavior of markets in order to know how to take profit from it. To this end, he creates a fictional character called Mr. Market, who will personify the behavior of the markets. Mr. Market is an unstable person who is always willing to trade shares at a certain price. Sometimes, Mr. Market is full of optimism, so he is willing to trade stocks at a high price due to his bullish perception. Conversely, there are days when Mr. Market goes into a depression, so he trades stocks at very low prices due to his pessimism. According to this parable, the investor must sell him stocks when he is in a good mood and buy them when he is overcome by pessimism. By means of this strategy it will be possible to obtain a good profitability buying cheap and selling expensive whenever there is confidence in the intrinsic value of the acquired values.

1.2.2. Conceptual and analytical development of Value Investing.

Graham's teachings were a before and after in the world of investment. As a result of the length and clarity of the arguments set out in his manuals, a large number of people began to apply and defend his guidelines. Among them, the most remarkable investor is Warren Buffet. Considered one of the most successful investors of all time, Buffet took Graham's lessons and perfected them to this day. Faulkenberry (2020) summarizes his strategy in the following points:

- Remain confident in the investment decisions made.
- Invest in what you know.
- Invest as if you wanted to buy the whole company.
- Invest in companies with competitive advantages.
- Find quality companies (good management, healthy accounts, dynamism, etc.)
- Always having money available, not investing all of it.

- Establish a margin of security between the price of the share and its intrinsic value.
- Be patient. Value Investing is oriented to the long term.

Lynch and Rothchild (2000) adopted the Value strategy after becoming disenchanted with quantitative investment analysis methods based mostly on the prediction of economic factors. In line with Buffet, Lynch believes that the successful investor is one who invests in what he or she knows, so knowledge of the business environment is crucial if one is to find its intrinsic value effectively. As both Graham and Buffet contend, Lynch focuses its investment strategy on the long term. Lynch also divides companies into six categories based on their characteristics: low-growth companies, high-growth companies, cyclical companies, stable companies, recoverable companies (underperforming companies that can grow with the right patterns), and finally, hidden asset companies (e.g., a patent about to be approved).

Table 1. Peter Lynch performance in Fidelity Magellan Fund, 1977-1990.

End Dec.	Magellan	S&P 500	Spread
1977	14.5%	-11.5%	26.0%
1978	31.7%	1.1%	30.6%
1979	51.7%	12.3%	39.4%
1980	69.9%	25.8%	44.1%
1981	16.5%	-9.7%	26.2%
1982	48.1%	14.8%	33.3%
1983	38.6%	17.3%	21.3%
1984	2.0%	1.4%	0.6%
1985	43.1%	26.3%	16.8%
1986	23.7%	14.6%	9.1%
1987	1.0%	2.0%	-1.0%
1988	22.8%	12.4%	10.4%
1989	34.6%	27.3%	7.3%
1990	-4.5%	-6.6%	-2.0%
Average Spread			**17.5%**

Source: Morss (2015)

In terms of quantitative analysis, Lynch focuses on certain key indicators in order to know the status of the company's fundamentals as accurately as possible. Some of the indicators Lynch recommends are the Price-to-Earnings Ratio (Market value per share/Earnings per share) or the Debt-to-Capitalization Ratio (Total Debt/Total Debt + Shareholder's Equity).

Following the idea of paying as less as possible for shares in companies with great potential, Greenblatt (2005) uses a measure that he defines as a 'magic formula'. This

formula is really the arrangement of the result of two ratios in a ranking, being the companies better positioned in the ranking the most suitable to invest:

- The first ratio used measures the return on capital as a result of dividing the Earnings Before Interest and Taxes (EBIT) by the Net Tangible Assets. With this formula, Greenblatt seeks to know the return on working capital required by the company to develop its activity.
- The second ratio shows the profit-price ratio of a share as the ratio between EBIT and Enterprise Value (the summation of the company's market capitalization and Total Debt minus Cash).

Figure 2. Greenblatt performance vs. Financial Times Stock Exchange, 2010-2018.

Source: Hall (2018)

1.2.3. The importance of the company's environment in Value Investing.

As we have seen, the Value Investing strategy goes beyond the merely quantitative aspect. This strategy has a great impact on the knowledge of the environment in which the company resides. With this, it seeks to understand how the environment influences the potential growth of the company, as well as helping to identify weaknesses. It is therefore necessary to carry out a good analysis of factors directly related to the company, such as the industry or industries in which the company operates or the general economy of the region or regions in which the company operates.

Damodaran (2015) highlights the importance of knowing whether the development of the company corresponds to a cyclical pattern linked to the behaviour of the economy. It is

important to analyse this coincidence in order to act accordingly. In order to operate correctly with companies of a cyclical nature, Damodaran proposes carrying out fundamental analyses with average values of the key variables to the detriment of the latest available data. Another option is to operate with data from years that are in the middle of the cycle. This second option is more effective but it is more difficult to determine that central phase of the cycle. With these methods, the investor is assured of the partial elimination of cyclicality in the data to be analyzed.

For his part, Dorsey (2008) looks for companies that have a sustainable competitive advantage in the long term, calling these advantages "defensive pits". Dorsey situates the origin of defensive pits in four sources: intangible assets, cost leadership, the replacement costs of their assets and the network effect generated by their goods or services. Having identified the defensive pits, Dorsey proposes to incorporate what has been deduced in the fundamental analysis of the company.

More comprehensively, Palepu *et al.* (1996) consider the analysis of the company's competitive strategies as a fundamental preliminary step to the analysis of financial statements. For that purpose, Palepu recommends researching the economic system in which the firm operates and identifying its revenue and risk generators. The first step involves analyzing the company's situation in the industry, its characteristics and current and potential competition within the industry. According to Palepu, a good tool to be able to analyze the business environment is the analysis of Porter's Five Forces (1980).

Figure 3. Porter's Five Forces.

Source: Ashrafi (2015)

Porter's Five Forces allows to carry out a detailed analysis of the situation of a business and industry from a multilateral perspective. This tool allows the analysis of competition (rivalry, threat of new companies and substitute products) and the bargaining power of key elements in the company's operation (bargaining power of customers and suppliers).

Once the company's environment has been analysed, it must be ascertained whether the company maintains competitive advantages over its competitors and whether these can be maintained over time. Once everything has been determined, the results must be taken into account in order to allocate adequate growth potential and risk to the achievement of intrinsic value.

1.3. Models for estimating the intrinsic value of a firm.

As explained in the previous sections, much of the determination of the intrinsic value of a company lies in the value judgement made by the investor. This judgement must be duly supported by the information the investor has gathered in order to be able to correctly understand the potential of the company, the risk it incurs and, therefore, its intrinsic value. However, although strong subjectivity prevails in this investment strategy, various analytical models have been developed in order to find the intrinsic value of a company or share in a more methodical way.

These models generally work by projecting a key variable of the company in the future, updated at a given rate. This discount rate is key, since it represents the company's risk-return ratio. Mercer and Harms (2008) establish six key elements that must be present in any valuation model by using the acronym G.R.A.P.E.S:

- **Growth and time:** the investor must take into account the factors related to the company's growth at both macro and micro levels and its evolution over time.
- **Risk/Reward:** the investor must assume the growing risk-return ratio for decision-making.
- **Alternative investments:** there are many investments available, as well as different ways of valuing the same investment.
- **Present value:** all future-oriented investments have a present value. This present value is the main indicator of feasibility and comparability between investments.
- **Expectations:** the present value is a function of the expected future values of the selected variable(s).
- **Sanity, rationality and consistency:** based on all the information the investor has obtained, conclusions should be sensible, rational and consistent.

1.3.1. Discounted Cash Flow (DFC) model.

Among the wide variety of valuation models used by investors, there is one prevailing model in the valuation of companies: the Discounted Cash Flow model. In general terms, the DFC model is composed of a number of factors:

- There is a stream of estimated future results, which are discounted to find the intrinsic value of the company.
- These results are discounted using a specific discount rate. This discount rate must be the result of analysing the company's growth, profitability and risk factors.
- The result of the model is the aggregate of two discounting time phases:
    - **The interim value:** this is the estimate of future flows in the coming years over a given period (normally between 3 and 5 years).
    - **The terminal value:** under the assumption that the company will continue to operate in the years following the estimate of the intermediate value, a value corresponding to this continuity is estimated. This value includes an element known as the perpetuity rate, which reflects the sustained constant growth of the variables analysed.

In view of the basic elements of this valuation model, the next step is to explain in more detail the elements that make it up. However, it should be stressed beforehand that the parameters used in this model are not the result of homogeneous operations, since each investor can determine future payment flows, a level of risk and a perpetual growth rate according to his preferences and prior observations. In this paper, we will use as a reference the operations proposed by Wahlen *et al.* (2011). In this valuation model, in order to find the necessary estimated elements, it is necessary to estimate the necessary balance sheet and profit and loss items. To do this, the simplest way is to see the growth of these items in recent years and apply this growth rate to the value of the last year. Of course, there are other ways of estimating items, such as relating one item to another.

The DFC is a valuation model in which the intrinsic value of the company is obtained by discounting estimated future cash flows. Cash Flows are a good measure of a company's profitability, as they represent the company's ability to generate revenue. In this valuation model, CF are estimated by obtaining the future Free Cash Flows (Operating Cash Flow - Capital Expenditures). The discount rate to be applied is estimated by means of the Weighted Average Cost of Capital (WACC) and the rate of perpetuity can be determined by the general growth of the economy or by the growth expectations of the company's environment.

Figure 4. Discounted Cash Flow model.

$$V_0 = \left(\frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \frac{CF_3}{(1+r)^3} + \cdots + \frac{CF_f}{(1+r)^f} \right) + \left(\frac{CF_{f+1}/(r-g)}{(1+r)^f} \right)$$

Present Value of Interim Cash Flows (PVICF) Present Value of the Terminal Value (PVTV)

Source: Mercer y Harms (2008)

In the figure 4, *r* represents the discount rate, while *g* represents the growth perpetuity rate. On the other hand, *f* represents the time horizon estimated in the forecasting process.

1.4. Objectives.

The aim of this paper is to analyse the communication and audiovisual production group Mediaset España Comunicación S.A. in order to find the intrinsic value of this company. Through a multifactorial analysis of Mediaset's situation in the audiovisual industry and an extensive analysis of the company's financial performance, a set of intrinsic values for Mediaset will be found, taking into account the possible scenarios that can be developed in the future.

2. Methodology.

This section will show all the analytical tools used in the study in order to find the intrinsic value of Mediaset España Comunicación S.A.

2.1. F-Score Piotroski.

Piotroski (2000) proposes a formula composed of 9 indicators in order to know the financial strength of a company. Each variable in the formula responds to a question, giving a 1 if the variable's approach is met and a 0 if it is not. Consequently, this formula can give a value between 0 and 9. Based on the result obtained by applying this formula, a company with a low score is a company whose financial situation is weak, and the stronger the result obtained, the stronger the company is.

The formula in question is as follows:

$$F\_SCORE = F\_ROA + F\_\Delta ROA + F\_CFO + F\_ACCRUAL + F\_\Delta MARGIN + F\_\Delta TURN \\ + F\_\Delta LEVER + F\_\Delta LIQUID + EQ\_OFFER$$

Being its variables:

- **F_SCORE** represents the total score obtained after the analysis of the variables included in the formula

- **F_ROA** questions whether the ROA is positive in the current year.
- **F_ ΔROA** questions if the ROA of the current year is higher than the ROA of the previous year.
- **F_CFO** questions if the Cash Flow of the current year is positive.
- **F_ACCRUAL** asks if the Operating Cash Flow for the current year is greater than the Net Income excluding Extraordinary items.
- **F_ΔMARGIN** questions whether the Gross margin of the current year is greater than that of the previous year.
- **F_ΔTURN** questions whether the asset turnover of the current year is greater than that of the previous year.
- **F_ΔLEVER** questions whether the current year's leverage is lower than last year's.
- **F_ΔLIQUID** questions whether the Current ratio is higher in the current year than in the previous year.
- **EQ_OFFER** takes value 1 if the company has not issued any shares during the last year and 0 otherwise.

As can be seen, there are several variables that are not on the balance sheet, so they must be found on the basis of the accounting information provided by each company. These variables are the Return On Assets (ROA):

$$ROA = \frac{Operating\ Income}{Total\ assets}$$

The Operating Cash Flow:

$$Operating\ Cash\ Flow = EBIT + Amortization - Taxes$$

The Gross Margin:

$$Gross\ Margin = \frac{Total\ Sales - Cost\ Of\ Goods\ Sold}{Total\ Sales}$$

The Current Ratio:

$$Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities}$$

The Leverage, which has been measured in this study by the Debt-to-Capitalization Ratio:

$$Total\ Debt\ to\ capitalization = \frac{SD + LD}{DS + LD + SE}$$

Being:

- **SD**: Short term Debt
- **LD**: Long term Debt
- **SE**: Shareholder's Equity

Finally, the Assets Turnover Ratio:

$$Assets\ Turnover\ Ratio = \frac{Net\ Sales}{Average\ Total\ Sales}$$

By carrying out all these calculations and obtaining the score corresponding to each indicator, it will be possible to know the situation and evolution of the company from three approaches: profitability (positive ROA, positive Cash Flow, growth in ROA and Operating Cash Flow greater than Net Income), financial performance (Leverage, growth in the Current Ratio and non-issue of shares) and operating efficiency (increase in the Gross Margin and growth in Assets Turnover).

2.2. Stock exchange ratios

The stock exchange ratios make up a set of tools that allow the company's financial situation to be known, as well as its valuation in a company that is listed on the stock exchange. Their main function is to ascertain the perception of the company analysed by investors, and to determine whether the company is over or undervalued (Laínez and Cuéllar, 2002).

One of the most widely used stock exchange ratios is the Price Earnings Ratio (PER). This ratio measures the relationship between the market price of a company's stock and its Earnings Per Share (EPS). The EPS represents the profit corresponding to a company's share.

$$PER = \frac{Market\ value\ of\ a\ share}{Earnings\ Per\ Share}$$

$$EPS = \frac{Net\ Income}{Number\ of\ shares\ outstanding}$$

Another ratio widely used in company analysis is the Price-to-Book Ratio, which shows the relationship between the market price of a share and its book value.

$$Price - to - Book\ Ratio = \frac{Market\ value\ of\ a\ share}{Book\ value\ of\ a\ share}$$

Normally the book value of a share issue is recorded in the corresponding reports. However, if this information is not available, an alternative way to obtain the Share's Book Price would be:

$$Book\ Price\ of\ a\ share = \frac{Shareholder's\ Equity}{Number\ of\ shares\ outstanding}$$

2.3. Weighted Average Cost of Capital (WACC).

WACC is a measure of the required profitability and cost of financing incurred by a company when making investments (Fernandez, 2016). By determining the WACC, a firm can estimate and weight the cost of raising capital from two sources: the firm's own funds and borrowing. This allows the company to know if its investments are profitable, which is why this indicator is widely used in project valuation. Analytically, the formula is as follows:

$$WACC = K_e \frac{E}{E+D} + K_d(1+T)\frac{D}{E+D}$$

Where:

- **K_e** represents the profitability demanded by the shareholders. To obtain this return, the Capital Asset Pricing Model (CAPM) is generally used.
- **E** represents the capital contributed by the shareholders.
- **D** represents the amount of debt incurred by the company.
- **K_d** represents the cost of raising capital through debt.
- **(1-T)** represents the tax shield, reflecting the lower tax impact on EBIT of paying interest on debt.

K_e is obtained by using the CAPM. The CAPM is a theoretical-practical model for valuing financial assets which makes it possible to estimate the yield required by a given financial asset on the basis of three factors:

- The return on a risk-free asset (R_f)
- Market performance (R_M)
- The volatility of the asset in question in relation to the reference index (β)

Analytically, the equation that determines the expected return on the asset would be as follows:

$$K_e = R_f + \beta_i(R_M - R_f)$$

In applying the CAPM in this study, RM represents the performance of the market in which the asset is traded. R_f indicates the return of a risk-free asset. Finally, βi represents the volatility of asset i relative to the market.

Obtaining E has been simple, as it is the Shareholder's equity of the balance sheet. D represents the amount of debt incurred by the company. In this study, the company's liabilities have been taken as the basis for obtaining the debt by deducting Provisions and Commercial Creditors, since these liabilities do not represent a debt payment. Therefore:

$$Total\ Debt = Total\ Liabilities - Commercial\ Creditors - Provisions$$

To calculate the tax shield, it is necessary to know the payment made by the company for "T" percentage of taxes. To find it, what has been done is to see the percentage difference between the EBIT and the Net Income. Analytically:

$$T = 1 - \left(\frac{Net\ Income}{EBIT}\right)$$

In order to avoid extreme values, the values of T have been delimited, so that $0 \leq T \leq 1$. Obtained T, the tax shield is (1-T).

Finally, to calculate K_d it is necessary to divide the financing cost between the average debt of period t and period t-1. The average debt is calculated as follows:

$$\overline{D}_t = \frac{D_t + D_{t-1}}{2}$$

Subsequently, K_d is calculated as follows:

$$K_d = \frac{Financing\ cost}{\overline{D}_t}$$

In this study, the parameters needed to calculate the WACC will be obtained through three routes: First, R_M and R_f will be obtained from the report of Fernandez *et al.* (2019). Volatility will be obtained by treating Mediaset and IBEX 35 quotes recorded in Investing (2020a) and Investing (2020b). Finally, the remaining variables will be obtained from the accounting and financial information provided by the Sistema de Análisis de Balances Ibéricos (2020).

2.4. Free Cash Flow.

Free Cash Flow (FCF) represents the cash flows that a company is able to generate after discounting the cash outflows incurred by the company as a result of maintaining its operating assets. Although there is no uniform method for calculating FCFs, one of the most common ways to find FCFs is to obtain the Cash Flow from Operating Activities and subtract the Capital Expenditure (CapEx). In this study, both Cash Flow from operating activities and FCFs has been obtained using the formulas proposed by the Corporate Finance Institute (2020a) and Corporate Finance Institute (2020b):

	Net Income
+	Amortizations and Depreciations
+	Corporate Tax
+	Financing Expenses
-	Cash and Equivalents
=	**Cash Flow from operating activities**

Once the Cash Flow from operating activities has been obtained, the next step is to calculate the FCF:

$$Free\ Cash\ Flow = CF\ from\ Operating\ Activities - CapEx - IntEx$$

Being:

$$CapEx = Property, Plant\ and\ Equipment_t - Property, Pant\ and\ Equipment_{t-1}$$

In this study, in order to obtain more precise FCFs, Intangible Expenses (IntEx) have also been added, as a large part of the non-current assets are under this balance sheet item.

$$IntEx = Intangible\ Assets_t - Intangible\ Assets_{t-1}$$

2.5. Forecasted Free Cash Flow.

In order to find the intrinsic value of the company using the DCF model, it is necessary to estimate the future FCFs. To do this, the first step is to know the average rate of change of the FCF in recent years. This rate of change will serve as the growth rate of the estimated future accounting items needed to obtain the future FCFs. The growth of the necessary items must be estimated since, according to Wahlen, the company must be understood as a whole. Consequently, the estimated future FCFs is only a derivative of the estimated future accounts.

In this process, two phases must be identified:

1. For the estimation of the accounts within the Interim Value, the calculation will be made in the following way:

$$Account_{t+1} = Account_t * (1 + \overline{\Delta\text{FCF}})$$

2. To estimate the accounts in the Terminal Value, we start from the last value found within the Interim Value, to which a growth equal to the perpetual growth rate g is applied.

$$Account_F = Account_{t+n} * (1 + g)$$

2.6. Enterprise Value (EV).

Enterprise Value, as its name suggests, is a measure of the total value of an enterprise. It is a value widely used in business valuation. To calculate it, the market capitalisation of the common and preferred shares of the major shareholders, the debt incurred by the company, the market value of the shares held by the minority shareholders and the cash of the company are needed.

$$EV = Market\ value\ of\ common\ stock + Market\ value\ of\ preferred\ equity$$
$$+ Market\ Value\ of\ debt - Minority\ interest - Cash\ and\ investments$$

In this study, the EV will be used to obtain an intrinsic reference value within the range of intrinsic values obtained by discounting Free Cash Flow.

3. Analysis of Mediaset España Comunicación S.A.

In this section we will proceed to analyse the business model of Mediaset España Comunicación S.A., as well as the environment in which it operates. In addition, the evolution of its fundamentals and its situation in the stock markets will be analysed.

3.1. History of Mediaset España Comunicación S.A.

After a long period of public monopoly in Spanish television, the television market was partially opened up in 1989 when three broadcasting licenses were granted under Private Television Law 10/1988 of May 3. One of these licences was granted to the Italian business group Fininvest, owned by Silvio Berlusconi. As a result, the group's Spanish subsidiary, Gestevisión-Telecinco S.A., was established. Telecinco began broadcasting on March 3, 1990, generating a great impact on viewers at the time due to Telecinco's strong commitment to programming that was almost entirely focused on entertainment (Encinas, 2014).

Although Telecinco managed to make its way into Spanish society, strong competition from its direct rival Antena 3 and, to a lesser extent, the pay channel Canal +, led to an arduous start for the channel, which incurred losses in 1993, conditioning the departure of its first CEO, Valerio Lazarov. In his place came Maurizio Carlotti, who reoriented the channel's television model by softening its television grid, which was considered vulgar and highly erotic at the time. In 1999, Paolo Vasile became the company's CEO, initiating the third stage of Telecinco, oriented towards the production of fiction and the broadcasting of reality shows, a reform that continues today. The channel grew extensively at this time, entering the Spanish stock market in 2004, which is reflected in Telecinco's annual report (2006).

The next major change for Gestevisión-Telecinco came in 2010 with the merger of Telecinco and Cuatro, a competitor chain owned by Grupo Prisa. This merger came together with the change of the company's name in 2011 to Mediaset España Comunicación S.A. In 2019, the boards of directors of the Italian company Mediaset Spa and Mediaset España merged under the mandate of the Dutch holding company MFE-MediaForEurope NV, with both companies maintaining their autonomy and being listed on their respective markets.

3.2. Channels and products of Mediaset España Comunicación S.A.

With the implementation of Digital Terrestrial Television (DTT) in 2010, the maintenance of the radio market and the development and consolidation of the Internet in Spain, Mediaset has chosen to establish its product offering channels through various channels. The Table 2 summarises information on its main channels:

Table 2. Main channels of Mediaset.

Communication channel	Means of distribution	Main products	Target
	TV Streaming	Reality TV News Celebrity journalism Fiction Sports	General adult audience

cuatro	TV Streaming	Fiction News Culture Sports	General audience
FACTORIADEFICCION	TV Streaming	Fiction	General audience
BOING	TV Streaming	Fiction	Child audience
Energy	TV Streaming	Fiction	Male audience
divinity	TV Streaming	Celebrity journalism Fashion Reality TV	Female audience
BE MAD	TV Streaming	Sports Travel programmes Fiction	Young general audience

Source: adapted from Mediaset (2020c)

It can be seen how Mediaset covers the whole spectrum of the Spanish population in its television offer. Through its main channels, Telecinco and Cuatro, Mediaset offers its star products in each category. Telecinco is the flagship of reality television at Mediaset, with successful programmes in each broadcast such as Supervivientes or Sálvame. Cuatro generally covers the demand for sport with Deportes Cuatro and various contents with programmes such as Planeta Calleja or Cuarto Milenio. In recent years, Telecinco and Cuatro have also broadcast major international sporting events, being the most notable the World Cup and the European Cup. At the same time, the secondary channels cover certain market niches that the main channels do not reach. For example, Energy is focused on the broadcasting of action fiction, while Boing is aimed at the broadcasting of children's audiovisual material.

Mediaset has alternative communication channels exposed in media other than television. Outside of television, Mediaset's main bet has been the Internet, where it has developed several portals with diverse content. The most outstanding is Mitele, an online platform where Mediaset offers its products to the public, giving the option to eliminate advertising by paying a monthly subscription. For content such as articles and diverse information, Mediaset has launched platforms for weather information (El tiempo hoy), miscellaneous (Yasss, Uppers and Mtmad) and sports (El desmarque). In parallel, it has its own information agency (Atlas agencia).

As far as the production of audiovisual material is concerned, Mediaset has its own audiovisual production company: Telecinco Cinema. As for distribution, Mediaset has promoted the Portal Mediterraneo, in which it integrates the content of the production companies associated with the group. In 2016, Mediaset established itself in America with CincoMAS, an international subscription channel that broadcasts content from all its channels. To manage everything related to advertising, Mediaset uses its associate company Publiespaña.

Figure 5. Production companies in which Mediaset España Comunicación S.A. has an interest.

Source: Mediaset (2020c)

3.3. Position of Mediaset España Comunicación S.A. in the market.

3.3.1. Evolution of the television industry in Spain.

In recent years, the television industry has undergone a series of constant changes. According to the Barlovento Comunicación report (2020), the entry of DTT was the starting point in this period of transformation marked by a crisis in the sector's advertising revenues between 2012 and 2014 and an increasingly lower consumption of television by viewers. During this period, the two large private groups (Mediaset and Atresmedia) were consolidated, a consolidation that continues to this day**.**

After the recovery of advertising revenues in 2015, the entry of streaming companies is once again revolutionizing the Spanish television industry, which has to respond by launching its own platforms. This trend has continued in recent years, with advertising revenues and traditional television consumption declining to the detriment of internet platforms. Therefore, companies belonging to the Spanish television industry are in a delicate transition period, as they have to face new competitors on the Internet while defending their traditional broadcasting means.

3.3.2. Strategic framework of Mediaset España Comunicación S.A..

Mediaset is no stranger to changes in the television industry. The company is undergoing an active process of adaptation to new market trends. Mediaset España (2020c) has thus defined a three-dimensional strategy in order to continue to be a benchmark in the industry:

1. **Maintenance of leadership in the television market:** Mediaset is the leading company in the sector in Spain. Therefore, one of its objectives is to continue to be so by maintaining its audience, the profitability of its resources and attracting advertising.
2. **Promotion of profitability on the Internet:** Mediaset seeks to consolidate its digital platforms by developing its offer on them, thus trying to attract new audiences.
3. **Promotion of alliances in the production and exploitation of audiovisual content:** Mediaset is aware that its products are becoming its main source of income, so it is promoting strategic alliances with companies that broadcast audiovisual products Over The Top (e.g. Amazon Prime).

In short, Mediaset is opting for profitability through its own productions and subsequent marketing of these, thus trying to make a name for itself in the Internet industry and maintain its leading position in conventional television.

To complement the vision of Mediaset's strategic decisions, it is necessary to understand the company's current situation. To do this, a SWOT analysis of the company will be carried out.

Table 3. SWOT of Mediaset España Comunicación S.A.

Strengths	Weaknesses
Mature company Large market share Loyal customers	Stigmatization of its products Little experience in online content broadcasting
Opportunities	**Threats**
Development of online services Transition from advertising revenues to production marketing revenues	Audiovisual piracy Strong direct competition on TV and online platforms

Source: own elaboration.

Having carried out the SWOT analysis, it can be said that Mediaset's extensive experience, the large market share it covers and the loyalty of its viewers are its main strengths. On the contrary, due to the reputation of its products, a large part of Spanish television viewers refuse to consume any product from this company. Although the company is managing to enter the online market, it is far from catching up with its competitors in this field. However, the company's commitment to offer more and more audiovisual products on its online platforms, linking a source of income to this commitment, may be a determining factor in the future for Mediaset, although negative factors such as the danger of illegal distribution of its content, which may damage the profitability obtained by these products, must be taken into account.

3.3.3. Analysis of the competitors.

Mediaset does not operate alone in the Spanish audiovisual industry. Both in the field of television and in online platforms, Mediaset must compete with rival companies of high standing in Spanish society and extensive experience.

In the competition for the television audience, we find two direct rivals:

1. **Atresmedia Corporación de medios de Comunicación S.A.:** this private Spanish media group is considered the direct rival of Mediaset. With roots in television, radio and internet, this company has been fighting for years with Mediaset for audience leadership. Its content grid is practically similar to

Mediaset's, which means that there is a great struggle for the leadership of certain contents such as news or audiovisual productions. Similarly, Atresmedia competes directly with Mediaset also on the Internet through its ATRESplayer platform.

2. **Corporación de Radio y Televisión Española S.A.:** this communication group owned by the Spanish State can be considered the third largest competitor by the Spanish audience. Although it does not pose a direct threat to Mediaset in terms of advertising revenues due to its inability to receive revenues from this concept, the materials produced by RTVE, as well as its online content platform (Playz) are alternatives to be considered for Mediaset.

Table 4. Average audiences of Mediaset, Atresmedia y RTVE (%), 2017-2019.

Firm/Year	2019	2018	2017
Mediaset	28,9	28,5	28,7
Atresmedia	26,2	27,2	26,5
RTVE	15,5	16,5	16,7

Source: Barlovento Comunicación (2020), Barlovento Comunicación (2019), Barlovento Comunicación (2018).

It can be seen how Mediaset has established itself as an audience leader in recent years, closely followed by Atresmedia. For its part, RTVE seems to be losing its ability to capture audiences over time. In relation to last year, Mediaset has achieved an increase in audience acquisition, compared to a 1% drop in its competitors. This is positive for the company, as it manages to retain its leadership.

Having analysed the television competition, the next step is to analyse the online content platform segment. In this sector, Mediaset finds additional complications since, apart from direct competition with the aforementioned rivals, large international competitors such as Netflix, HBO or Amazon are added.

Figure 6. Number of subscribers on streaming video platforms in Spain (thousands of users), 2019.
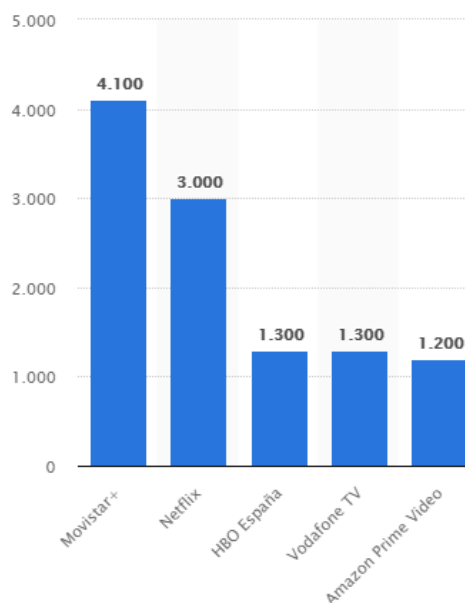
According to the data collected for 2019, Movistar+ and Netflix are the most important companies in online content services, with more than three million users. Behind them are HBO, Vodafone and Amazon with approximately 1.2 million users. These figures are far from those obtained by Mediaset and Atresmedia, who managed to close 2019 with 124,000 and 125,000 subscribers respectively (La vanguardia, 2020). Therefore, Mediaset is one of the most affected of the entry of large international platforms, which means that it will have to make great efforts to capture greater market shares in this niche.

3.4. Financial analysis of Mediaset España Comunicación S.A.

Having analysed the environment in which Mediaset operates and the strategies implemented to continue to be a reference point in the Spanish market, the next step is to observe its economic and financial performance.

3.4.1. Balance sheet and Income Statement.

The first step is to analyse the evolution of the company's main items in order to have an overview of the company's development.

Table 5. Mediaset's Assets evolution (thousands €), 2015-2019.

	2019	2018	2017	2016	2015
Non-current Assets	**998.753**	**775.214**	**826.771**	**865.772**	**916.860**
Intangible Assets	644.022	613.271	639.143	662.240	698.209
Property, Plant & Equipment	55.372	57.918	60.108	57.644	54.449
Other Non-current Assets	299.359	104.025	127.520	145.888	164.202
Δ Non-current Assets (%)	**28,8%**	**-6,2%**	**-4,5%**	**-5,6%**	
Current Assets	**424.393**	**420.955**	**408.225**	**436.931**	**469.285**
Inventory	12.855	9.754	5.821	6.732	6.575
Accounts Receivable	247.983	234.257	252.889	229.733	243.471
Other Current Assets	163.555	176.944	149.515	200.466	219.239
Cash & Cash Equivalents	128.993	165.737	134.148	190.790	211.397
Δ Current Assets (%)	**0,82%**	**3,12%**	**-6,57%**	**-6,89%**	
Total Assets	**1.423.146**	**1.196.169**	**1.234.996**	**1.302.703**	**1.386.145**
Δ Total Assets (%)	**18,98%**	**-3,14%**	**-5,20%**	**-6,02%**	

Source: adapted from SABI (2020)

The evolution of the assets already shows the transition process to which Mediaset has been subjected in recent years. The first fact to highlight is the growth of Mediaset's assets in 2019, breaking the trend of previous years. This is a direct reflection of the effort made by Mediaset to compete with its own production, as it can be seen that the items that have increased most in 2019 are those related to non-current assets. Specifically, those related to intangible assets and other fixed assets, where all the rights and intellectual properties of the company would be reflected.

Non-current assets have remained virtually unchanged in the last period, although they are following the growth trend of total assets in the periods 2018 and 2019, as opposed to their reduction during 2017 and 2016.

Mediaset's liability structure and equity reveal that the company is choosing to finance its new projects by contracting long-term debt, as between 2018 and 2019 non-current liabilities have increased by 533.54%. In contrast, equity and current liabilities have hardly changed in recent periods, confirming that Mediaset is taking on long-term debt to finance its competitive strategies.

Table 6. Mediaset's Liabilities and Equity evolution (thousands €), 2015-2019.

	2019	2018	2017	2016	2015
Shareholder's Equity	**915.754**	**904.805**	**900.077**	**983.291**	**1.069.903**
Registered Capital	163.718	163.718	168.359	168.359	183.088
Other funds	752.036	741.087	731.718	814.932	886.815
Δ Shareholder's Equity (%)	**1,21%**	**0,53%**	**-8,46%**	**-8,10%**	
Non-current Liabilities	**236.094**	**37.266**	**32.437**	**34.656**	**26.406**
Long-term Creditors	186.521	110	266	13.721	7.704
Other Non-current Liabilities	49.573	37.156	32.171	20.935	18.702
Provisions	11.126	8.945	13.429	9.151	10.386
Δ Non-current Liabilities (%)	**533,54%**	**14,89%**	**-6,40%**	**31,24%**	
Current Liabilities	271.298	254.098	302.482	284.756	289.836
Financial Debts	0	44	636	924	478
Commercial Creditors	162.607	152.246	207.555	184.228	182.526
Other Current Liabilities	108.691	101.808	94.291	99.604	106.832
Δ Current Liabilities (%)	**6,77%**	**-16,00%**	**6,22%**	**-1,75%**	
Total Liabilities	**507.392**	**291.364**	**334.919**	**319.412**	**316.242**
Δ Total Liabilities (%)	**74,14%**	**-13,00%**	**4,85%**	**1,00%**	
Total Liabilities and SE	**1.423.146**	**1.196.169**	**1.234.996**	**1.302.703**	**1.386.145**
Δ Total Liabilities and SE (%)	**18,98%**	**-3,14%**	**-5,20%**	**-6,02%**	

Source: adapted from SABI (2020)

Operating revenues are experiencing a decline in recent periods, having fallen by 3.6% in 2019 compared to 2018. This drop in operating revenues is mainly due to the drop in revenues from advertising, which is Mediaset's main source of operating revenues. On the other hand, revenues from the provision of services grew by around 20% in 2019 compared to 2018. Nevertheless, it is possible to see how the current situation of the industry directly affects the company.

Table 7. Operating Income of Mediaset (thousands €), 2015-2019.

	2019	2018	2017	2016	2015
Core Advertising Revenue	869.536	919.280	928.695	926.916	897.973
Other Advertinsing Revenue	10.599	5.714	3.182	2.515	3.815
Service Provision	53.418	41.226	47.368	47.578	48.824
Other Revenue	5.448	8.257	6.404	8.029	7.279
Other Operating Income	7.240	7.087	10.608	6.945	14.040
Total Operating Income	**946.241**	**981.564**	**996.257**	**991.983**	**971.931**
Δ Operating Income (%)	**-3,60%**	**-1,47%**	**0,43%**	**2,06%**	

Source: adapted from Mediaset España (2020c) and Mediaset España (2018).

Table 8. Operating Expenses of Mediaset (thousands €), 2015-2019.

	2019	2018	2017	2016	2015
Reduction of Finished and Ongoing Products	-3.102	-4.168	692	-164	-4.832
Procurements	208.476	250.986	229.660	240.917	236.276
Personnel expenses	121.543	107.824	105.646	105.872	105.041
Media Rights Clearance	135.851	153.086	186.849	205.455	205.156
Depreciation and Amortization	20.278	19.916	18.659	17.924	17.099
Variation in Working Captial Provisions	-1.180	-2.815	-1.748	-5.999	388
Other Expenses	199.481	199.843	211.159	203.543	207.619
Total Operating Expenses	**681.347**	**724.672**	**750.917**	**767.548**	**766.747**
Δ Operating Expenses (%)	**-5,98%**	**-3,50%**	**-2,17%**	**0,10%**	

Source: adapted from Mediaset España (2020c) y Mediaset España (2018)

Table 9. Number of Mediaset employees, 2015-2019.

	2019	2018	2017	2016	2015
Mediaset employees	**1.559**	**1.267**	**1.280**	**1.275**	**1.266**
Δ Nº employees	**23,05%**	**-1,02%**	**0,39%**	**0,71%**	

Source: adapted from SABI (2020)

The data on Mediaset's operating expenses reveal a generalised process of austerity, with its operating expenses reduced by 5.98% between 2019 and 2018. Within these items, there are two in particular that provide revealing data: the increase in personnel expenses and the decrease in the consumption of audiovisual rights. The inverse relationship between these two items shows how Mediaset is choosing to produce its own genre, which implies a greater hiring of personnel, which has increased by 23% in 2019. Due to this strategy, Mediaset is acquiring less material from third parties, hence the decrease in this item.

Table 10. Mediaset's EBIT and EBITDA (thousands €), 2015-2019.

	2019	2018	2017	2016	2015
EBIT	**264.894**	**256.892**	**245.340**	**224.435**	**205.184**
EBITDA	**285.172**	**276.808**	**263.999**	**242.359**	**222.283**
Δ EBIT (%)	**3,11%**	**4,71%**	**9,31%**	**9,38%**	
Δ EBITDA (%)	**3,02%**	**4,85%**	**8,93%**	**9,03%**	

Source: adapted from SABI (2020)

The operating result grows year after year, although in lesser quantity in the last period. The accounting effect of depreciation and impairment is negligible.

Table 11. Mediaset's EBT and Net Income (thousands €), 2015-2019.

	2019	2018	2017	2016	2015
EBIT	**264.894**	**256.892**	**245.340**	**224.435**	**205.184**
Financing Revenue	6.515	11.049	6.080	5.858	17.336
Financing Expenses	800	2.335	4.012	4.478	3.380
Common size of Financial expenses with respect to EBIT	**0,30%**	**0,91%**	**1,64%**	**2,00%**	**1,65%**
Financing Income	5.715	8.714	2.068	1.380	13.956
Earnings Before Taxes (EBT)	**270.609**	**265.606**	**247.408**	**225.815**	**219.140**
Δ EBT (%)	**1,88%**	**7,36%**	**9,56%**	**3,05%**	
Corporate Tax	56.847	65.280	50.062	55.090	53.187
Net Income	**213.762**	**200.326**	**197.346**	**170.725**	**165.953**
Δ Net Income (%)	**6,71%**	**1,51%**	**15,59%**	**2,88%**	

Source: adapted from SABI (2020).

This portion of the Income Statement reflects the good financial health enjoyed by Mediaset. With financial expenses amounting to 0.3% of operating profit and a broadly positive financial result, it is possible to see the low cost of Mediaset's indebtedness. Although it is true that the company's liabilities have increased significantly in 2019, it seems that the debt incurred does not represent a determining cost for the company. Net Income is growing every year, with the 2019 and 2017 financial years standing out, in which Net Income grew by 6.71% and 15.59% respectively in relation to previous years.

In general, the Balance Sheet and Income Statement shows the image of a company that is making a strong investment in the future. These investments seem to be reducing the growth of some items in these reports. However, the negative impact of these investments and the change in the company's source of income does not appear to be decisive in significantly affecting earnings development. Therefore, Mediaset is an apparently profitable and financially sound company and therefore appears to have a large operating margin in the short and medium term.

3.4.2. Financial performance of Mediaset España Comunicación S.A.

By applying the criteria of the Piotroski F Score method, the following scores have been obtained for Mediaset:

Table 12. Key aspects to be analyzed, 2015-2019.

		2019	2018	2017	2016	2015
Profitability	**ROA (%)**	19,01	22,20	20,03	17,33	15,81
	Cash flow	234.040	220.242	216.005	188.649	183.052
	Δ ROA (%)	-14,37%	10,84%	15,57%	9,65%	174,70%
	Op. Income-Extraordinary Income	213.762	200.326	197.346	170.725	165.953
Financial performance	**Leverage (%)**	25,78	4,12	3,67	3,62	2,51
	Current Ratio	1,564	1,657	1,350	1,534	1,619
	Shares outstanding	327.435.216	327.435.216	336.717.490	336.717.490	366.175.284
Operative efficiency	**Gross margin (%)**	27,99%	26,17%	24,63%	22,62%	21,11%
	Asset Turnover	0,821	1,041	1,068	0,974	0,886

Source: adapted from SABI (2020) and Mediaset España (2020a)

Table 13. Mediaset's Piotroski F Score, 2015-2019.

	2019	2018	2017	2016	2015
ROA (%) > 0	1	1	1	1	1
Cash flow > 0	1	1	1	1	1
Δ ROA (%) > 0	0	1	1	1	1
Cash Flow > Op. Income-Extraordinary Income	1	1	1	1	1
Leverage$_t$ < Leverage$_{t-1}$	0	0	0	0	1
Current Ratio$_t$ > Current Ratio $_{t-1}$	0	1	0	0	0
Nº Shares$_t$ ≤ Nº Shares$_{t-1}$	1	1	1	1	1
Gross margin$_t$ > Gross margin$_{t-1}$	1	1	1	1	1
Asset Turnover$_t$ > Asset turnover$_{t-1}$	0	0	1	1	1
TOTAL PIOTROSKI F SCORE	**5**	**7**	**7**	**7**	**8**

Source: own elaboration.

In terms of profitability, the first aspect to take into account is the ROA and its evolution. You can see how the ROA for Mediaset is very high, oscillating around 20% in recent years. However, the profitability of Mediaset's assets has decreased significantly in the last period, losing 14.37% of profitability in 2019. On the other hand, the company's cash flow is growing year by year. Mediaset's ability to generate capital inflows does not appear to be impaired by the decline in operating income suffered by the company in the last period. Operating income is also on a steady growth path. In terms of profitability, Mediaset seems to be operating efficiently, having obtained a score of 3 out of 4 in the profitability measures set by the Piotroski F Score, having obtained the maximum score in this aspect in the period 2015-2018.

According to the data obtained, financial performance seems to be Mediaset's Achilles' heel. Although the company has some margin, the declining ratio of current assets to liabilities and the general increase in leverage in recent years may be dangerous for the

company's ability to meet its contractual obligations if this trend continues. This trend, if it continues, may imply higher financing costs for Mediaset in the future. At the same time, the company has been reducing the number of shares, which indicates that the company is considering a financing system based on third party debt. In all periods except 2018, the company obtains a score of 1 out of 3.

Operational efficiency also seems to be declining as the exercises progress. While Mediaset is managing to increase the gross margin each year, the decline in asset turnover in 2018 and 2018 shows the company's loss of capacity to generate sales. In recent periods, Mediaset has been awarded 1 out of 2, losing half of its score compared to 2015-2017.

The general conclusion of the analysis of the company's financial strength is that Mediaset is a company that, while it is managing to maintain certain profitability standards, is entering into a quagmire in terms of financing and capital structure. Therefore, the weaknesses of this company should be taken into account when estimating its future profitability and risk.

3.4.3. Stock exchange information of Mediaset España Comunicación S.A.

In this section we will analyze stock market information related to Mediaset, as well as some of its main ratios. The purpose of this analysis is to know the situation of the company in relation to the stock market.

Table 14. Stock exchange Ratios of Mediaset España Comunicación S.A.

	2019	2018	2017	2016	2015
EPS	0,653	0,612	0,586	0,507	0,453
Price at end of year	5,596	5,650	9,830	11,077	9,965
PER	8,572	9,235	16,772	21,847	21,988
Book Value	2,797	2,763	2,673	2,920	2,922
Price/Book Value	2,001	2,045	3,677	3,793	3,411
Dividends	99.958.000	197.496.000	175.720.000	167.404.000	47.540.000

Source: own elaboration from Investing (2020b) and Mediaset (2020b)

The Earnings Per Share (EPS) are growing every year. A steady increase in Net Income, coupled with a reduction in the number of total shares in 2018, means that the owner of one or more Mediaset shares is making a higher average profit each year. On the other hand, we can see how the share price has fallen sharply in the last two periods, which has reduced the P/E almost by half, implying a reduction in the share price. Consequently, the increase in the EPS and the fall in the PER indicate that some investors may see this as a good time to invest in the company. In addition, the share

price is converging to its book value, which is another sign of the company's ability to grow its business. However, the company has more than halved its dividend payments to shareholders in 2019 due to the strong reinvestment process it is undergoing, which may make investors think about whether to invest in Mediaset.

Table 15. Mediaset's Equity distribution, 2015-2019.

	2019	2018	2017	2016	2015
Free-Float (%)	43,04	48,37	47,04	49,79	48,51
Treasury Shares (%)	4,36	0	2,76	0	5,32
Mediaset S.p.A (%)	52,6	51,63	50,21	50,21	46,17

Source: Mediaset (2020a)

It can be seen how Mediaset S.p.A. has held the majority of the shares since 2016. This fact has a double meaning: on the one hand, if a single group holds the absolute majority of shares, there will be no inter-group conflict of interest, which is beneficial for the company's management and administration. However, there may be intra-group discrepancies due to internal conflicts, a situation potentially detrimental to the development of the company. The treasury stock is increasing and decreasing according to the needs of altering the offer of Mediaset's shares.

3.5. Intrinsic value of Mediaset España Comunicación S.A.

After analysing the industry in which Mediaset operates, its strategies towards its competitors and its financial evolution, the next and final step is to find a range of intrinsic values of Mediaset's actions. To do this, the data obtained must be interpreted and applied in the Discounted Cash Flow model to obtain the results. In this study, the Interim Value will comprise three periods, from 2020 to 2022, while the Terminal Value will be established in 2023.

The first set of data needed to find the intrinsic value of Mediaset are the Free Cash Flows obtained. Firstly, the FCFs for the periods 2015-2019 have been obtained. An additional year has been added to the 5 years used in the other items to level the average growth of the FCF. Once obtained, the variation of the FCF has been calculated for each period. Finally, the average variation in these years has been calculated in order to project future FCFs.

Table 16. Mediaset Free Cash Flows (thousands €), 2015-2019.

	2019	2018	2017	2016	2015
Net Income	213.762	200.326	197.346	170.725	165.953
Amortizations	20.278	19.916	18.659	17.924	17.099
Corporate Tax	56.847	65.280	50.062	55.090	53.187
Financing Expenses	800	2.335	4.012	4.478	3.380
Cash & Equivalents	128.993	165.737	134.148	190.790	211.397
Op CF	**162.694**	**122.120**	**135.931**	**57.427**	**28.222**
CapEx	-2.546	-2.190	2.464	3.195	5.820
IntEx	30.751	-25.872	-23.097	-35.969	-35.099
Free Cash Flow	**134.489**	**150.182**	**156.564**	**90.201**	**57.501**
Δ FCF	-10,45%	-4,08%	73,57%	56,87%	
Average Δ FCF	**28,98%**				

Source: own elaboration from SABI (2020)

Overall, Operating Cash Flow has increased sharply in recent years. An uninterrupted increase in Net Income as well as a decreasing payment of financial interest makes the company capable of generating more cash income from its operating activity. In more detail, a strong investment in intangible assets in 2019 has led to a fall in Free Cash Flow, which has been declining in the last two years due to the investments in tangible fixed assets made by the company.

Having obtained the FCF of the last years and its average variation, the next step is to project the future accounts needed to obtain the future FCF. As indicated above, the projection of the accounts is made up of two stages: the projection from 2020 to 2020 includes the Interim Value, while the estimate for 2023 includes the company's Terminal Value. The estimated accounts, as well as the estimated derived FCF are as follows:

Table 17. Mediaset's forecasted accounts and FCF (thousands €), 2020-2023.

					2022*(1+g)
	2019	2020	2021	2022	2023
Net Income	213.762	275.708	355.605	458.655	465.993
Provisions for depreciation of PP&E	20.278	26.154	33.734	43.509	44.205
Corporate Tax	56.847	73.321	94.568	121.973	123.924
Financing Expenses	800	1.032	1.331	1.717	1.744
Cash & Equivalents	128.993	166.374	214.587	276.772	281.200
Op CF	**162.694**	**209.841**	**270.650**	**349.082**	**354.667**
Intangible Assets	644.022	830.652	1.071.365	1.381.834	1.403.944
Property, Plant & Equipment	55.372	71.418	92.114	118.808	120.709
IntEx		186.630	240.713	310.469	22.109
CapEx		16.046	20.696	26.694	1.901
Forecasted FCF		**7.165**	**9.241**	**11.919**	**330.657**

Source: own elaboration.

Because of a positive average growth in the last few accounting periods, both the annual accounts used and the estimated future FCF will be higher each year. However, the large difference in values between 2022 and 2023 should be noted. This difference is due to the fact that in the medium term the company is expected to grow at a much lower rate in the long term. This discrepancy in growth is the cause of such a contrast.

The next step is to obtain the discount rate (k) and the perpetual growth rate (g). To obtain the discount rate, the WACC for the last 5 years will be calculated to be in line with the FCF. R_f and R_M will be set for operational ease, so the cost of capital corresponding to the return expected by investors will vary depending on the capital structure and beta. K_d and the tax shield will be fully flexible.

To determine the perpetual growth rate, the growth expected for the Spanish economy in 2020 according to the OECD will be used, which is 1.6% (Tahiri, 2019).

Mediaset's WACC seems to follow a constant pattern, as it has oscillated around 5% in recent years. However, a slight downward trend can be seen over time, with the WACC standing at 4.3% in 2019. Looking at the costs separately, it can be seen how much of the WACC corresponds to the required return on equity. This is due to a high proportion of the capital structure corresponding to equity in relation to the percentage of debt and the high return required on shares. The cost of debt is on the contrary trend, as it has fallen sharply in the last period, while the share of debt in the capital structure has risen in the last period.

Table 18. Mediaset's Discount Rate and Growth Perpetuity Rate.

	2019	2018	2017	2016	2015
SE/D+SE	73,29%	87,42%	88,76%	88,64%	89,66%
D/D+SE	26,71%	12,58%	11,24%	11,36%	10,34%
R_f	0,017				
R_M	0,064				
β	0,8832	0,8822	0,8281	0,8805	0,8579
ke	0,0585	0,0585	0,0559	0,0584	0,0573
kd	0,0034	0,0191	0,0334	0,0359	0,0271
kd*(1-Tax Rate)	0,0027	0,0144	0,0267	0,0272	0,0205
WACC	**0,0436**	**0,0529**	**0,0526**	**0,0548**	**0,0535**
Average WACC	**0,0515**				
Growth Rate (g)	**0,016**				

Source: Own elaboration from SABI (2020), Investing (2020a), Investing (2020b) and Tahiri (2019).

With everything calculated, the last step is to calculate the set of intrinsic values of Mediaset España Comunicación S.A. As the evolution of a company depends on a multitude of variables, the intrinsic value will be calculated in a series of scenarios:

- The first scenario will be a positive one, where WACC only corresponds to its accounting evolution and the Spanish economy grows at a good pace. In this scenario, the data obtained in the analyses will be used.

- The second scenario will be a scenario in which, despite the company continuing to carry out its strategies correctly, the Spanish economy suffers from a brake on growth, even to the point of not growing at all. In this scenario g will be equal to 0.

- The third scenario is the most complex. This scenario considers the possibility that Mediaset will not be able to make the transition it hopes for in the coming years. In this scenario, the company would fail to sell its productions and would be stifled by strong multilateral competition, which would worsen its future financial health. In addition, the worsening of the company's situation would imply higher returns demanded by shareholders, which would make Mediaset's financing more expensive by issuing capital. In this scenario, k=10% will be assumed, notably higher than its discount rate in an optimal scenario.

- The fourth and last scenario combines the worst possible situation for the company and the Spanish economy. In this scenario g=0 and k=10%.

Table 19. Mediaset's Intrinsic Value Calculation on an optimistic scenario.

	2019	2020	2021	2022	2023
Forecasted FCF		7.164.617	9.240.840	11.918.727	330.656.531
Discount Rate (k)	5,15%				
Growth Perpetuity Rate (g)	1,60%				
Terminal FCF	Terminal FCF=FCF$_{2023}$/(k-g)				9.312.979.654
Discounted FCF		6.813.679	8.357.739	10.251.702	8.010.409.823
Firm's Value	8.035.832.943				
Nº Shares Outstanding	327.435.216				
Intrinsic Value of a Share	24,54				

 Source: own elaboration.

Table 20. Mediaset's Intrinsic Value under an economic deceleration.

	2019	2020	2021	2022	2023
Forecasted FCF		7.164.617	9.240.840	11.918.727	330.656.531
Discount Rate (k)	5,15%				
Growth Perpetuity Rate (g)	0,00%				
Terminal FCF	Terminal FCF=FCF$_{2023}$/(k-g)				6.419.902.738
Discounted FCF		6.813.679	8.357.739	10.251.702	5.521.976.195
Firm's Value	5.547.399.316				
Nº Shares Outstanding	327.435.216				
Intrinsic Value of a Share	16,94				

Source: own elaboration.

Table 21. Mediaset's Intrinsic Value under operating difficulties.

	2019	2020	2021	2022	2023
Forecasted FCF		7.164.617	9.240.840	11.918.727	330.656.531
Discount Rate (k)	10,00%				
Growth Perpetuity Rate (g)	1,60%				
Terminal FCF	Terminal FCF=FCF$_{2023}$/(k-g)				3.936.387.275
Discounted FCF		6.513.289	7.637.058	8.954.716	2.957.466.022
Firm's Value	2.980.571.084				
Nº Shares Outstanding	327.435.216				
Intrinsic Value of a Share	9,10				

Source: Own elaboration.

Table 22. Mediaset's Intrinsic Value under operating difficulties in a decelerating economy.

	2019	2020	2021	2022	2023
Forecasted FCF		7.164.617	9.240.840	11.918.727	330.656.531
Discount Rate (k)	10,00%				
Growth Perpetuity Rate (g)	0,00%				
Terminal FCF	Terminal FCF=FCF$_{2023}$/(k-g)				3.306.565.311
Discounted FCF		6.513.289	7.637.058	8.954.716	2.484.271.459
Firm's Value	2.507.376.521				
Nº Shares Outstanding	327.435.216				
Intrinsic Value of a Share	7,66				

Source: own ellaboration.

When the 4 scenarios are calculated, there is an intrinsic value per share ranging from 7.66 euros/share to 24.54 euros/share. It can be seen how a worsening of the company's situation leads to worse values for the company compared to a worsening of the economy in general. As the range is a bit wide, the Enterprise Value is going to be used to obtain a reference value against this range of values.

Table 23. Mediaset's Enterprise Value.

Market Capitalization	963.804.249
Debt	333.659.000
Minority Interest	788.633.743
Cash and Cash Eq.	128.993.000
Enterprise Value	**1.957.103.991**
Nº Shares Outstanding	327.435.216
EV/Shares	**5,977**

Source: own elaboration.

The EV corresponding to each share of Mediaset España Comunicación S.A. is 5.977 euros/share. With this value, a lower margin can be established in which it may be advisable to invest until the value of a Mediaset share is close to 6 euros/share if it is conservative. Although the range of values is up to more than 24 Euros, investing for a similar figure should be considered a risk factor.

4. Conclusions.

Based on all the information analyzed, as well as the future projections made for Mediaset, it can be stated that, today, Mediaset is a company that, despite its maturity, has a great potential for growth based on the strategies followed in recent years. However, the company is not exempt from factors that adversely affect its possible future development.

The company is in a situation of transition from a traditional audiovisual model to a new business model based on online services and the production of own material on a larger scale so as not to depend entirely on advertising revenues, which are in decline. To this end, it has invested heavily in assets. With this investment, Mediaset is attempting to enter the online audiovisual services market with force, a market in which it is at a certain disadvantage compared to the large international companies operating in Spain.

Despite the future uncertainty that Mediaset presents, it is currently the leading company in the television industry in Spain. This leadership position maintained over a long period of time allows the company to ensure a certain level of income in the short and medium term. This gives the company some temporary peace of mind as it enters the online world.

In operational and financial terms, Mediaset has developed a more than notable performance in recent years, which is reflected in the financial efficiency indicators used. However, it seems that in 2019 financial operations have suffered due to the abrupt

transition strategy developed by Mediaset. It is therefore appropriate to take this setback into account when considering any future scenario.

Expectations of future Free Cash Flow growth are high due to large variations experienced in previous periods. However, it should be borne in mind that in the last two accounting periods these have decreased due to heavy investments in fixed assets. It is therefore appropriate to apply certain nuances by taking the high growth of FCFs as a reference.

Finally, the range of intrinsic values yields a series of theoretical values for Mediaset action ranging from 7.66 to 24.54 euros/share. Taking as an alternative reference the more direct and conservative Enterprise Value of 5.97 euros/share, it could be considered a good investment decision to buy Mediaset shares in order to expect a reasonable growth up to about 10-12 euros/share. Although the peak value is above 24 euros, it has been seen throughout the study that there are certain factors that are likely to hinder Mediaset's future growth capacity.

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