LISBON SCHOOL OF ECONOMICS & MANAGEMENT
UNIVERSIDADE DE LISBOA

MASTER OF SCIENCE IN FINANCE

MASTERS FINAL WORK

PROJECT

EQUITY RESEARCH: IMPRESA SGPS SA

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ABSTRACT

The main motivation in the choice of Impresa SGPS arises with the interesting challenges that this company has been subjected to in an era where the Media industry undergoes through deep transformations with the emergence of new platforms provided by technological advances.

The objective was to perform an analysis and evaluation of the company resulting in the estimation of a price target, defining the evaluation methods with the evolution of the work in the most suited way, maintaining the CFA structure.

As the largest Portuguese Media group, the focus of its activity is mainly divided between the television and publishing segments, where SIC and Expresso stand out, contributing to revenues of 172M€ in 2018.

To determine the intrinsic value of the group, a Discounted Cash Flow (DCF) approach was used as the main valuation method. With an estimated price target of 0.34€ per IPR's share for August of 2019, is issued a BUY recommendation with high risk, representing a 37% upside potential from the 1st of August closing price of 0.25€.

Complementary valuation approaches, stress tests including sensibility and scenario analysis with sensible variables were used to support this valuation results.

Keywords: Equity Research; Valuation; DCF; FCFF; Multiples; Media; Television; Publishing; Impresa SGPS SA; SIC; Expresso.

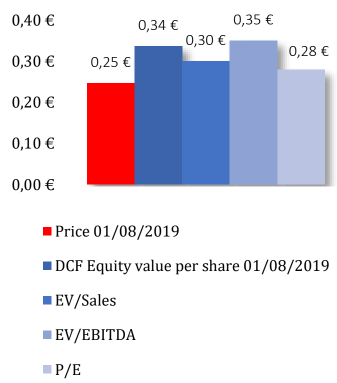
PORTUGUESE STOCK EXCHANGE

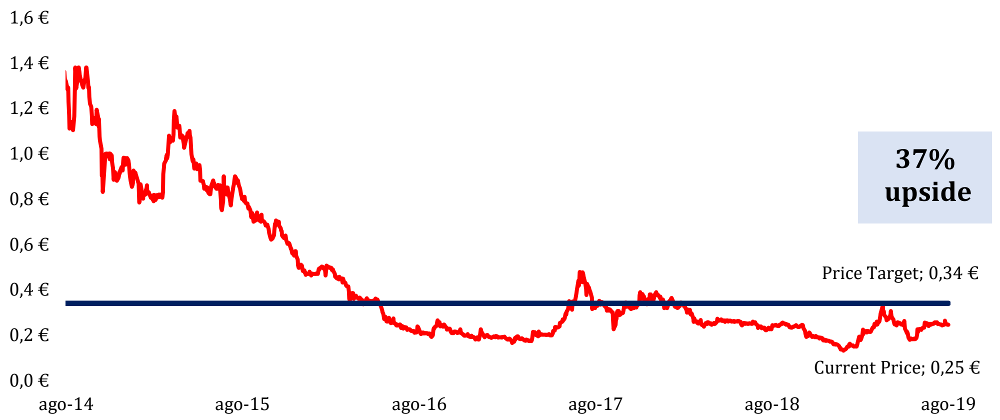
MEDIA SECTOR

IMPRESA SGPS SA

DATE: 01/08/2019	CURRENT PRICE: 0.25€	RECOMMENDATION: **BUY** (**37% UPSIDE**)
TICKER: IMPA.LS (REUTERS)	EUR 1.000: USD 1.108	TARGET PRICE: **0.34€** ($0.37) HIGH RISK

Fig 1: IPR price target





Source: Author

1. Investment Summary

Impreger, 99.9% owned by Impresa's Chairman, Dr. Francisco José Pinto Balsemão, who is also the father of both the Deputy Chairman and the current CEO of this company, owns 52% of the shares of the group under analysis (*Table 2*), which embraces a very diverse universe within the media industry (*Appendix 10*). These characteristics shape dividend policy and the unlikelihood of capital increases in the future.

The most relevant assets of the group are SIC, which once again leads the audiences' share, collecting the largest slice of television advertising investment in Portugal and Expresso, which remains the best-selling newspaper in the country. This is a business area with enormous social and political influence and therefore implicit power and responsibility.

Table 1: IPR market profile

Market Profile	
Closing Price 01.08.2019 (€)	0,25
Shares outstanding (M)	168
Market Cap (M€)	42,0
52 week price range (€)	0,13 - 0,33
Average daily volume (K)	336
Impreger SGPS ownership (%)	52
ROE 2019F	0,03
EPS 2019F	0,02
D/E 2019F	2,02

Source: Reuters and author

Recent developments

In 2018 the group sold most of its magazines' portfolio setting its strategic focus on efficiency. Another example is the centralization of teams in the Impresa building fueling synergies. In an era marked by the emergence of fake news and the unprecedented attack on journalism, as well as social networks and the entry of sharks into the market, for example through OTT services, the paradigm has changed and is forcing the group to put its resilience into practice, reinventing itself, getting closer to the public. SIC has just made a technological update that will guarantee a pioneering place in the coming years, reflected in the speed and quality with which it can generate content as well as the capability to integrate technologies such as AR and VR in its 2 main segments.

After a worse performance by TVI, arose the appetite for a possible acquisition of Prisa's position in Media Capital by Cofina, in order to threat SIC's leading position, reached early in 2019.

In July, SIC successfully placed a bond offer of 51M€, generating a demand that shows the recovery of the market's confidence, thus diversifying the sources of funding.

Table 2: IPR main shareholders 2018

Main Shareholders 2018	% owned
IMPREGER SGPS	52
MADRE SGP	4
SANTANDER Bank	4
BPI Bank	4

Source: Company Data

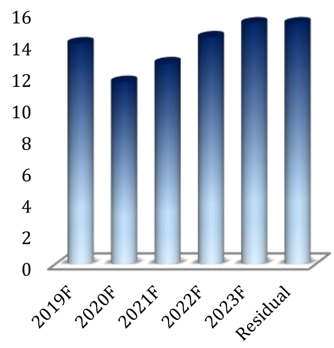
Rising overall income

For the forecasted period, revenues will reverse the recent trend rising from 172M€ to 192M€ in the 2023 horizon (*Fig 4*) with the TV segment on the lead (*Fig 5*). The representativeness of both advertising and subscriptions in IPR's total revenues will tend to reach a plateau. Advertising will continue to grow largely due to the television segment, where SIC has the highest power ratio in the market. Gross profit margin is foreseen to rise from 57% to 65% in 2023 resembling net income that is expected to evolve from 3M€ to 11M€ and EBITDA that is trusted to reach 30M€. The central trend for this growth is that it is digital and personalized with the increasingly prevalence of mobile components. In the publishing segment, despite Expresso's position as the leader in both print and digital newspapers, it is anticipated that will suffer losses in advertising revenues with a CAGR of - 4%. With this segment's revenues representing 2% less of IPR's revenues, from 2021 on it's expected that sales will start a period of contraction.

Fig 2: Long term interest rate for Portugal (%)

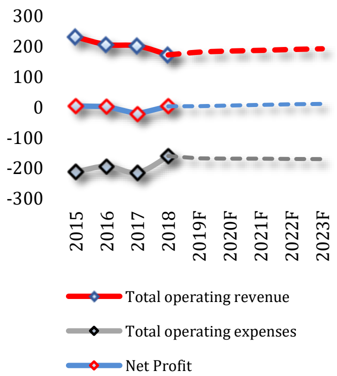
Source: European Central Bank (ECB)

Fig 3: Free cash flow to the firm (M€)



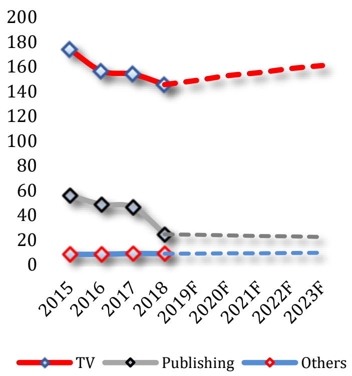
Source: Author

Fig 4: Operating revenues and net profit, historical and forecasted (M€)



Source: Author

Fig 5: IPR's revenues by segment, historical and forecasted (M€)



Source: Author

Improving liquidity and performance

The group should maintain its deleveraging strategy decreasing liabilities in the forecasted period from 271M€ to 231M€ with the debt to equity ratio falling from 2.2 in 2018 to 1.4 in 2023 as desired. The expected good performance of the company should be reflected in the EPS and ROA which can be multiplied by 2.5. At the same time, ROE is expected to rapidly get closer to the benchmark as it has a long way to go.

Price target

After a deep analysis is issued a **BUY** recommendation for Impresa S.G.P.S., S.A. with a price target of 0.34€/share for August 2019 based on a DCF model, implying a 37% upside potential from the 1st of August closing price of 0.25€/share, considering the company's high risk.

The price target was derived from a discounted cash flow method through the free cash flow to the firm (*Fig 3*) having reached a price target of 0.34€/share. Relative valuation was used to complement DCF. Through peers the multiples approach focused on the enterprise value that was calculated through EV/EBITDA, EV/Sales and as an alternative was used P/E. Thus it was respectively achieved a price target ranging from 0.28€ to 0.35€, in line with the DCF model output (*Fig 1*).

What the market hasn't seen and risks involved

The group has the advantage of having robust teams with extraordinary professionals as many of them were responsible for building the first private television channel in Portugal and the most reputed newspaper.

IVRs are expected to be this year's surprise with performances far above the recent ones. Cuts in some production costs around 20% sporadically compared to the standard, without pinching public acceptance are a plus. These two updates are apparently not yet reflected in the value that the market attributes to this stock. The focus will be on what the public values, with tailored proposals, benefiting from the implementation of a CRM with a clear focus on resource allocation efficiency as well as in the measuring and adaptation of the supply in shorter time frames. Future strategy also includes adapting and reselling content, like the Txillo channel does, and betting on non-related businesses through SIC Ventures that can reveal pleasant surprises.

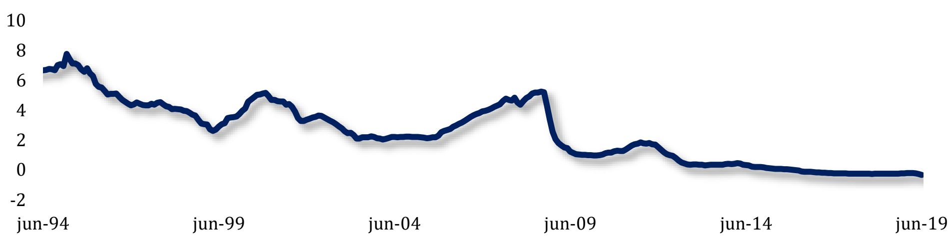
Much of SIC's recent success has been attributed to the hiring of Cristina Ferreira but the truth is that the market has probably underestimated the ability of its CEO, Dr. Francisco Pedro Balsemão, who has been leading toward consecutive wins of which one cannot fail to highlight the assertiveness in the selection of key players, where the entertainment director, Daniel Oliveira and the CFO, Dr. Paulo Miguel dos Reis stand out.

But there's a lot of risk involved. The recent dynamism of the Portuguese economy cannot hide the presence of several threats in global markets such as Brexit, US-China trade conflict, the monetary policies of the ECB and FED or the slowing of the world economy announced, among other indicators, by the inversion of bond yields.

It's noteworthy the historically and atypically low interest rates (*Fig 2*), with an amount of debt that leaves the group very exposed to fluctuations as in many of its loans features variable rates (*Fig 6*). It is important to keep in mind that low interest rates increase the present value of assets. A refinancing of 45M€ in bonds was considered to 2021 as in 2022, the bonds that were issued during this year, will reach their maturity and so it's imperative that the group has such capacity. The sensitivity of the business was verified by simulations to changes in 2023 and in the terminal period impacting debt, whether through the cost of debt or its weight. In these it was possible to lose the total value of the stock with a 1% increase in WACC combined with a 2M€ decrease in EBIT adjusted after taxes. Increments in the cost of programs and goods sold and rendered services in the television segment were also tested and a fluctuation of mere 0.5% either way relatively to the assumptions resulted in serious impacts on the stock's value highlighting the model's susceptibility to these variables and its intrinsic high level of risk.

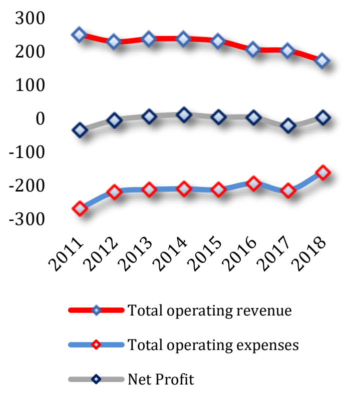
Last but not the least, impairments were strongly felt in 2017 with the sale of magazines in the portfolio and leaves an open door to a possible impact on the future after eventual asset sales, especially given the amount of goodwill that was accounted upon the acquisition of SIC.

Fig 6: Euribor 6M historic data (%)



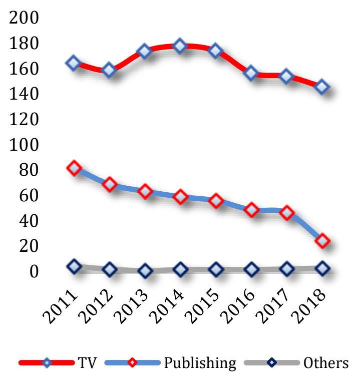
Source: European Central Bank (ECB)

Fig 7: Operating results and net profit (M€)



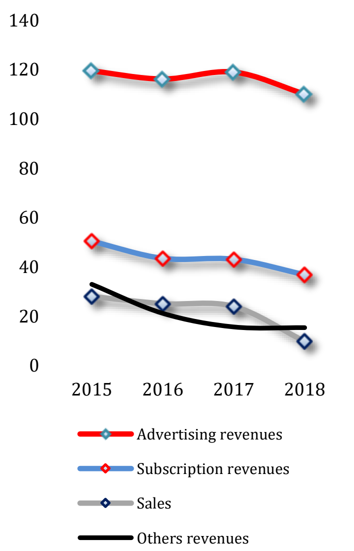
Source: Company data

Fig 8: Revenues by segment (M€)



Source: Company data

Fig 9: Main sources of IPR's revenues (M€)



Source: Company data

2. Business Description

Company Profile

Impresa, SGPS (IPR) is a Media Group headquartered in Lisbon, Portugal and listed in the Euronext Lisbon Stock Exchange. The company is divided into two core businesses, television and publishing. A small expression of the business volume is scattered by other participations namely in the edition and distribution of digital and multimedia content and on a news agency *(Appendix 9).*

In 1972, when Portugal still lived under dictatorship and media was censored, Dr. Francisco José Balsemão created Sojornal that would be the spark of the group. In the following year founded the newspaper Expresso that would become the weekly newspaper of reference in the Portuguese society.

1975 was the year when VASP was founded with the aim of overcoming difficulties created in Expresso's distribution by political motivations. In 1988 Controljornal was constituted to be the holding company of the entire Social Communication Group and one year later entered the magazine market with Exame.

Controljornal's share capital was opened to external investors in 1991 creating the holding IPR and in 1992 SIC was born, the first private free to air (FTA) TV channel in Portugal, another important milestone in the innovative DNA of the group. In the year 2000 IPR was accepted into the Lisbon Stock Exchange after becoming SIC's major shareholder having acquired the remaining 49% 5 years later through foreign capital, holding 100% of equity. In 2001 launched the first Portuguese 24 live news channel – SIC Notícias – and other thematic channels that have grown since. Two years later, the Private Social Solidarity Institution of the Group, SIC Esperança, started its works.

The internationalization of IPR began in 1997 when SIC Internacional started broadcasting and the website Expresso.pt went online and today SIC channels are present in 15 countries.

IPR's production, namely of soap operas, was in 2011 already a reference worldwide and won an Emmy for "Laços de Sangue". Also in 2016 SIC's "Coração d'Ouro" and "Mar Salgado" won the gold and bronze medals, respectively, in the soap operas category at the New York Festival's World's Best TV & Films in Las Vegas.

In 2018 the group sold twelve of its magazines to the company Trust in News and in the same year SIC Ventures was born focusing on new revenue streams through the support of B2C companies mainly in the digital area, namely by exchanging investment for advertising space. In early 2019 the group finished centralizing all its brands in a unique building giving sequence to the strategic cost control and optimization policies.

Historical Financial Analysis

Revenues and costs were shrinking

Last year IPR returned to positive net results reaching 3.1M€, a sharp improvement over the 22M€ loss in 2017 following a recurring decline in previous years (*Fig 7*). Operating revenues had a -8% CAGR between 2014 and 2018 and decreased 15% in the last year to 172M€, with a special impact after the sale of publications, resulting in a -47% variation in publishing. In the TV area, this decrease was 5.5% (*Fig 8)*. The revenues that arrived from outside of Portugal were 3% of total reaching 6M€, 11% below the previous year.

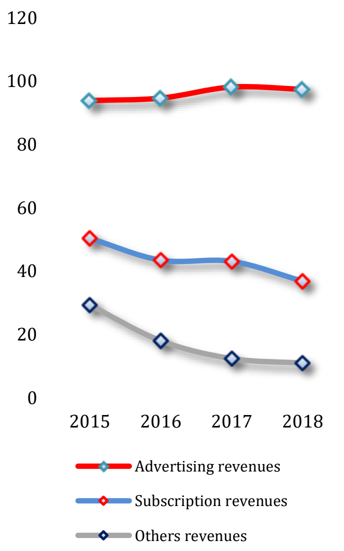
Discriminating the revenues, in 2018 it's observable that the weight of the TV was 84%, of publishing 14% and other sources 2%. From another point of view the advertising revenues were in the last year 64%, the subscription ones 21%, circulation was 6% and the remaining 9% were related to residual sources (*Fig 9).*

On the other hand, operating expenses decreased by 18% in 2018 to 154M€, not including D&A, provisions and impairments, maintaining the trend of recent years, with a -7% CAGR for 2014-2018 (*Fig 7*). This result in the last year also falls within the scope of the sales on the portfolio of magazines, namely with the external supplies and services where the subcontracts and communication expenses took a big cut. Staff costs also dropped. In 2017 the compensations reached a peak of 5M€ and in 2018 dropped to 1.5M€. In that year the employees were reduced in 16% and the respective costs in 15%. IPR lost 224 employees since 2014 and now has 895 representing 32M€ in costs, board included. This evolution of costs is also due to lower programming expenses, lower activity of the IVRs thanks to the discontinuation of some programs, and reduction of restructuring costs.

Advertising is key

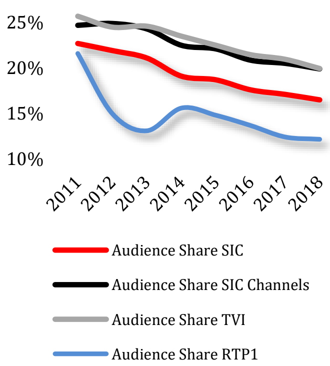
From SIC's total 145M€ in revenues 67% was obtained through advertising, 25% with channel subscription, and the remaining 8% with other sources (*Fig 10).* During 2018 SIC reached 45% of television advertising investment in Portugal. At the same time had an average share of 17% (*Fig 11)*, inferior to TVI, but so showing a higher power ratio of 2.13 (*Fig 12)*. At this time SIC's ratings are very positive - it has taken the lead on the first month of 2019, with a share of 19.2%, after the new TV grid was launched, result that was unseen since March 2005, after leading 2018 in the target "ABCD25-54" (consumers with the highest purchasing power).

Fig 10: Main sources of SIC's revenues (M€)



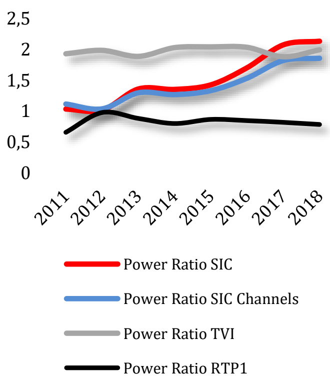
Source: Company data

Fig 11: Audience share (%)



Source: IPG Mediabrands (YUMI/ADfast)

Fig 12: Power ratios



Source: IPG Mediabrands (YUMI/ADfast)

For this result has contributed the debut of the show "Programa da Cristina" led by Cristina Ferreira, who left TVI in the end of last year, obtaining a share of 33.8%, as well as some reality shows and soap operas.

Although SIC recently has gained share it's important to highlight the fact that FTA TVs are losing their position over the last years since there are more options between video on demand or subscription channels, for example. In 2018 SIC Mulher reached a record audience, with a 1% share and SIC Notícias was once again the leading information channel with 1.9%. In terms of total subscription channels, SIC's group of thematic channels reached a market share of 3.8%, up 0.1% compared to 2017.

Expresso remained the best-selling newspaper in Portugal, with an average of 86K copies of paid circulation, according to data released for the last year. It was also the leading Portuguese publication in paid digital circulation, selling an average of more than 25K copies per edition. From publishing revenues, which logically had a downfall in 2018, 41% were due sales, 52% regarded advertising and the remaining 7% were from other sources (*Fig 13).*

Assets rearranged

Comparing the fixed assets of the group with operating revenues there is a similar trend over the years, and the divergence on the last year is largely due to the acquisition of diverse technical equipment for television transmission and recording, as well as owed to the project of expansion of the Paço de Arcos building, after the change in the magazines portfolio the year before (*Fig 14)*. Cash and cash equivalents also climbed from 3.8M€ to 9.6M€.

Financial investments remained stable for the last 4 years between 3.6M€ and 4M€ but investment properties suffered a sharp reduction from 5.9M€ to 1.5M€ in 2017 given the sale of the "FNAC" land for 3.2M€ and due to impairments.

Broadcasting rights correspond essentially to contracts for the display of soap operas, films, series or other television programs. Current rights ranged between 12.8M€ and 15.6M€ in the last 5 years and the non-current ones have been consecutively decreasing with a -27% CAGR in the same period (*Fig 15)*. In 2018 they went from 5M€ to 2.6M€, continuing the focus on domestic content production.

Goodwill and impairments – all eyes on them

After acquiring the remaining 49% of SIC in 2005, IPR's goodwill changed from 153M€ to 287M€, a difference of 134M€, that's higher than the current 125M€ of the group's equity. There's the possibility of negative equity if the group sells its television segment and so an accounting risk. That acquisition was closed for 152.5M€ and the fair value considered for that percentage was 18.5M€, which went into equity.

In 2011 impairment losses on goodwill reached 33M€. These were related to the increase in discount rates as a result of higher interest rates on sovereign bonds and changes of the business outlook that reflected a more adverse macroeconomic environment. Susceptibility to these variables, as well as any deterioration in cash flow generation prospects, such as the less favorable evolution of advertising revenues and the sale of publications, indicate the importance of assessing impairments.

Goodwill decreased 32.3M€ due to the sale on the magazines portfolio in 2017 for 10.2M€ although the sale did not take place until January 2018. Television goodwill remained unchanged in the last year at 246M€, publishing's at 20M€ and Infoportugal's at 2M€ totaling 268M€.

For the impairment analysis of goodwill the group turned to a specialized external entity. The discounted cash flow method was used based on the five year cash flow projections of each cash generating unit and considering a perpetuity from the fifth year on. It is important to note that the generating units, namely SIC, have undergone through structural changes since their acquisition. For television, was used a discount rate of 7.6% in 2017 and a perpetuity growth rate of 2%.

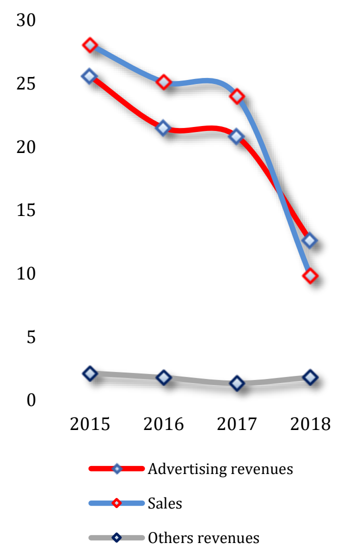
Only with access to SIC's individual accounts for 2017 and applying a growth rate of 2% to the cash flow of 11M€ with the above discount rate the present value (PV) for the 49% of SIC's capital is 120M€, lower than the 134M€ considered in 2005, representing a possible impairment loss of 14M€ (*Appendix 25*). However in 2017 the value considered for impairments on television was residual.

Dependence on rates

Both current and non-current loans have tended to be between 90M€ and 100M€ (*Fig 16)*, evidencing a preference for the short term. It was also possible to replace these loans given the exceptional climate for interests though the variable rates depending on Euribor (*Fig 6*), increasing their exposure to an expected rise in medium term and inherent risks.

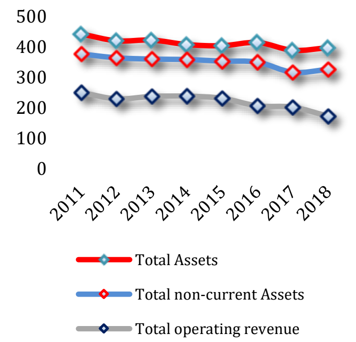
Loan repayment cash flows rose 97% from 27M€ to 53M€ in 2018, while maintaining a -11% CAGR for 2014-2018 given the exceptional value of 85M€ in 2014. From 2015 to 2017 the flows oscillated between 29M€ and 37M€. Future loan payments are in evidence in *Appendix 11* and it is worth noticing the existence of covenants in many of them, which imply the fulfillment of financial ratios and, in the event of default, result in the obligation of early repayment. However in 2018 even though the group failed some of these ratios, the funding agencies agreed to waive this.

Fig 13: IPR's publishing segment revenues (M€)



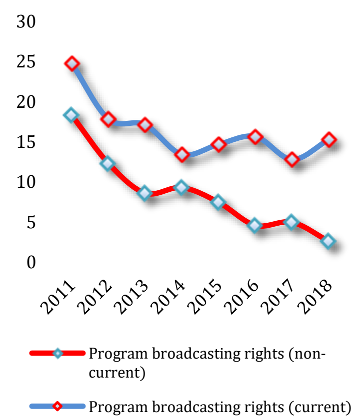
Source: Company data

Fig 14: Assets and operating revenue (M€)



Source: Company data

Fig 15: Program broadcasting rights (M€)



Source: Company data

Financial results have been improving, with 17% CAGR since 2014 going from -11.3M€ to -5.5M€. The 18% improvement over 2017 was due to the 11% reduction in interest rates, despite the maintenance of the debt balance. In that year, interest payments were reduced by 6.3% and, after two postponements, the group canceled a bond issue that could go up to 35M€. The objective of this debt issue was to renew the financing lines, replacing the one that IPR ended up paying last year for this one, which would have the maturity in 2022, but did not have the demand that would be necessary, which was a worrying indicator.

However, countering these fears in the middle of 2019, the group, through SIC and its recent positive performance, successfully launched a bond offer that collected 51M€ after an initial offer of 30M€ which generated a great appetite for investors with a demand almost 4 times higher than the final offer. The maturity of these bonds is in 2022 and the interest rate 4.5%.

Low Liquidity

The current ratio indicates that the group debt obligations in the short term are greater than the assets that can be converted to face them. In the last 5 years always remained below 0.5. After growing until 2016, in 2017 suffered a fall from 0.49 to 0.33 recovering in 2018 to 0.41 (*Appendix 5*). The quick and cash ratios also give the same indications, since they were always below the unit, uncovering the difficulty to have liquidity to fulfill obligations in the short term. The cash ratio, although extremely low, rose very sharply in 2018 from 0.02 to 0.06.

Deleverage leads the way

Total debt ratio had a 2% CAGR between 2014 and 2018 at the same time that the long term debt ratio had a CAGR of -8% in the same period, although it reversed the trend in 2018 with a 16% increase to 25% (*Appendix 5*).

Debt to equity ratio shows the leveraged nature of the group's model, evidencing the risk associated with the fact that it has financed its growth with debt. This ratio had a 3% CAGR since 2014, having risen from the 1.9 level where it was then to 2.2 in 2017 thanks to the decrease in equity given the accentuated negative result of that year. By industry, this value is 0.28 for broadcasting and publishing[1].

Equity multiplier performed similarly to D/E, passing, in 2017, from the 2.9 it had previously to 3.2 since the decrease in equity in that period was higher than the decrease in assets, even though the 11% decrease in the goodwill from that year on.

Debt to EBITDA ratio has grown with a 15% CAGR continuously since 2014 having reversed the trend in 2018 decreasing 17% from 12.5 to 10.5. These are high values and so they still carry associated risk. The media industry presents an average value of 4.0 for this ratio[2].

Interest coverage ratio indicates that interest expenses are high against the EBIT. This ratio ranged between 1.5 and 2.5 from 2014 with the exception of 2017, scenario that worsened momentarily in that year with negative EBIT due to the impairments. Is currently 2.2. This ratio evidences the historical weight of debt service in the group's results, even more in such a privileged time given the conditions of financing with low interest rates.

The proportion of operating income which is backed by operating cash flows was around 8% in 2018, even so the highest value since 2014. The business takes in significantly less cash and cash equivalents than what it earns in profits, and is not collecting enough cash to meet its short-term obligations with ease.

Tuning Profitability

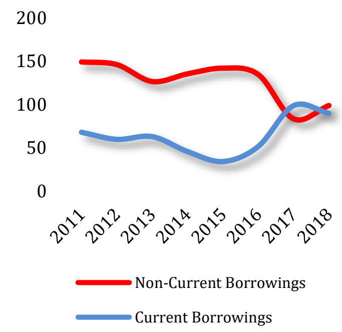
The ROE returned to positive values with 2.5% after went negative to -17.6% in 2017 due to the negative net results that it had already repeated in 2011, also because of impairments (*Appendix 5*). Before 2017 it was already in decline with a loss of 76% between 2014 and 2016 where it obtained a ratio of 1.9%. It should be between 16% and 23% respectively for publishing and broadcasting industries[1], thus showing that management is not using assets as efficiently as it should to create profits. The ROA, currently 0.8%, followed the same trends[1].

The gross profit margin had a -3% CAGR since 2014, however still presents high values around 57%.

The EBITDA margin, showing a clear view of the company's operating profitability and cash flow, has reversed the downward trend of the last 5 years in 2018 from 7.2% to 10.5%, a 46% increase. The same performance is shared by the EBIT and net profit margins that moved into positive territory this year after a negative 2017. The CAGR of the EBIT margin since 2014 was -13% and the net profit margin was -21%. The industry's net profit margin is between 8% and 10% instead of the 2% presented[1].

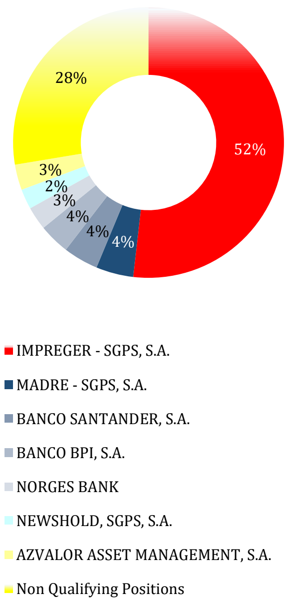
By industry, SG&A/Sales ratio for broadcasting is 11% and for publishing 27%[1]. Although it has been decreasing in recent years, in particular 12% in 2018, SG&A represents a very significant part of the sales, being over 45%. The great reduction was in the supply of external services, trend since 2014 with a -15% CAGR. Personnel costs also contributed to the improvement with a cut of 10M€ in 2018.

Fig 16: Borrowings (M€)



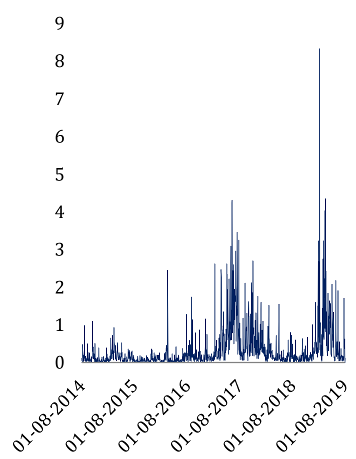
Source: Company data

Fig 17: Shareholders structure 2018



Source: Company information

Fig 18: IPR stock volume traded (M)



Source: Reuters

Typical Efficiency

Accounts receivables turnover has come down with a -14% CAGR in the last 5 years and the accounts receivables over sales around 19% what is within the industry both for broadcasting and publishing[1]. The accounts payables over sales is below the industry's 19% which is positive but it has continuously grown. The collection period in days increased significantly in 2016 from 38 to 67 days and in 2018 was already in 69 days. Total assets turnover declined continuously since 2014 with a CAGR of -7% and in 2018 it has fallen 17% to 0.43, which means that for each EURO of assets the group generates 0.43€ in revenues. Nevertheless it still shows good efficiency (*Appendix 5*).

Strategy

The Strategic Plan for a three-year period ending in 2019 foresees the diversification of the debt portfolio. The successful 51M€ bond offering of June/July 2019 supported by the recent performance of SIC, contradicts the recent difficulty of IPR in this form of financing. This difficulty was also evident with the constant increases in short-term loans rather than with long maturities. That strategy aims to diversify and manage debt maturities, opening doors that have been closed in the financing market in order to meet the future cash needs posteriorly analyzed.

Improving operating results is another key point. On the side of the expenditure reduction, adding to cuts of production costs, as in the case of the series "Golpe de Sorte" where roughly a reduction of 20% was obtained, synergies are also foreseen between IPR's teams of different segments that now share a common space with refurbished technical equipment in the Impresa building, encouraging the optimization of performances.

From the perspective of revenues' reinforcement, the focus is on the exploration of the IVRs, also with SIC Ventures, exchanging advertising for equity, exporting content like the Txillo channel that is a success and exploring Portuguese-speaking markets (Angola which has recently been overcoming the circumstances that hindered confidence and investment will be gradually a natural target).

Audience share increase through the study of the public will be the path to pursuit, offering the right contents with the optimization of the programming grid, which includes the review of the contract with Globo. This is expected to result in the growth of the advertising investment quota, reinforcing an already relevant power ratio (*Fig 12*). Still within the strategic scope, the group forecasts the launch of new digital properties, relying on the increase of the digital sales of Expresso and in multiplatform formats.

Shareholders Structure

On December 2018, the capital was already fully subscribed and amounted to 84M€, consisting of 168M shares with a nominal value of 0.50€ each, with the qualifying positions, above 2%, shown on *Fig 17.* Impreger SGPS S.A. has the majority of capital and the voting rights of each shareholder correspond to the number of shares held.

Among the known family relationships between members of the board and qualifying shareholders in the group stands out the fact that the Chairman of the Board of Directors, Dr. Francisco José Pinto Balsemão, owner of 99.9% of Impreger SGPS S.A (that owns 52% of total shares), is the father of both the Deputy Chairman of the Board of Directors, Eng. Francisco Supico Balsemão and the CEO, Dr. Francisco Pedro Balsemão.

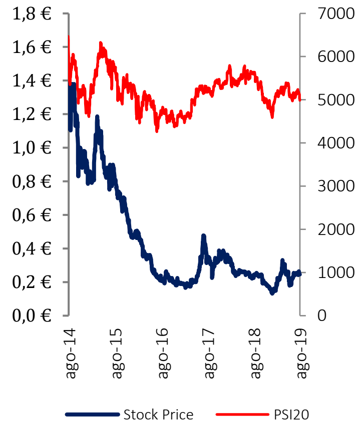
Stock Evolution

In the last 5 years, since March 2014, when IPR rejoined PSI20 after 6 years away, the stock has undergone a clearly downward trend, falling from 1.97€ at its highest peak on 04/04/2014 to 0.25€ on 01/08/2019 (*Fig 19*).

Since 2014, the performance of the stock against the PSI 20 shows a similar but more volatile behavior, since the stock does not have the diversification effect present in the index - the correlation of both returns between 01/08/2014 and 01/08/2019 was 0.27 and the stock annualized daily volatility reached 49%. During this period, 3 of the 5 days with the highest trading volumes took place at the beginning of 2019, with the most dynamic day having more than 8M transactions, coinciding with an upward trend at the beginning of the year (*Fig 18*). The stock reached its lowest point at 0.13€ in the last days of 2018.

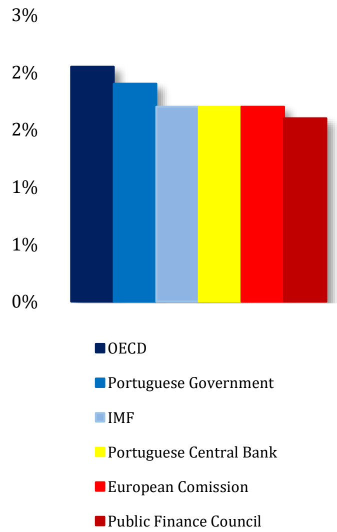
The year of 2018 was a particularly negative one for capital markets, despite the dynamism of the Portuguese economy. The presence of several threats in global markets such as Brexit, US-China trade conflict, the dragging of historically minimal interest rates, the monetary policies of the ECB and FED or the slowing of the world economy resulted in a correction in December after the good results achieved throughout the year. As a result, PSI 20 ended 2018, down 12.2%, even though better than the IPR stock which fell from 0.35€ to 0.14€, resulting in a 61% devaluation (*Fig 19).*

Fig 19: Stock price vs PSI20 (€; points)



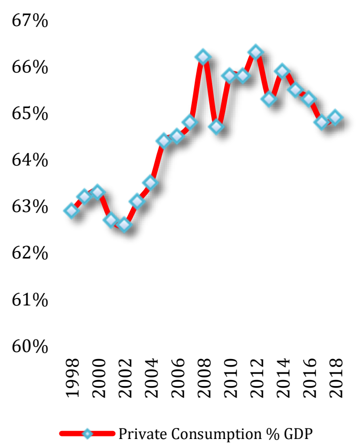
Source: Reuters and Bloomberg

Fig 20: Portuguese GDP Outlook 2019 (%)



Source: Author compilation

Fig 21: Portuguese private consumption (% GDP)



Source: Pordata

3. Management and Corporate Governance

Structure

IPR follows an Anglo-Saxon Model, which includes a Board of Directors, an Audit Committee and an External Auditor (*Appendix 12*), and acts in compliance with Código das Sociedades Comerciais and Código de Governo das Sociedades (Instituto Português de Corporate Governance). Has an Audit Committee, a Corporate Governance Committee and Strategy Committee all created within the Board of Directors.

The Board of Directors is composed by the Chairman, Dr. Francisco José Balsemão, the Deputy Chairman, Eng. Francisco Supico Balsemão and 6 members, 3 of them independent (*Appendix 13*).

The remuneration of the members of the Board of Directors is established by the Remuneration Committee, which has 3 members, all independent. The compensation strategy has the objective to be reasonable, simplified and based on merit (*Appendix 13*).

Beyond his work within the IPR universe, where through Impreger SGPS SA has 52% of the voting rights, Dr. Francisco José Balsemão has a law degree and was one of the founders of the Portuguese Social Democrat Party. Was Prime Minister (1981-1983), a member of parliament and of the Steering Committee of the Bilderberg Meetings. Interpreted high level positions in numerous institutions from politics to business, education or culture being distinguished on several occasions. Currently is a member of the Council of State since 2005.

As Chairman is responsible for the coordination of the relations of the Board of Directors with the CEO, also for presiding over the Strategy Committee, which is responsible for the Strategic Plan, and approves proposals concerning the editorial strategy of the various brands of the group. Represents IPR institutionally and coordinates the Institutional Relations Department and the Research Department.

Eng. Francisco Supico Balsemão is an engineer with a post-graduation in Telecommunications Business Management. Served as Senior Adviser of Operations for Lehman Brothers Inc. and was the Director of International Business and Roaming at TMN. Apart from his activity as Deputy Chairman at IPR also serves as a Director of Portuguese information services provider Compta SA, President of the local Association of Young Entrepreneurs (ANJE), Vice- President of Portuguese Industrial Association (AIP) and Director at ACEPI.

Dr. Francisco Pedro Balsemão, is the only director at IPR with executive functions, has a law degree and held the positions of Associate at Linklaters, Senior Associate at Heidrick & Struggles and council member at Universidade Nova de Lisboa. As CEO, coordinates all operations and the areas of HR, Systems and External Communications.

The Audit Committee created and approved an internal system for the communication of irregularities with the objective to prevent and eliminate irregular practices and incorporates the risk management office. Recommends the External Auditor, BDO & Associados, SROC, Lda. and verifies the independence and the quality of the financial information disclosed.

The Corporate Governance Committee is responsible for assisting the Board of Directors supervising the corporate activity on matters of corporate governance and implementing rules of conduct with rigorous ethical principles in the performance of the duties attributed to the members of the governing bodies and employees.

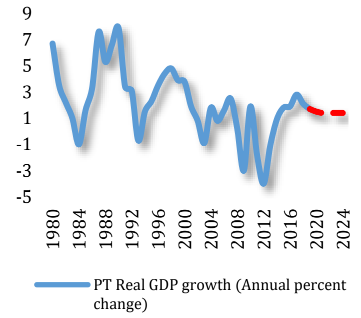
Analyzing the compliance with the Governance Code adopted, from the recommendations, 39 where implemented, 9 of them only partially, 13 were not implemented and of those 4 had no justification.

Social Responsibility

Media companies, notably newspapers and televisions, have a great capacity for social, economic and political influence, and can therefore be an attractive strategic asset for non-financial motivated reasons. IPR, in particular through SIC, arrives free of charge practically to the whole of the Portuguese territory and has a significant number of spectators every day, thus imposing on the group a social responsible conduct, requiring awareness and intervention in the problems that affect society, defending freedom of expression and the role of independent media in the quality of democracy. The group responds to this need through its Private Institution of Social Solidarity, SIC Esperança, as well as through support to cultural manifestations and institutional initiatives, privileging a close relationship with its stakeholders, investors and spectators, not forgetting the stipulation of measures within the group for this purpose (*Appendix 14*).

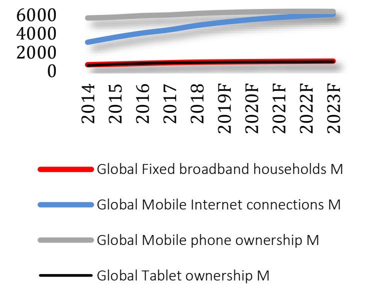
4. Industry Overview and Competitive Positioning

Fig 22: Portuguese real GDP growth (%)



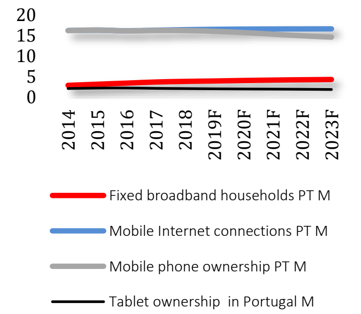
Source: IMF

Fig 23: Global internet connections and devices (M)



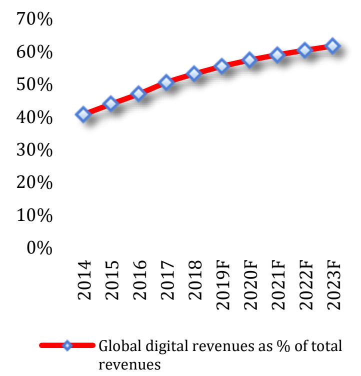
Source: PwC

Fig 24: Portuguese internet connections and devices (M)



Source: PwC

Fig 25: Global digital revenues as % of total



Source: PwC

Macroeconomic Summary

The past 15 of September 2018 marks the 10th anniversary of Lehman Brothers' bankruptcy, an event that is regarded as the beginning of the global financial crisis (GFC) that required the intervention of the central banks, the bailout of some financial institutions and even of some sovereign states, Portugal included. Since then the world economy has gradually recovered. The long-term view, however, shows that household income and consumption are still depressed under negative effects of the GFC and despite broad expectations to see the deleveraging of global debt it continue to grow together with historically low interest rates whose yield curves show signs of inversion. This when fear arises on behalf of trade wars and slowing economies - the IMF estimates that 70% of economies will slow down in 2019, with world economic growth falling from 3.6% to 3.3% (*Appendix 15*) - suggests a possible downturn in the economic cycle. Populism is also starting to show in some political discourses at a time when the disparity between classes is constantly increasing.

Portugal has come a long way since the crisis and managed to drastically reduce the deficit from 11.2% of GDP in 2010 to 0.5% in 2018 by cutting public spending and benefiting from the positive economic period that has been experiencing particularly in the tourism area and exports. Public debt stood at 121.5% of GDP in the last year and unemployment remained at historical lows of 6.7% after exceeding 16% in 2013. Private consumption recovered to close to 65% of GDP, being a good proxy to the advertising market growth (*Fig 21*). Inflation in the last 10 years was always conditioned between -1% and 3% (*Fig 38*) being the ECB's target 2%.

In 2018 the Portuguese economy grew by 2.1% decelerating from the 2.8% in 2017 and for 2019 most institutions that make forecasts are projecting a further deceleration to 1.7% (*Fig 20*), a tendency that should be followed in upcoming years.

Industry Overview

The main sources of revenues of media companies are advertising, subscriptions and content sales. Those are directly influenced by the economic fluctuations and digital migration. In Portugal the industry where IPR's main segments belong can be seen as an oligopoly, with few players, high barriers to entry and non-price competition through advertising and product differentiation[3].

According to PwC[4] Global E&M revenues are set to see a 4.3% CAGR from 2018 to 2023, with the sector's overall revenue exceeding \$2.1B in 2018 and reaching \$2.6B in 2023, maintaining the historical trend despite changes in the consumption patterns that are reshaping the industry. The central trend for this growth is that it is digital and personalized, asking for a business model direct to consumer.

Over the next five years, China's absolute growth in E&M is set to surpass that of the US for the first time. In that period China will add \$84G equivalent to a 7.7% CAGR[4] with potential to change the status quo.

Preference for mobile devices & digital

E&M market will continue to be increasingly marked by preferences for mobile devices[4] given the ubiquitous connectivity that will be extended with 5G. Continued investment in the development of technology and network structures has allowed the expansion of coverage and connectivity to the point where users can always be connected in a reality of constant production and diversification of content and experiences that can be reached digitally[5].

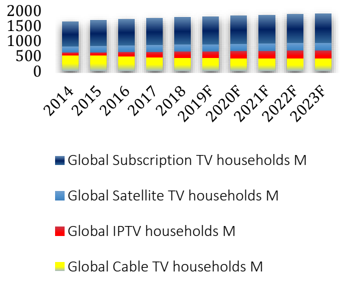
Data consumption is expected to have a CAGR in 2018-2023 of 26% globally[4], as the cost of data consumption has continuously declined. Global internet accesses will grow 33% (*Fig 23*) and 18% in Portugal (*Fig 24*), where the same evolution will be registered both for mobile and fixed broadband accesses, with the expected mobile internet penetration on 79% in 2023 and fixed broadband' s reaching 98%. Mobile connections in this country will be increasingly of high-speed representing a CAGR of 11% in that period. Smartphone ownership will grow 38% in Portugal, reaching a market penetration of 95% with almost 14M devices in 2023 (in a country with 10.3M residents in 2018[7]). Non-smartphone ownership is expected to decrease 88%[4].

That makes it imperative for content creators, distributors and platforms to continue adapting in order to monetize directly through mobile experiences rather than through traditional approaches.

Personalization

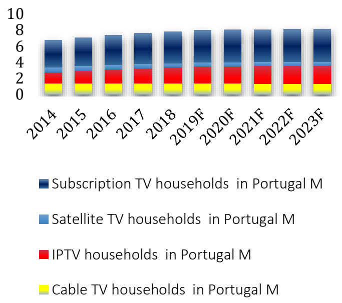
Companies are already adapting to the new paradigm that focuses on personal preferences with tailored offerings as today's consumers, and, as a result, advertisers reject the standard, converging on personal experiences[5]. With the help of big data analytics tools and AI, customer behavior patterns are dissected, offering companies the insights on how to efficiently reach their targets and simultaneously surpass competitors with better decision-making ability on content, distribution, timing, consumer experience and monetization.

Fig 26: Global TV households (M)



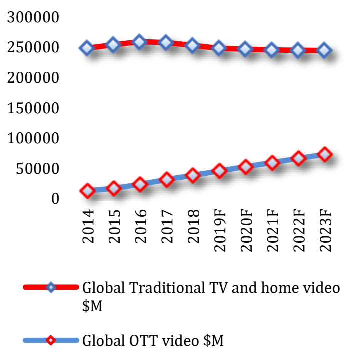
Source: PwC

Fig 27: Portuguese TV households (M)



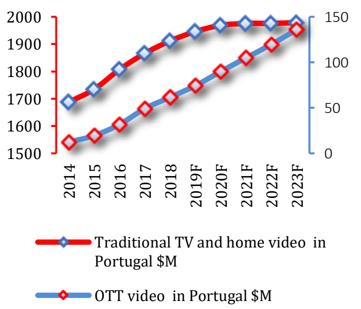
Source: PwC

Fig 28: Global traditional TV vs OTT ($M)



Source: PwC

Fig 29: Portuguese traditional TV vs OTT ($M)



Source: PwC

Thus has emerged a world where consumers actively control the shape and content rather than the classic passive form through a growing variety of devices, having the ability to add content to the network themselves. Voice will be one of the following competition grounds as media experiences will be activated by voice, being more dynamic and personalized[4].

At the same time consumers' concern for security, data privacy and protection against piracy attacks and commercial policies led to the adoption of the General Data Protection Regulation (GDPR) in 2018. It aims to protect the privacy and data of all individuals within the European Union and Euro Area and there's also an effort by companies to handle data more transparently as this is seen as a pillar of the robustness of these ecosystems through the trust that it generates.

Resiliency of television

Traditional vs 21th century

Traditional TV is based on broadcast networks that operate by broadcasting content from a central point through a dedicated coaxial cable network in the case of cable TV or through radio waves in the case of satellite TV that can be harvested with a satellite dish or cable box. In both cases consumers can "tune in" to specific channels within that signal.

The emerged internet networks differ from cable and satellite by offering content through the Internet Protocol (IP) allowing users to request the content over the web at any time as it can store programming on servers.

Internet networks

The main web based services are Internet Protocol Television (IPTV) and Over The Top (OTT). IPTV is delivered over the internet via a private dedicated network which can deliver a more consistent service of live TV or storing video (on demand or pay per view) with high quality. The use of this technology allows the integration of different services across platforms which brings the convergence of voice, data and television over the same network, allowing the purchase of products present in programming through the TV itself. For consumers, assuming internet access, a set-top box is enough to access the channels[8].

OTT offers television from third-party services like Netflix and YouTube, delivered over the same open, unmanaged network of email and web browsing, based on multipurpose platforms such as computers, smartTVs, video games platforms and mobile devices. Thus the quality of transmission is subject to internet speed, with buffering and other wait-times common for slow connections and peak-hour viewing but will benefit from the 5G upgrade[8].

Coexistence

On the advertising side, digital advertising is attracting increasing resources in Portugal (*Fig 34*) and globally (*Fig 35*). On the consumer side, emerging over-the-top digital alternatives are competing with traditional pay TV options (*Fig 29*). Although competition from OTT and digital advertising is heating up, it's expected that traditional television will continue to expand after the downturn in the last years (*Fig 28*).

Traditional television has done relatively well because it still has the largest reach of any medium. In the case of television advertising, digital media has served more as a complement to traditional television than as a substitute[5]. Respecting consumer habits, OTT has been adopted mostly as an add-on to the traditional pay TV subscription, rather than a replacement. Consequently, pay TV subscription has continued to grow both domestically (*Fig 27*) and worldwide (*Fig 26*).

How SIC has prepared

Fiber infrastructures and 5G networks will handle the massive increase in digital traffic and all-IP is becoming the standard for TV distribution, to which SIC has already adapted in a partnership with SONY and Telefónica to deliver Portugal's first all-IP TV and multimedia production facility, a breakthrough also in Europe. Adopting an open IP approach enables SIC to route HD video and audio, synchronization and control data in real time over standard network infrastructures benefiting from the possibility to create better-looking content, faster and more efficiently, with wider creative possibilities[9], taking advantage from the proximity of teams from IPRs different segments in the new building.

A glimpse of the future

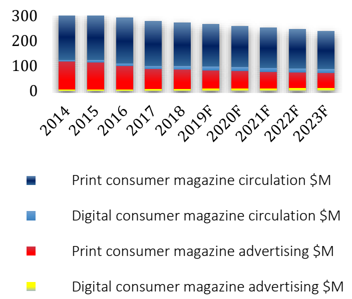
According to PwC[4], traditional TV and home video services are expected to stabilize with a decrease of only 1.5% until 2023, remaining above $244G globally and $1.9G in Portugal, where it will continue to present a positive CAGR of 3.5%. Here cable TV's penetration is expected to stabilize at 31% and 51% of national users will have access to IPTV technology, well above the global 18% (*Fig 26*). Penetration in Portugal of satellite TV will decline with a -2% CAGR stabilizing at 11% (*Fig 27*). At the same time subscription TV will remain virtually unchanged at 93%.

It's foreseen an emerging trend of rejection of the packs of channels offered by operators as consumers instead build their own assortments of OTT services.

OTT

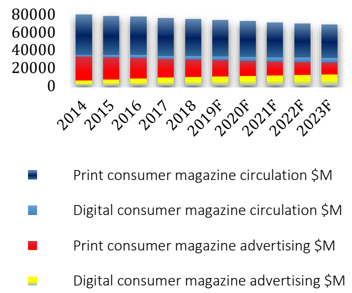
Regarding video services, pay-per-view and DVDs rental are, in this digital context, replaced by transaction supported video-on-demand (TVOD) of which Google Play, Amazon Instant Video and iTunes are examples. Within cable and pay TV subscription services composed by live sports, live events, first-run and syndicated movies will be, in OTT services, supported by subscription supported video on demand (SVOD) as are the cases of eleven sports (9.99€/month), Netflix (7.99€ to 13.99€ per month) or PlayStation Vue. Traditional broadcast TV and FTA video services can be substituted by advertising supported video on demand (AVOD)

Fig 30: Portuguese magazine circulation and advertising ($M)



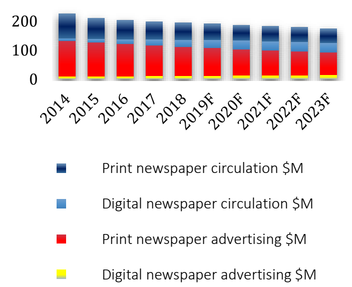
Source: PwC

Fig 31: Global magazine circulation and advertising ($M)



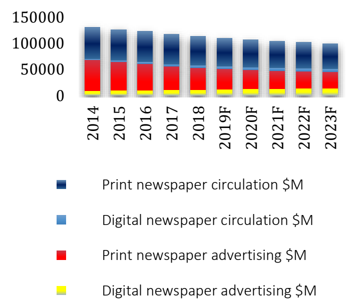
Source: PwC

Fig 32: Portuguese newspaper circulation and advertising ($M)



Source: PwC

Fig 33: Global newspaper circulation and advertising ($M)



Source: PwC

such as YouTube or Facebook[10]. While AVOD represents the potential to steal ad revenues for the internet giants, SVOD competes with television packs that include SIC channels, with prices between 20€ and 30€ per month.

Global revenues from these services reached $38.2G in 2018 and are expected to almost double by 2023 (*Fig 28*), with domestic revenues of $136M over this horizon (*Fig 29*). Dissecting OTT forecasts in national terms the highlight goes to the doubling of revenues over this period for SVOD while TVOD will continue to have a CAGR above 4.5%[4].

Reinvent Publishing

Trying new methods

In response to the rough decade the news industry went through, major newspapers have made considerable changes. They tried to combat diminishing readers' interest by shortening stories, adding commentary and using social media to their advantage. With the rise of Twitter, Facebook, Instagram and WhatsApp some can claim that we are entering a new age in which news must be delivered in 280 characters or fewer. In this digital ground when it comes do advertising the rise of click bait, fake news, inflated audience counts and ad-blocking is undermining the attractiveness of this medium, emphasizing the struggle of publishers.

The importance of social networks and search platforms for journalistic work is extremely relevant in this context not only for the globalized potential but also thanks to the impact analysis with all the data feedback and the symbioses that immediate news notifications create in readers. Heavy reliance on these content delivery vehicles not only entails a restructuring of audience management but also changes in the structure of profits and revenues.

But newspapers aren't sure of how to best respond to the many challenges they face today even with optimistic values from additional digital revenues from newspapers it's most likely that they cannot compensate for losses in print (*Fig 33*). The most solid path seems to be through investment in journalistic quality monetizing the historical knowledge.

Newsrooms under attack

Difficulties have also led to changes in costs, particularly in terms of staffing, with some of the most experienced reporters with their places at risk as they earned the highest wages. At the same time journalists have come under increasing pressure in an aggressive political and social environment in some geographies being the profession the target of discrediting. IPR's strategy is to ensure what it considers an extraordinary caste of staff by promoting salary corrections to rectify cuts of the past[11].

It's a social imperative to continue to invest in quality and differentiating journalism, as well as well-rated and independent opinion articles. That has been a struggle in this era of numerous free newspapers and articles online of all creeds and convictions that through algorithms tend to present content that somehow reinforces the biases of each reader leading to extremist opinions.

Trends to 2023

Magazines

The magazine revenues are expected to globally decrease until 2023 with 1.8% CAGR[4] to $68G. In this period global circulation of magazines will decrease by 6% to $43G, of which digital circulation will grow by 14% to $12G and print will be cut by 8% on this horizon to $15G (*Fig 31*). In Portugal the trend will be similar, with revenues from magazines going down 10% by 2023 reaching $245M split between circulation and advertising (*Fig 30*). Circulation will fall 9% to $167M over the same period. From this circulation the print will continue to fall 10% to $151M while digital will rise 9% to $16M.

Newspapers

Newspaper revenues will follow a CAGR of less than 2% both globally and in Portugal reaching $172M[4]. The same trend will be seen with the circulation which, however, locally will have a smaller decline than what is seen globally falling 2% to $81M (*Fig 33*). In this decrease digital circulation will play a counterweight role with an increase of 16% in Portugal to $33M (*Fig 32*), still lower than the global forecast to 2023 of 35% but compensating the retraction in the printed segment around 12% both globally and nationally where it consolidate at $48M.

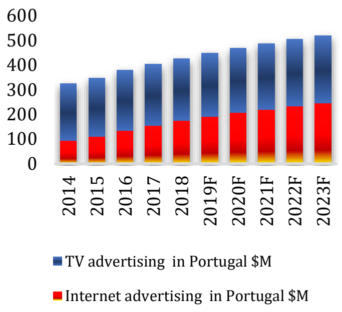
Metrics on advertising

According to PwC[4], by 2023, marketers will allocate more than 50% of their budgets to digital advertising. The internet is already the single-largest advertising segment, accounting for 41% of all ad revenues in 2018.

TV advertising will grow roughly 7% until 2023 globally (*Fig 35*) and 9% in Portugal (*Fig 34*), from which broadcast's adds will grow less than 8% but online TV ads will double in that period. This trend is reinforced at the same time that the internet advertising will rise almost 40% in Portugal and globally, although this strand is dominated by the two giants Facebook and Google bringing together about 57% of US digital advertising in 2018[12].

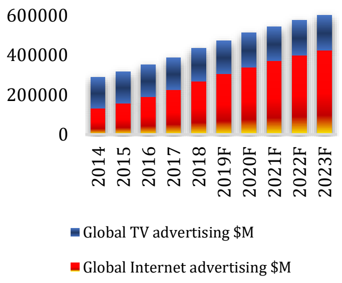
In Portugal magazine advertising revenues are expected to fall by 13% until 2023, while digital magazine revenues are expected to grow by 40% (*Fig 30*). Simultaneously print ads will decrease by 20%. For newspapers, advertising revenues will have a CAGR of -3.7% in 2018-2023, which, as in magazines, will be characterized by a 19% increase in the digital segment and a decrease of 18% in the print one (*Fig 32*).

Fig 34: TV and internet advertising in Portugal ($M)



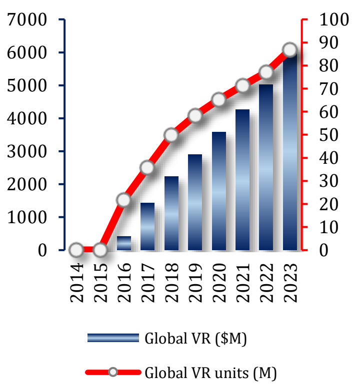
Source: PwC

Fig 35: Global TV and internet advertising ($M)



Source: PwC

Fig 36: VR revenues and units



Source: PwC

Fragmentation

The proliferation of specialized media platforms and the variety of content choice has at the same time made it more expensive and difficult to accommodate all that content consumers are looking for. They can enjoy content as diverse as sports and series through subscribing several services, such as SportTV, Eleven Sports, HBO or Netflix. However there is an upper limit on how many different services a consumer is willing and able to pay for, and in parallel how much time has in the day to consume. This leads to a belief that the growth rate in content and platforms in this industry may not be sustainable over the long term.

This fragmentation has added complexity to the decision making of the various stakeholders, leaving room for the development of aggregators.

Convergence

At the same time this fragmentation occurs, there is a convergence regarding content producers and distributors. The boundaries have been blurred between the different media segments, visible for example in digital news where various segments are used (audio, text, video) or in series and movies produced by the distributors themselves like Netflix competing with the big studios[4]. Content creators have been forced to compete and partner with platforms, connecting with consumers directly through these distribution networks – take the acquisitions of Time Warner by AT&T and of 21st Century Fox by Disney.

At the same time, it's discussed where technology giants should be taxed, to what OECD recently announced that 129 countries have already agreed to find a solution by 2021. This issue has already sparked a heated exchange of economic threats between France and the US in a world where globalization increasingly faces these risks.

AR/VR

The forecast for VR (*Fig 36*) global revenues follow a CAGR of 22% till 2023 where it will reach $6G, representing a nearly 50% increase of units present in the market expected to reach 87M on that horizon. From all PWC's analyzed E&M segments, this will be the one that will have a higher growth rate over the next 5 years[4]. The potential is huge.

The combination of AR/VR and AI can change the current paradigm once even more detailed information can be collected, such as where the consumer looks to when immersed in a given virtual environment allowing a more efficient design of the supply[5]. It is a matter of perfecting the experience. In the UK Guardian has offered readers VR experiences and here SIC has already incorporated in the night news AR content and has the technology needed.

Competitive Positioning

SWOT

Through the SWOT analysis (*Appendix 16*) it's important to say that IPR is the major Portuguese media group, having a diverse portfolio and presence in multiplatform. In its strengths stands out the capacity to target the audience with more purchasing power, resulting in a higher power ratio and reaching 45% of domestic TV advertising investments in 2018. It's also noteworthy the group's capacity to reduce operating costs with the recent centralization as a good example.

On the other hand as weaknesses it can be referred the remote possibility for IPR to raise capital as it's a family company and in the same rationale has no dividend policy. The highly leveraged structure with a historically downgrade of revenues has resulted in a poor performance in stock exchange, although in 2019 this paradigm seems to be changing. The business segments where the group is involved contribute to fragilities once there's high competition, dependence on economic cycles and advertising at the same time that is exposed to a changing digital era.

As opportunities for the future the recent bet on SIC Ventures, receiving equity by providing advertising space to new non-related companies is just another example of IPR's successful ingenuity to find new sources of revenue as also the sale of contents to new markets, being Txillo a great showpiece. The group can possibly be in the front line to target M&A solutions in Portuguese speaking countries.

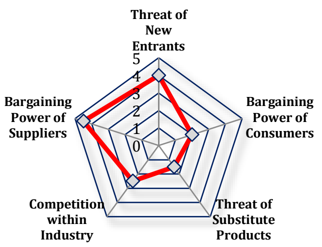
The exposure of the domestic economy to sharp fluctuations may represent a serious threat ahead, as it impacts both on consumption an on financial health and also increases the potential for high impairments on futures sales of assets. Danger also comes from the diversion of advertising to other media due to changes on supply and consumption patterns and may eventually result in the privatization of RTP if a future government considers it an unnecessary public service.

Porter's 5 Forces

Threat of new entrants – Low (4)

TV channels and existing publications have consumer's loyalty and this is the key to advertising that is the main source of revenue. There are high setup costs as well as brand awareness ones, so high initial investments require a long period of return. For the entry of new players it may be considered an M&A but tight regulation and, in the case of TV, the requirement of an FTA broadcast license will have to be assessed. The difficulty of new TV entries is evident when one observes the residual share of the numerous thematic channels that have appeared over the years in the cable. In case of entry of a new player, IPR and current players would be able to react since the new competitor will not be able to bring, predictably, exclusive content.

Fig 37: Porter's 5 Forces



(5) Insignificant threat to IPR
(1) Critical threat to IPR

Source: Author

Table 3: DCF output summary

Enterprise Value (EUR '000)	253571
Net Debt (EUR '000)	197051
Value of Equity (EUR '000)	56519
#Shares ('000)	168000
DCF share value 01.08.2019	0,34 €
Price 01/08/2019	0,25 €
Upside potential	37%

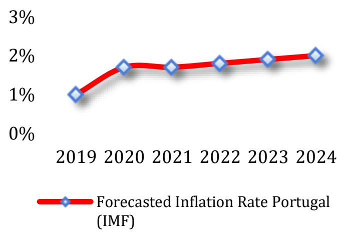
Source: Author

Table 4: WACC terminal period

IPR Terminal Period	
Cost of Equity	
Rf	-0,3%
CRP	3,1%
MRP	7,2%
Beta Levered - BL	1,3
Cost of Equity	12,9%
Cost of Debt	
Cost of Debt	4,6%
Marginal Tax rate	27,5%
After tax Cost of Debt	3,3%
WACC	
Weight of equity	41,5%
Weight of debt	58,5%
WACC	7,3%

Source: Author

Fig 38: Inflation rate for Portugal (%)



Source: IMF

Bargaining power of buyers – High (2)

Given the intense rivalry and the availability of different sources and alternatives, consumers have a wide range of options. Since SIC is an FTA channel, there are other channels and alternatives that are also free, so it cannot force its consumers to remain faithful at the same time that revenues are too dependent on advertising. Streaming on demand, for example, has a low cost access and customers are considered high sensitive to prices. Additionally free publications and piracy still is an enormous threat, offering the same content for free despite the poorer quality. Customers have a high bargaining power (*Fig 37*) because they can unfollow or unsubscribe whenever they want with low or without switching costs, so their consumption is expected to continue to adapt in this new era in which new offers and models flourish in a market where the consolidation that once existed has virtually vanished.

Rivalry among existent competitors – High/Moderate (2.5)

There are few weekly newspaper players at a national level like Expresso being SOL the main rival. In the case of FTA televisions, the share is distributed mainly between SIC and TVI (*Fig 11*), followed by RTP1, relegating the remaining 3 public channels of RTP and ARTV to low values, being higher SIC's ability to capture advertising revenues. Competition is made through content and market share. To increase the client base each player is trying to offer the most attractive and diversified content. Hence, competition for exclusive content is high and is expected to increase in the next years. However, because digital access isn't too expensive and one client can subscribe or follow various broadcasters or publishers at the same time, companies' revenues can increase at the same time that the competitive environment becomes wider. For IPR, with the strategy of cost reduction in place, a sharp decrease in market share has a significant impact on revenues from advertising and might be difficult to overcome, although the recent trend is of gaining share. If RTP becomes a private company this risk becomes more real as in this scenario that channel's advertising time would increase significantly. An M&A scenario could pose as a risk or as an opportunity depending on IPR's position on it. The interest of Cofina SGPS SA on an eventual acquisition of Prisa's stake in Media Capital SGPS SA group is not new and can bear a potential risk for IPR (*Appendix 17*).

Threat of substitute products – Critical/High (1.5)

Considering satellite, cable television and OTT (SVOD and AVOD) as the main substitute products the tendency is that consumer are shifting away from TV fees and fixed programming in favor of more personalized and on demand experiences through internet mediums known as OTT. This rise contrasts with the declining of pay-per-view channels and DVDs at a time when movie releases doesn't happen anymore exclusively in cinemas with launches in subscribed channels, for example. SVOD is similar to traditional TV packages, allowing users to consume as much content as they desire at a flat rate per month. With SVOD, there is far greater freedom to opt out as users are not tied into long term contracts. This offers greater flexibility to users. Consequently, providers of SVOD such as Netflix, Amazon Prime and Hulu are challenged with retaining consumers. AVOD is a variation of that business model that keeps including ads representing a free variant to clients, like YouTube. Exclusive live contents such as sports which were ideally suited to reside behind a conventional TV, with the speed and reliability of 5G, will trend to move to this new paradigm with examples such as Eleven Sports. With these relevant changes, advertisers will test new investment distributions until they are able to find a new optimized equilibrium.

Bargaining power of suppliers – Low/Insignificant (4.5)

This force is highly dependent on each company business model. The great majority of content is obtained from licensing agreements, giving a high bargaining power to suppliers. Companies have the right to air its exclusive content for a certain period of time, but don't have its ownership, therefore some shows can be sold to another player when the contract ends. However, producers are interested to have their shows broadcast through digital channel (Breaking Bad's number of viewers increased drastically when broadcasted by Netflix), reducing their bargaining power. Many TV contents such as soap operas are developed by IPR nowadays, but the next step is to create a production segment, like Plural exists in Media Capital, reducing the dependence from suppliers and giving the chance to also act as a supplier itself. This step was told to the author as being strategic for IPR during a meeting with its CFO.

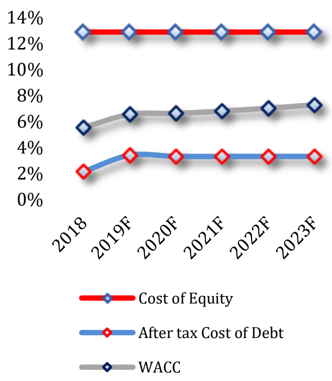
5. Valuation

IPR was valued using a free cash flow to the firm model (FCFF) complemented with a relative valuation through market multiples after selecting a peer group. A two-stage growth model was applied considering annual FCFF forecasts for 2019-2023 and a constant growth rate for the perpetual period. Finally the enterprise value was reached by discounting at a weighted average cost of capital rate (*Table 4*) the sum of discounted cash flows (*Appendix 23*). This method is the most appropriate for this company due to the available information. A sum of parts (SoP) approach would be interesting, dividing the valuation by IPR's business areas but since the balance sheet divided by segments is neither public nor provided by the company upon request it was concluded that it would not make sense to extrapolate values. The dividend discount model is not suitable since IPR has no dividend history pattern or future policy, neither is the free cash flow to equity (FCFE) since the company has not a target capital structure and maintains the deleveraging strategy. The approach lead to a price target of 0.34€/share for August of 2019, representing an upside potential of 37% (*Table 3*), especially susceptible to the following factors.

Revenues & Costs

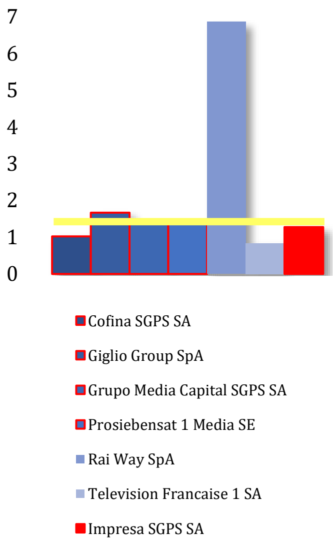
Revenues and costs were forecasted according to IPR's 3 main segments with focus on television and publishing, showing different trends for the period.

Fig 39: Forecast for Rd, Re and WACC



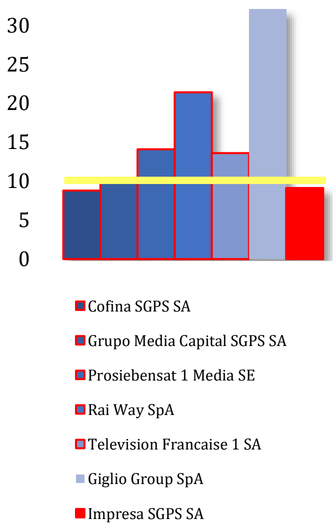
Source: Author

Fig 40: EV/Sales peer values



Source: Author

Fig 41: P/E peer values



Source: Author

Following PwC's projections for Portugal, television advertising revenues will have an intermittent positive annual growth between 1.1% and 2.4%, but with a tendency to lose momentum with online media setting the market attention (*Appendix 8*). Subscriptions will continue to grow but at a steadily lower rate, with 2.3% expected in 2019 and 0.5% in 2023 given the fierce competition from OTT services (*Appendix 28*). Historically, small changes in audience share are not significant, power ratio is a good indicator and SIC has achieved its leadership (*Fig 12*). IVRs stand out considering an annual growth of 8% as this is a declared bet of SIC. The health of this segment will be vitalized by controlling costs with programs and goods sold with an annual decrease of 2% following the example of the series "Golpe de Sorte" where costs were cut by 20% compared to what would be the standard. However simultaneously personal costs are considered to growth at 1.5 times the inflation rate (*Fig 38*) in all segments to compensate cuts that were made in recent years that opened some wounds that now need to be healed.

Regarding to publishing, advertising revenues confirm the recent trend as the decrease weakens annually, falling 4% in 2019 and 3.3% in 2023 (*Appendix 8*), ratifying the paradigm shift of consumer relations and digital trends (*Fig 25*) but considering a compensatory response from ads in that medium offsetting the drop in print editions. Also noteworthy is the evolution of sales, which highlights Expresso's performance. In that forecast after a period of 2019-2020 when results will improve, it will start declining from 2021 onwards with a contraction of 1.5% in 2023, keeping up with the industry, now that the group cannot count on the contribution of the magazines that were sold. Here evolution in costs is assumed to mimic that of the revenues. Other revenues and costs will mostly be linked to inflation forecasts.

Interests are considered to amount to 4.6% over borrowings and financial leases, an average of the last 5 years.

Terminal Value

The growth rate on perpetuity considered by IPR for TV impairment tests is 2% (*Appendix 25*), above both the expected evolution for GDP in Portugal in 2019 around 1.7% (*Fig 20*) and the expected Portuguese real GDP growth for 2023 of 1.4% (*Fig 22*). So the growth rate of 1.5% considered for the terminal period is considered to be in line with economic forecasts maintaining a conservative profile, as the growth rate considered by the group for the publishing segment is 0.5% although has less impact on the structure. At the same time considers the impact of SIC's recent performance, technological investments and synergies from team centralization in the new building, as well as the increasing trend of private consumption.

CAPEX

For the forecasted period, regarding the change in tangible fixed assets, it was broke down by segments according to the performance in the historical period resulting in increments that correspond to a percentage of revenue, 1% in television, 0.1% for publishing and 2% for others. The remaining fixed assets whose variations contribute to CAPEX are investments, whose annual increments will correspond to 0.1% of revenues, and program broadcasting rights that, according to a weighting of historical values, will also contract 0.2% of revenues annually. This performance will be more restrained than in the previous year when was notably characterized by investments in tangible fixed assets that were already described, thus expecting to invest annually around 5.5M€ (*Appendix 18*).

Relatively to the computation of depreciations and amortizations, given the characteristics in the historical period, was fixed as 13% the ratio between D&A in a given year and tangible fixed assets in the previous year. This figure was later spread across the 3 business segments, also in line with the performance of recent years, matching 78% for television, 4% for publishing and 18% for others (*Appendix 18*).

WACC

The cost of equity was calculated using a non-pure Capital Asset Pricing Model (CAPM) as a country risk premium (CRP) was added to the market risk premium (MRP) to replicate the intended return, taking a conservative approach. For the risk free rate was used the 10 year German Bond yield which continues to atypically show negative values (*Table 4*). However, it was decided not to consider any change as a rise in rates in the short or medium term is not expected with a substantial degree of certainty.

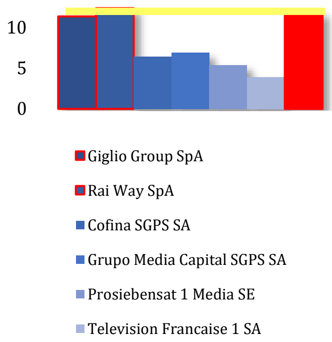
In this context the levered beta was obtained by segment and posteriorly weighted. For this purpose was considered the unlevered beta of each segment proposed by Damodaran for US companies being then leveraged to IPR's capital structure (*Appendix 19*).

The cost of debt stands at 4.6% representing the relationship between interest expenses and the respective debt, which is conditioned by the same percentage that was set for interests according to the historical values of the last 5 years (*Appendix 8*). For the after tax cost of debt was considered a tax rate according to the taxable amount taking into consideration the tax shield (*Appendix 20*).

In addition, it is important to refer that in order to meet an expected historical cash value in each forecasted year of 2% of revenues, a bank overdrafts account was created funding deficits and writing off current debt in the case of a surplus.

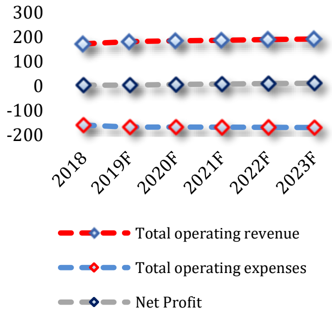
These capital costs were finally weighted according to the capital structure at each moment reaching a WACC rate which is expected to grow in the forecasted period (*Fig 39*).

Fig 42: EV/EBITDA peer values



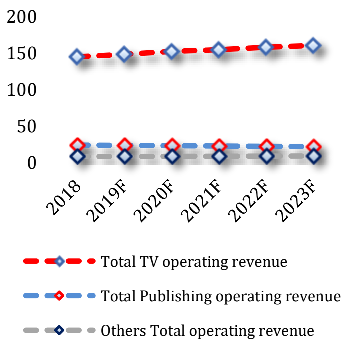
Source: Author

Fig 43: Operating revenues and net profit (M€)



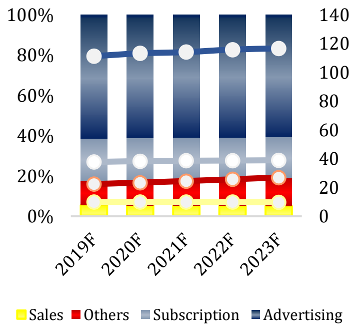
Source: Author

Fig 44: Revenues by segment (M€)



Source: Author

Fig 45: Main sources of IPR's revenues (M€) and weight on business structure



Source: Author

Peer Selection

The initial selection of peers was based on Damodaran's listing for the broadcasting and publishing&newspapers industries according to the GICS for developed Europe, cross-referenced with peers suggested by both Bloomberg and Reuters. Subsequently were discarded companies whose focus is thematic, such as sports, and those whose results were not presented in euros, selecting the ones with targeted indicators available. The two major domestic competitors were logically chosen. The final group brings together Cofina SGPS SA, Giglio Group SpA, Media Capital Group SGPS SA, Prosiebensat 1 Media SE, Rai Way SpA and Television Francaise 1 SA.

Multiples

Given the difficulty in mimicking, for example, the capital structure, exposure to the domestic market and the weight of each segment in the business it's crucial to disclosure that these multiples are complementary to the DCF method that more effectively harnesses the intrinsic value of IPR. For each multiple value were selected the peers whose value are more near to the value that the market attributes to IPR, as is visible in *Fig 40*, *Fig 41* and *Fig 42.*

The enterprise value was calculated through EV/EBITDA, EV/Sales and as alternative was used P/E to reach the final price. Thus was respectively achieved a price target of 0.35€, 0.30€, and 0.28€ representing upside potentials of 42%, 22% and 13% (*Appendix 21*).

Based on results obtained above, we reach the same conclusions of the FCFF methodology, meaning that IPR stocks are undervalued and still present growth potential for the coming future.

6. Forecast Financial Analysis

Revenues and costs on track

For the forecasted period total operating revenue will reverse the recent trend rising steadily from 172M€ on 2018 to 192M€ in 2023 (*Fig 43*) incorporating a CAGR of 2.2% with other revenues based on the expansion of IVRs once sales, advertising and subscription revenues will perform comparatively more moderately (*Fig 45*). The representativeness of both advertising and subscriptions in IPR's total revenues will tend to stabilize at 61% and 20% respectively. At the same time, total operating expenses will slightly increase from 160M€ to 170M€. Almost all this change takes place from 2018 to 2019 remaining at this level in the subsequent years (*Fig 43*), as such stability is largely due to the balance between the increase in personnel expenses that will rise from 43M€ to 48M€ and the control of the costs of broadcasted programs and goods sold which will decrease practically 7M€ with particular impact of the television segment with 2% in annual improvements. It is expected that net profit will be able to breathe after the instability of recent years, showing positive and consistent growth from 3M€ to 11M€ in the outlook.

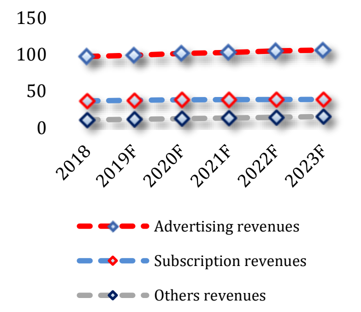
Television and Publishing, two different horizons

TV revenues will settle by 2023 at 84% of total revenues, rising 2%, in contrast to publishing revenues which will represent 2% less of IPR's revenues, ending 2023 at 12% (*Fig 44*). Following the optimistic results since the beginning of the year, SIC's results, namely through its advertising and IVRs' revenues, are expected to continue an upward trend with a gross growth of 8.7M€ and 4.5M€ respectively (*Fig 46*), corresponding to increases of 9% and 47% between 2018 and 2023. In the publishing segment, despite Expresso's position as the leader in both print and digital newspapers, it is anticipated that similarly to this market will suffer losses in advertising revenues (*Fig 47*) with a CAGR of - 4% in the 2018-2023 period. From 2021 on it's also expected that sales will start a period of contraction which will tend to be reinforced, decreasing 1.5% in 2023 alone, a trend that has been recurring in this era and is likely to continue. Such facts will not be completely compensated, just like in the television segment, from synergies created by the centralization of teams and the decrease in cost of programs and goods sold from 2021 onwards, once staff costs, like will happen in other group's segments , will be continually adjusted.

Asset stabilization

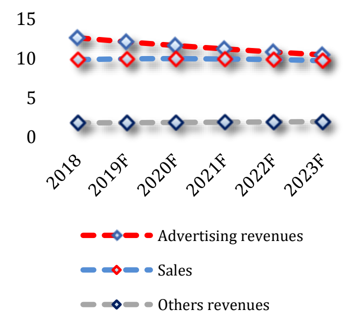
Total operating revenues will follow the tendency of assets from 2019 onwards, which should increase 6M€ to 394M€ during this period (*Fig 48*). Cash and cash equivalents were set at 2% of revenues ranging from 3.6M€ to 3.8M€. Non-current program rights will keep their tendency to be replaced by short term ones, as an IPR's strategy, since the short term management allows greater agility and flexibility according to the performance of the programs regarding public reaction and advertisers . Thus non-current rights will fall 72% from 2018 on to less than 1M€ and in reverse flow the current rights will grow 18% to 18M€ on the time horizon (*Fig 49*). The increments on investments that were linked to a percentage (0.1%) of revenues end up with a 4% CARG after 2018, rising this balance sheet account 23% until 2023 representing almost 5M€ by then. Trade and other receivables also play a role in rising assets as they are directly linked to 18% of revenues given historical performance and will present a CAGR of 1% in the forecasted period. Changes in goodwill were not considered as asset sales are not expected in the near future and with the coming performances is not foreseen to be considered significant impairments in the next tests, although the perpetual growth rate of 1.5% is lower than the 2% considered historically in those audits. This is an issue that should be followed closely.

Fig 46: Main sources of SIC's revenues (M€)



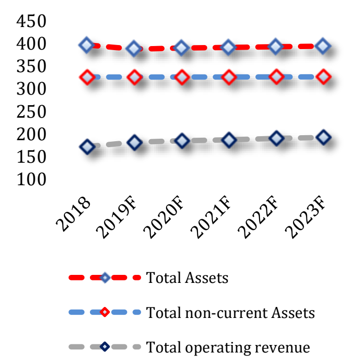
Source: Author

Fig 47: IPR's publishing segment main sources of revenue (M€)



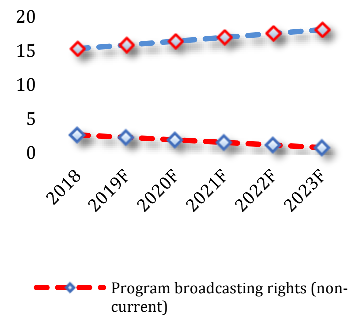
Source: Author

Fig 48: Assets and operating revenue (M€)



Source: Author

Fig 49: Program broadcasting rights (M€)



Source: Author

Debt and liquidity improving

The group's deleveraging strategy was followed in the forecast with the overall liabilities decreasing by 15% after 2018, from 271M€ to 231M€. The bank overdrafts account was created with the purpose of ensuring that the group does not run out of cash, keeping in the cash account 2% of revenues. When added to current borrowings it can be seen that this ensemble will tend to increase to grant its purpose, since on the side of non-current borrowings the trend will be the opposite, becoming inferior to the short term from 2022 on (*Fig 50*). The overdrafts account will reach 65M€ in 2023 while current borrowings will decrease to 14M€. Long-term loans will decrease by 36% to 63M€. A refinancing of 45M€ in bonds was considered to 2021 as in 2022 the bonds that were issued during this year of 2019 will reach their maturity (*Appendix 11*). The debt to equity ratio will thus tend to fall from 2.2 in 2018 to 1.4 in 2023 (*Fig 51*) as desired and the equity multiplier will decrease from 3.2 to 2.4. The debt to EBITDA will also perform well with a negative CAGR of 15% ending 2023 at 4.7 (*Appendix 5*). The liquidity will thus steady, with the current ratio practically unchanged at 0.43 and the quick ratio with a similar behavior settling at 0.31. After an unusual year of 2018 concerning the group's available cash after the sale of the magazine portfolio, the cash ratio will be at normal values for IPR with cash representing around 2% of current liabilities.

Tendency to profitability and efficiency

Gross profit margin will reverse its trend of the recent years due to simultaneous cost savings and revenue increases comprising a CAGR of 3%. The net profit margin will be closer to the referred industry's benchmark values with 5.7% in 2023 after a 26% CAGR until then. In this period both EBITDA and EBIT margins will increase by 49% and 65% respectively. The expected good performance of the company will also be reflected in EPS which will be multiplied by 2.5 as well as the ROA. Shareholders' money will begin to be used more efficiently to create profits once ROE is expected to rise to 6.8% resulting from a 22% CAGR but still far from the benchmarks of both the publishing and broadcasting industry mentioned above. Efficiency will be slightly improved, with asset turnover standing out, rising from 0.43 in 2018 to generating 0.49€ in revenues per euro of the group's assets in 2023 (*Appendix 5*).

7. Investment Risks

Market Risk: Sharks Entrance; Net Profits Decrease; Exchange Rates; Talent Retention, Advertising

Although it's not likely the entrance of direct competitors into the market, opponents with alternative products are in force charging on it. With customers driving their attention to these new media, namely OTT with SVOD such as Netflix, HBO and sports channels like Eleven Sports, it's predictable a continuous decrease in the global average market share for traditional TV and publishing. For customers it will be challenging to accommodate too many subscription jeopardizing revenues, while external content costs tend to rise, and this is expected to push down profit margins and may force companies like IPR to review the highly leveraged nature of their present business models. Advertisers will so adapt both their TV and publishing investments. Furthermore, given the financial capacity of these new players, it may occur a market share war with the sole aim of conquering the market, leaving to secondary plan profits and financial sustainability. If cable operators no longer necessarily include TV in their service packs the impact on the number of subscriptions and viewers may decrease drastically and so a tight relation with operators, content providers and an effort to retain talent is key (*Appendix 17*).
It is important to keep in mind that mitigation policies can aggravate other risks as they are interconnected. So these market risks can be mitigated with M&A strategies or with the optimization and specialization of the group. To face overseas exchange rates risks that for IPR are essentially related to broadcasting rights of television programs contracted with several foreign producers the group usually contracts loans that are converted into US dollars term deposits. The group recently hasn't used exchange rates forward contracts but it could also be an option.

Reputational Risk: Tech Failure; Legal Proceedings

With the expectation of increasing legal processes in order to protect platforms and content, while the risk of affecting both top executives of the companies and the companies' image, market players can be able to execute a concerted defense strategy against these risks, benefiting tune from the synergies and showing an image of strength and robustness.
The development of platforms, with device partners, conjugated with marketing strategies, will be essential to avoid impact from technological failures that can undermine customer confidence.

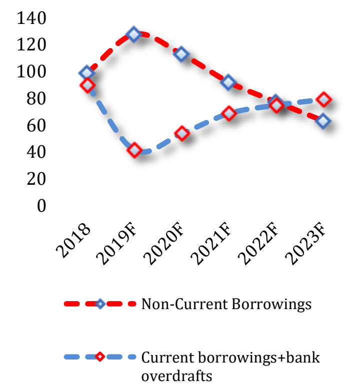
Operational Risk: Piracy and Cybersecurity; Device Partners

With large data collection the appetite to access that information increases and it is necessary to protect clients' data by pushing policies and adopting technologies of protection, including protection against illegal access and distribution of contents. Device providers such as cell phone companies are essential to be in tune facilitating the access as it's important to prevent that these providers won't block a particular platform where IPR operates.

Sovereign Risk: Austerity Policies; Taxes and Trade Wars

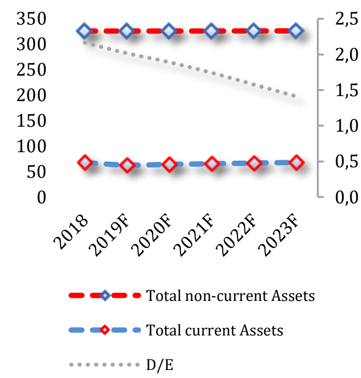
Exposure to changes in economic environment of countries where IPR is active is high as it can be shown by the beta of 1.3. It must be taken into account through the anticipation of policies that avoid picking operational scenarios with a recession trend and exposed to trade wars given the impact on revenues. Mitigation of these risks may pass through betting on open and growing markets, preferably Portuguese speaking, adapting to local contents.

Fig 50: Borrowings and bank overdrafts (M€)



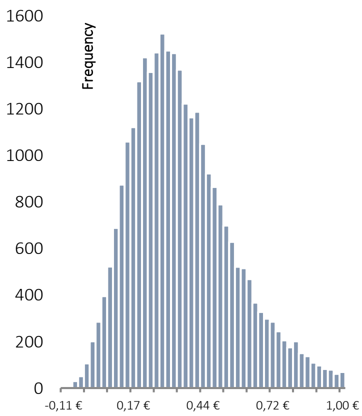
Source: Author

Fig 51: Assets (M€) and D/E



Source: Author

Fig 52: Monte Carlo distribution



Source: Author

Table 5: Limits to recommendations

	Sell <	0,25 €
0,25 €	< Reduce <	0,28 €
0,28 €	< Hold <	0,30 €
0,30 €	< Buy <	0,36 €
0,36 €	< Strong Buy	

Source: Author

Credit and Liquidity Risk: Cash to Service Debt; Interest Rates and Recessions

With a leveraged industry given the prevailing business model, with the prospect that debt growth will continue, given the entry of new players, among them sharks like Netflix, it's essential that financial equilibrium is on the horizon, deleveraging and at the same putting a greater focus on efficiency and profits, not leaving the company exposed to significant changes of interest rates, thus ensuring financial obligations to its partners. The risks of the IPR's interest rates are essentially related to the interest paid on the contracting of various loans with variable interest rates. The lack of market appetite for the 35M€ in IPR bonds in July 2017 that should renew the lines of funding forced the cancellation of the operation and was a clear signal for the required risk premium and the stock suffered a hit then (*Fig 19*).
The exposure is patent so that if market interest rates were higher by 0.5% during 2018 the net result for that year would have decreased by approximately 1.040.000€ not considering the respective tax effect[13].

Risks to Price Target

Was computed a Monte Carlo simulation with 30000 trials and the results presented a mean of 0.37€ and a median of 0.33€, within the price target determined with DCF. The standard deviation was 0.23€. The distribution has a skewness of 1.59 as can be seen by the asymmetry most often on the left side of the graph. The kurtosis of 11.43 has a positive excess since it is higher than 3, which would correspond to a normal distribution, as it can be seen by its fat tails (*Fig 52*).

This result has a confidence interval of 95% and the two assumptions were the perpetual growth and the perpetual WACC, given the susceptibility of the model to these variables. The standard deviation assumed was 0.4% and 0.9% respectively. There is a practically 60% probability of the buy recommendation to be accurate (*Appendix 22*).

Table 6: Sensibility analysis. CRP & Rd

Rd \ CRP	1,6%	1,9%	2,2%	2,5%	2,8%	3,1%	3,4%	3,7%	4,0%	4,3%	4,6%	4,9%
0,34 €												
2,8%	0,87 €	0,80 €	0,73 €	0,66 €	0,61 €	0,55 €	0,50 €	0,45 €	0,41 €	0,36 €	0,32 €	0,28 €
3,1%	0,81 €	0,74 €	0,68 €	0,62 €	0,56 €	0,51 €	0,46 €	0,41 €	0,37 €	0,33 €	0,29 €	0,25 €
3,4%	0,75 €	0,69 €	0,63 €	0,57 €	0,52 €	0,47 €	0,42 €	0,38 €	0,34 €	0,30 €	0,26 €	0,23 €
3,7%	0,70 €	0,64 €	0,58 €	0,53 €	0,48 €	0,43 €	0,39 €	0,35 €	0,31 €	0,27 €	0,23 €	0,20 €
4,0%	0,65 €	0,60 €	0,54 €	0,49 €	0,44 €	0,40 €	0,36 €	0,31 €	0,28 €	0,24 €	0,21 €	0,17 €
4,3%	0,61 €	0,55 €	0,50 €	0,45 €	0,41 €	0,36 €	0,32 €	0,28 €	0,25 €	0,21 €	0,18 €	0,15 €
4,6%	0,56 €	0,51 €	0,46 €	0,42 €	0,37 €	0,33 €	0,29 €	0,26 €	0,22 €	0,19 €	0,16 €	0,13 €
4,9%	0,52 €	0,47 €	0,42 €	0,38 €	0,34 €	0,30 €	0,26 €	0,23 €	0,19 €	0,16 €	0,13 €	0,10 €
5,2%	0,48 €	0,43 €	0,39 €	0,35 €	0,31 €	0,27 €	0,23 €	0,20 €	0,17 €	0,14 €	0,11 €	0,08 €
5,5%	0,44 €	0,40 €	0,36 €	0,32 €	0,28 €	0,24 €	0,21 €	0,17 €	0,14 €	0,11 €	0,09 €	0,06 €
5,8%	0,41 €	0,36 €	0,32 €	0,29 €	0,25 €	0,21 €	0,18 €	0,15 €	0,12 €	0,09 €	0,07 €	0,04 €
6,1%	0,37 €	0,33 €	0,29 €	0,26 €	0,22 €	0,19 €	0,16 €	0,13 €	0,10 €	0,07 €	0,04 €	0,02 €
6,4%	0,34 €	0,30 €	0,26 €	0,23 €	0,19 €	0,16 €	0,13 €	0,10 €	0,08 €	0,05 €	0,02 €	0,00 €

Source: Author

Table 7: Sensibility analysis. WACC & EBIT*(1-Tc)

EBIT*(1-Tc) M€ \ WACC	6,3%	6,5%	6,7%	6,9%	7,1%	7,3%	7,5%	7,7%	7,9%	8,1%	8,3%	8,5%
0,34 €												
21,3	1,19 €	1,10 €	1,01 €	0,93 €	0,85 €	0,78 €	0,71 €	0,65 €	0,59 €	0,54 €	0,49 €	0,44 €
20,3	1,09 €	1,00 €	0,92 €	0,84 €	0,77 €	0,70 €	0,64 €	0,58 €	0,52 €	0,47 €	0,42 €	0,38 €
19,3	0,99 €	0,91 €	0,83 €	0,75 €	0,68 €	0,62 €	0,56 €	0,50 €	0,45 €	0,40 €	0,36 €	0,31 €
18,3	0,89 €	0,81 €	0,73 €	0,66 €	0,60 €	0,54 €	0,48 €	0,43 €	0,38 €	0,33 €	0,29 €	0,25 €
17,3	0,79 €	0,71 €	0,64 €	0,58 €	0,51 €	0,46 €	0,40 €	0,35 €	0,31 €	0,26 €	0,22 €	0,18 €
16,3	0,69 €	0,62 €	0,55 €	0,49 €	0,43 €	0,38 €	0,33 €	0,28 €	0,24 €	0,19 €	0,16 €	0,12 €
15,8	0,64 €	0,57 €	0,51 €	0,44 €	0,39 €	0,34 €	0,29 €	0,24 €	0,20 €	0,16 €	0,12 €	0,09 €
15,3	0,59 €	0,52 €	0,46 €	0,40 €	0,35 €	0,30 €	0,25 €	0,21 €	0,16 €	0,13 €	0,09 €	0,05 €
14,8	0,54 €	0,47 €	0,41 €	0,36 €	0,30 €	0,26 €	0,21 €	0,17 €	0,13 €	0,09 €	0,06 €	0,02 €
14,3	0,49 €	0,43 €	0,37 €	0,31 €	0,26 €	0,22 €	0,17 €	0,13 €	0,09 €	0,06 €	0,02 €	-0,01 €
13,8	0,44 €	0,38 €	0,32 €	0,27 €	0,22 €	0,18 €	0,13 €	0,09 €	0,06 €	0,02 €	-0,01 €	-0,04 €
13,3	0,39 €	0,33 €	0,28 €	0,23 €	0,18 €	0,13 €	0,09 €	0,06 €	0,02 €	-0,01 €	-0,04 €	-0,07 €
12,8	0,34 €	0,28 €	0,23 €	0,18 €	0,14 €	0,09 €	0,06 €	0,02 €	-0,02 €	-0,05 €	-0,08 €	-0,11 €

Source: Author

Then a sensibility analysis was performed to assess the impact of other variables on the price target. First, the CRP and the cost of debt were analyzed (*Table 6*). Subsequently, the EBIT*(1-Tc) and the weight of debt were scrutinized (*Table 7*). All those were scrutinized to 2023 and to the terminal period.

In both cases it is clear the sensitivity of the model to changes impacting debt, whether through the cost of debt, its weight, or even through the WACC itself. In these simulations it was possible to see the stock plunging with a 1% increase in WACC complemented with a 2M€ decrease in EBIT(1-Tc). The same impact would be obtained with an increase of 1.8% both in the CRP and in the Rd. For a recommendation change from buy to hold will be enough a 0.3% increase in CRP or in Rd.

Finally, in the scenario analysis, 4 scenarios were simulated, 2 more positive and 2 negative ones. The selected variables focused on the television segment given its weight in the business structure. They were the advertising revenue, subscription revenue and other revenues. The cost of programs and goods sold was also tested (*Table 8*). In both negative scenarios the variables were downsized 0.5% and 1% respectively resulting in the sinking of the stock's value. On the other hand in the positive scenarios through identical yet positive changes resulted in valuations of 0.58€ and 0.82€, highlighting the model's high susceptibility to these variables once more, inside an already high level of risk.

Table 8: Scenario Analysis

Scenario Summary	Current Values:	Positive scenario 1	Positive scenario 2	Negative scenario 1	Negative scenario 2
Changing variables:					
Advertising revenues 2019F	1,7%	2,2%	2,7%	1,2%	0,7%
Advertising revenues 2020F	2,4%	2,9%	3,4%	1,9%	1,4%
Advertising revenues 2021F	1,3%	1,8%	2,3%	0,8%	0,3%
Advertising revenues 2022F	2,1%	2,6%	3,1%	1,6%	1,1%
Advertising revenues 2023F	1,1%	1,6%	2,1%	0,6%	0,1%
Subscription revenues 2019F	2,3%	2,8%	3,3%	1,8%	1,3%
Subscription revenues 2020F	1,6%	2,1%	2,6%	1,1%	0,6%
Subscription revenues 2021F	0,7%	1,2%	1,7%	0,2%	-0,3%
Subscription revenues 2022F	0,4%	0,9%	1,4%	-0,1%	-0,6%
Subscription revenues 2023F	0,5%	1,0%	1,5%	0,0%	-0,5%
Others revenues 2019F	8,0%	8,5%	9,0%	7,5%	7,0%
Others revenues 2020F	8,0%	8,5%	9,0%	7,5%	7,0%
Others revenues 2021F	8,0%	8,5%	9,0%	7,5%	7,0%
Others revenues 2022F	8,0%	8,5%	9,0%	7,5%	7,0%
Others revenues 2023F	8,0%	8,5%	9,0%	7,5%	7,0%
Cost of programs broadcast and goods sold 2019F	-2,0%	-2,5%	-3,0%	-1,5%	-1,0%
Cost of programs broadcast and goods sold 2020F	-2,0%	-2,5%	-3,0%	-1,5%	-1,0%
Cost of programs broadcast and goods sold 2021F	-2,0%	-2,5%	-3,0%	-1,5%	-1,0%
Cost of programs broadcast and goods sold 2022F	-2,0%	-2,5%	-3,0%	-1,5%	-1,0%
Cost of programs broadcast and goods sold 2023F	-2,0%	-2,5%	-3,0%	-1,5%	-1,0%
Price Target	0,34 €	0,58 €	0,82 €	0,04 €	-0,27 €

Source: Author

Appendices

Appendix 1: Statement of Financial Position

Balance Sheet (EUR '000)	2016	2017	2018	2019F	2020F	2021F	2022F	2023F
NON-CURRENT ASSETS								
Goodwill	300893	268623	268623	268623	268623	268623	268623	268623
Intangible assets	436	314	160	160	160	160	160	160
Tangible fixed assets	28235	29882	42158	42297	42529	42800	43129	43481
Investments	3668	3615	4040	4221	4406	4593	4783	4976
Investment properties	5912	1478	1478	1478	1478	1478	1478	1478
Program broadcasting rights (non-current)	4568	4959	2586	2224	1854	1480	1100	715
Other non-current assets	4942	5567	5087	5087	5087	5087	5087	5087
Deferred tax assets	818	1606	1791	1791	1791	1791	1791	1791
Total non-current Assets	***349472***	***316044***	***325922***	***325880***	***325928***	***326011***	***326150***	***326310***
CURRENT ASSETS:								
Program broadcasting rights (current)	15636	12778	15264	15808	16363	16924	17494	18071
Inventories	1423	355	505	725	740	748	760	769
Trade and other receivables	37632	36574	32371	32628	33279	33675	34218	34598
State and other public entities	0	0	0	0	0	0	0	0
Other current assets	6330	5196	9813	9911	10080	10251	10436	10634
Cash and cash equivalents	3491	3824	9639	3625	3698	3742	3802	3844
Total current Assets	***64512***	***58727***	***67592***	***62698***	***64159***	***65340***	***66710***	***67916***
Assets classified for sale	0	13845	3200	0	0	0	0	0
Total Assets	***413984***	***388617***	***396714***	***388578***	***390087***	***391351***	***392860***	***394226***

EQUITY:								
Share capital	84000	84000	84000	84000	84000	84000	84000	84000
Share premium	36179	36179	36179	36179	36179	36179	36179	36179
Legal reserve	1782	2002	2002	2002	2002	2002	2002	2002
Retained earnings/(accumulated losses) and other reserves	19520	22152	60	3200	6647	12803	20550	30311
Consolidated net profit/(loss) loss for the year	2760	-21654	3139	3448	6156	7747	9761	11036
Equity attributable to shareholders of the parent company	144242	122679	125381	128828	134984	142731	152492	163527
Equity attributable to non-controlling interest	0	0	0	0	0	0	0	0
Total Equity	***144242***	***122679***	***125381***	***128828***	***134984***	***142731***	***152492***	***163527***

LIABILITIES:								
NON-CURRENT LIABILITIES:								
Non-Current Borrowings	134730	83507	98931	127799	112908	91947	77250	63145
Finance leases	257	0	0	2756	1428	714	0	0
Provisions	3757	4502	7078	7078	7078	7078	7078	7078
Deferred tax liabilities	315	340	255	255	255	255	255	255
Trade and other payables	0	0	2027	2027	2027	2027	2027	2027
Total non-current liabilities	***139060***	***88349***	***108292***	***139916***	***123696***	***102022***	***86610***	***72505***
CURRENT LIABILITIES:								
Current Borrowings	51596	98742	89880	21696	14892	65960	14698	14105
Trade and other payables	29876	32036	32881	34441	35128	35546	36119	36520
Finance leases	113	0	0	3154	1328	714	714	0
State and other public entities	254	1325	1004	1088	1109	1122	1141	1153
Other current liabilities	48842	43555	39277	39670	40067	40467	40872	41281
Bank overdrafts			0	19785	38883	2789	60216	65134
Total current liabilities	***130682***	***175658***	***163042***	***119833***	***131407***	***146599***	***153759***	***158193***
Liabilities referring to assets for sale	0	1931	0	0	0	0	0	0
Total Liabilities	***269742***	***265937***	***271333***	***259749***	***255103***	***248620***	***240369***	***230698***
Total Equity and Liabilities	***413984***	***388617***	***396714***	***388578***	***390087***	***391351***	***392860***	***394226***

Control	0,0 €	0,0 €	0,0 €	0,0 €	0,0 €	0,0 €	0,0 €	0,0 €

Source: Author

Appendix 2: Income Statement

Income Statement (EUR '000)	2016	2017	2018	2019F	2020F	2021F	2022F	2023F
Revenue	**205997**	**201821**	**172163**	**181267**	**184885**	**187082**	**190099**	**192211**
Cost of Revenue	80693	80692	73756	72352	70959	69574	68215	66862
Gross Profit	125305	121130	98407	108915	113926	117508	121884	125349
Gross Profit Margin	*61%*	*60%*	*57%*	*60%*	*62%*	*63%*	*64%*	*65%*
SG&A Expenses	109101	106564	80297	87419	89219	91058	93046	95193
EBITDA	**16203**	**14566**	**18110**	**21496**	**24707**	**26450**	**28838**	**30156**
EBITDA Margin	*8%*	*7%*	*11%*	*12%*	*13%*	*14%*	*15%*	*16%*
D&A	3501	3652	3521	5481	5499	5529	5564	5607
Impairments	677	23950	2778	2778	2778	2778	2778	2778
EBIT	**12025**	**-13036**	**11810**	**13237**	**16430**	**18143**	**20496**	**21771**
Interest expenses	7332	6730	5492	8059	7794	7458	7032	6550
EBT	**4692**	**-19765**	**6319**	**5179**	**8636**	**10685**	**13463**	**15222**
Income Taxes	1932	1889	3180	1731	2480	2938	3702	4186
Net Income	**2760**	**-21654**	**3139**	**3448**	**6156**	**7747**	**9761**	**11036**

Source: Author

Appendix 3: Income Statement per Segment

Television segment

	Income Statement (EUR '000)	2016	2017	2018	2019F	2020F	2021F	2022F	2023F
	Television								
	OPERATING REVENUE								
	Services rendered - External clients	154604	152443	143902	147217	151068	153539	156788	159171
	Advertising revenues	*94669*	*98168*	*97449*	*99139*	*101552*	*102860*	*105003*	*106159*
Television	*Subscription revenues*	*43488*	*43129*	*36858*	*37714*	*38322*	*38591*	*38731*	*38912*
	Others revenues	*16447*	*11146*	*9596*	*10364*	*11193*	*12088*	*13055*	*14100*
	Services rendered - Inter-segments	441	304	33	34	34	35	35	36
	Other operating - External clients	1063	864	1284	1297	1319	1342	1366	1392
	Other operating revenue - Inter-segments	85	93	90	91	92	94	96	98
	Total TV operating revenue	**156192**	**153705**	**145310**	**148639**	**152513**	**155010**	**158285**	**160696**
		18035	12407	11004					
	OPERATING EXPENSES								
	Cost of programs broadcast and goods sold	-74536	-75484	-71434	-70006	-68606	-67233	-65889	-64571
	External supplies and services	-36167	-31624	-26271	-26534	-26985	-27443	-27937	-28468
	Personnel costs	-25375	-26154	-26875	-27278	-27974	-28687	-29462	-30301
Television	Amortization and depreciation	-2738	-2864	-2761	-4275	-4289	-4312	-4340	-4373
	Provisions and impairment losses	-310	-1816	-96	-96	-96	-96	-96	-96
	Other operating expenses	-906	-2242	-728	-735	-748	-761	-774	-789
	Total operating expenses	**-140033**	**-140185**	**-128165**	**-128924**	**-128697**	**-128533**	**-128498**	**-128599**
	Operating profit/(loss)	**16159**	**13520**	**17145**	**19715**	**23817**	**26477**	**29787**	**32097**
	EBITDA	**19207**	**18199**	**20002**	**24086**	**28202**	**30885**	**34223**	**36567**
	EBITDA Margin	*12%*	*12%*	*14%*	*16%*	*18%*	*20%*	*22%*	*23%*
	D&A and Impairments	3048	4680	2857	4371	4385	4408	4436	4469
	EBIT	**16159**	**13520**	**17145**	**19715**	**23817**	**26477**	**29787**	**32097**
Television	NET FINANCIAL EXPENSES								
	Gain / (loss) on associated companies								
	Other Financial Results	-1567	-1599	-1113					
	Profit/(loss) before taxes	**14592**	**11921**	**16031**	**19715**	**23817**	**26477**	**29787**	**32097**
	Income tax expense	-3740	-3237						
	Consolidated net profit/(loss) for the year	**10852**	**8684**	**16031**	**19715**	**23817**	**26477**	**29787**	**32097**

Source: Author

Publishing segment

	Publishing								
Publishing	OPERATING REVENUE								
	Services rendered	22742	21915	14082	13588	13145	12743	12377	12046
	Advertising revenues	*21515*	*20822*	*12616*	*12107*	*11639*	*11211*	*10818*	*10458*
	Others revenues	*1227*	*1093*	*1466*	*1481*	*1506*	*1532*	*1559*	*1589*
	Services rendered	51	53	41	42	42	43	44	45
	Sales	25118	24012	9841	9945	9975	9922	9860	9709
	Other operating revenue - External clients	514	190	308	311	316	322	328	334
	Total Publishing operating revenue	**48425**	**46171**	**24273**	**23885**	**23479**	**23030**	**22608**	**22134**
		1792	*1337*	*1816*					
Publishing	OPERATING EXPENSES								
	Cost of programs broadcast and goods sold	-6156	-5207	-2322	-2346	-2353	-2341	-2326	-2291
	External supplies and services	-22261	-21278	-11132	-11244	-11435	-11629	-11838	-12063
	Personnel costs	-19582	-20306	-9504	-9646	-9892	-10144	-10418	-10715
	Amortization and depreciation	-120	-123	-109	-219	-220	-221	-223	-224
	Provisions and impairment losses	-337	-22134	-2610	-2610	-2610	-2610	-2610	-2610
	Other operating expenses	-164	-187	-127	-129	-131	-133	-135	-138
	Total operating expenses	**-48619**	**-69235**	**-25804**	**-26194**	**-26641**	**-27078**	**-27551**	**-28041**
	Operating profit/(loss)	**-194**	**-23064**	**-1530**	**-2308**	**-3161**	**-4049**	**-4943**	**-5907**
Publishing	**EBITDA**	**262**	**-808**	**1188**	**521**	**-331**	**-1218**	**-2110**	**-3073**
	EBITDA Margin	*1%*	*-2%*	*5%*	*2%*	*-1%*	*-5%*	*-9%*	*-14%*
	D&A and Impairments	456	22256	2719	2829	2830	2831	2833	2834
	EBIT	**-194**	**-23064**	**-1530**	**-2308**	**-3161**	**-4049**	**-4943**	**-5907**
	NET FINANCIAL EXPENSES								
	Gain / (loss) on associated companies								
	Other Financial Results	-364	-425	-388					
	Profit/(loss) before taxes	**-559**	**-23489**	**-1918**	**-2308**	**-3161**	**-4049**	**-4943**	**-5907**
	Income tax expense	120	199						
	Consolidated net profit/(loss) for the year	**-439**	**-23290**	**-1918**	**-2308**	**-3161**	**-4049**	**-4943**	**-5907**

Source: Author

Others segment

	Others								
Others	OPERATING REVENUE								
	Services rendered	1898	2309	2320	2343	2383	2424	2467	2514
	Digital cartography	*979*	*2254*	*1676*	1693	1722	1751	1783	1816
	Others revenues	*919*	*55*	*644*	650	661	673	685	698
	Services rendered	6178	6400	5912	5972	6073	6176	6287	6407
	Other operating revenue - External clients	59	88	424	428	436	443	451	460
	Others Total operating revenue	**8134**	**8797**	**8657**	**8743**	**8892**	**9043**	**9206**	**9381**
Others	OPERATING EXPENSES								
	Cost of programs broadcast and goods sold	0	0	0	0	0	0	0	0
	External supplies and services	-4128	-4419	-4513	-4558	-4635	-4714	-4799	-4890
	Personnel costs	-6708	-6613	-6679	-6746	-6860	-6977	-7103	-7238
	Amortization and depreciation	-644	-665	-652	-986	-990	-995	-1002	-1009
	Provisions and impairment losses	-30		-72	-72	-72	-72	-72	-72
	Other operating expenses	-565	-590	-545	-550	-560	-569	-579	-590
	Total operating expenses	**-12075**	**-12288**	**-12461**	**-12913**	**-13117**	**-13328**	**-13555**	**-13800**
	Operating profit/(loss)	**-3940**	**-3492**	**-3804**	**-4170**	**-4226**	**-4285**	**-4349**	**-4419**
Others	**EBITDA**	**-3267**	**-2826**	**-3080**	**-3111**	**-3164**	**-3217**	**-3275**	**-3337**
	EBITDA Margin	*-40%*	*-32%*	*-36%*	*-36%*	*-36%*	*-36%*	*-36%*	*-36%*
	D&A and Impairments	674	665	724	1059	1062	1068	1074	1082
	EBIT	**-3940**	**-3492**	**-3804**	**-4170**	**-4226**	**-4285**	**-4349**	**-4419**
	NET FINANCIAL EXPENSES								
	Gain / (loss) on associated companies	-140	127	431					
	Other Financial Results	-5261	-4833	-4421					
	Profit/(loss) before taxes	**-9341**	**-8198**	**-7794**	**-4170**	**-4226**	**-4285**	**-4349**	**-4419**
	Income tax expense	1688	1149						
	Consolidated net profit/(loss) for the year	**-7654**	**-7048**	**-7794**	**-4170**	**-4226**	**-4285**	**-4349**	**-4419**

Source: Author

Appendix 4: Cash Flow Statement

Cash Flow Statement (EUR '000)	2016	2017	2018	2019F	2020F	2021F	2022F	2023F
Operating Activities	***3555***	***-20743***	***15680***	***21103***	***19165***	***20428***	***22043***	***22851***
EBIT	12025	-13036	11810	13237	16430	18143	20496	21771
D&A (+)	3501	3652	3521	5481	5499	5529	5564	5607
Income Tax (-)	1932	1889	3180	1731	2480	2938	3702	4186
DNWC (-)	10038	9470	-3528	-4116	283	306	314	341
Investment Activities	***-3695***	***-5053***	***-16123***	***-5438***	***-5547***	***-5612***	***-5703***	***-5766***
CAPEX (-)	3695	5053	16123	5438	5547	5612	5703	5766
Other Inv (+)	0	0	0	0	0	0	0	0
Financing Activities	***-2925***	***-11177***	***1070***	***-21679***	***-13546***	***-14771***	***-16280***	***-17043***
Interest Paid (-)	7332	6730	5492	8059	7794	7458	7032	6550
Dividends (-)	0	0	0	0	0	0	0	0
Ddebt (-)	4408	-4448	6562	-33405	-24850	28780	-66674	-15412
Revolving credit line proceeds/(payments)			0	19785	19098	-36093	57426	4919
Dcash	-3064	-36974	628	-6014	72	44	60	42
Beginning	3520	3491	3824	9639	3625	3698	3742	3802
End	3491	3824	9639	3625	3698	3742	3802	3844

Source: Author

Appendix 5: Key Financial Ratios

Key Financial Ratios	2016	2017	2018	2019F	2020F	2021F	2022F	2023F
Liquidity Ratios								
Current Ratio (x)	0,49	0,33	0,41	0,52	0,49	0,45	0,43	0,43
Quick Ratio (x)	0,36	0,26	0,32	0,39	0,36	0,33	0,32	0,31
Cash Ratio (x)	0,03	0,02	0,06	0,03	0,03	0,03	0,02	0,02
Efficiency Ratios								
Total Assets Turnover (x)	0,5	0,5	0,4	0,5	0,5	0,5	0,5	0,5
Accounts Receivables Turnover (x)	5,5	5,6	5,3	5,6	5,6	5,6	5,6	5,6
ACC rec/sales	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2
Collection Period (days)	66,7	65,6	68,6	65,7	65,7	65,7	65,7	65,7
Inventory Turnover (x)	56,7	227,1	146,1	99,8	96,0	93,0	89,7	87,0
Days in Inventory (days)	6,4	1,6	2,5	3,7	3,8	3,9	4,1	4,2
Payables Turnover (x)	6,9	6,3	5,2	5,3	5,3	5,3	5,3	5,3
ACC pay/sales	0,1	0,2	0,2	0,2	0,2	0,2	0,2	0,2
Payables Period (days)	52,9	57,9	69,7	69,4	69,4	69,4	69,4	69,4
Operating Cycle (days)	73,1	67,2	71,1	69,4	69,5	69,6	69,8	69,9
Cash Cycle (days)	20,2	9,2	1,4	0,0	0,2	0,3	0,4	0,5
Assets Turnover	0,5	0,5	0,4	0,5	0,5	0,5	0,5	0,5
Profitability Ratios								
Gross Profit Margin (%)	60,8%	60,0%	57,2%	60,1%	61,6%	62,8%	64,1%	65,2%
EBITDA Margin (%)	7,9%	7,2%	10,5%	11,9%	13,4%	14,1%	15,2%	15,7%
EBIT Margin (%)	5,8%	-6,5%	6,9%	7,3%	8,9%	9,7%	10,8%	11,3%
Net Profit Margin (%)	1,3%	-10,7%	1,8%	1,9%	3,3%	4,1%	5,1%	5,7%
ROA (%)	0,7%	-5,6%	0,8%	0,9%	1,6%	2,0%	2,5%	2,8%
ROCE (%)	2,9%	-3,4%	3,0%	3,4%	4,2%	4,6%	5,2%	5,5%
ROE (%)	1,9%	-17,6%	2,5%	2,7%	4,6%	5,4%	6,4%	6,7%
EPS (x)	0,02	-0,13	0,02	0,02	0,04	0,05	0,06	0,07
SG&A/Sale (%)	53,0%	52,8%	46,6%	48,2%	48,3%	48,7%	48,9%	49,5%
Solvency Ratios								
Long- and short-term Debt Ratio (%)	45,0%	46,9%	47,6%	43,6%	42,7%	41,1%	38,7%	36,1%
Long-term Debt Ratio (%)	32,6%	21,5%	24,9%	33,6%	29,3%	23,7%	19,7%	16,0%
Debt to Equity Ratio (x)	1,9	2,2	2,2	2,0	1,9	1,7	1,6	1,4
Equity Multiplier (x)	2,9	3,2	3,2	3,0	2,9	2,7	2,6	2,4
Debt to EBITDA	11,5	12,5	10,4	8,1	6,9	6,1	5,3	4,7
Interest Coverage Ratio (x)	1,6	-1,9	2,2	1,6	2,1	2,4	2,9	3,3
Value Creation and Cash Flow Ratios								
Debt Coverage	0,1	0,1	0,1	0,2	0,2	0,2	0,2	0,2
Cash to Income	0,3	1,6	1,3	1,6	1,2	1,1	1,1	1,0

Source: Author

Appendix 6: Common-Size Statement of Financial Position

Balance Sheet	2016	2017	2018	2019F	2020F	2021F	2022F	2023F
NON-CURRENT ASSETS								
Goodwill	72,7%	69,1%	67,7%	69,1%	68,9%	68,6%	68,4%	68,1%
Intangible assets	0,1%	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Tangible fixed assets	6,8%	7,7%	10,6%	10,9%	10,9%	10,9%	11,0%	11,0%
Investments	0,9%	0,9%	1,0%	1,1%	1,1%	1,2%	1,2%	1,3%
Investment properties	1,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Program broadcasting rights (non-current)	1,1%	1,3%	0,7%	0,6%	0,5%	0,4%	0,3%	0,2%
Other non-current assets	1,2%	1,4%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%
Deferred tax assets	0,2%	0,4%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Total non-current Assets	***84,4%***	***81,3%***	***82,2%***	***83,9%***	***83,6%***	***83,3%***	***83,0%***	***82,8%***
CURRENT ASSETS:								
Program broadcasting rights (current)	3,8%	3,3%	3,8%	4,1%	4,2%	4,3%	4,5%	4,6%
Inventories	0,3%	0,1%	0,1%	0,2%	0,2%	0,2%	0,2%	0,2%
Trade and other receivables	9,1%	9,4%	8,2%	8,4%	8,5%	8,6%	8,7%	8,8%
State and other public entities	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Other current assets	1,5%	1,3%	2,5%	2,6%	2,6%	2,6%	2,7%	2,7%
Cash and cash equivalents	0,8%	1,0%	2,4%	0,9%	0,9%	1,0%	1,0%	1,0%
Total current assets	***15,6%***	***15,1%***	***17,0%***	***16,1%***	***16,4%***	***16,7%***	***17,0%***	***17,2%***
Assets classified for sale	0,0%	3,6%	0,8%	0,0%	0,0%	0,0%	0,0%	0,0%
Total Assets	***100,0 %***	***100,0 %***	***100,0 %***	***100,0 %***	***100,0 %***	***100,0 %***	***100,0 %***	***100,0 %***
EQUITY:								
Share capital	20,3%	21,6%	21,2%	21,6%	21,5%	21,5%	21,4%	21,3%
Share premium	8,7%	9,3%	9,1%	9,3%	9,3%	9,2%	9,2%	9,2%
Legal reserve	0,4%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Retained earnings/(accumulated losses) and other reserves	4,7%	5,7%	0,0%	0,8%	1,7%	3,3%	5,2%	7,7%
Consolidated net profit/(loss) loss for the year	0,7%	-5,6%	0,8%	0,9%	1,6%	2,0%	2,5%	2,8%
Equity attributable to non-controlling interest	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Total Equity	***34,8%***	***31,6%***	***31,6%***	***33,2%***	***34,6%***	***36,5%***	***38,8%***	***41,5%***
LIABILITIES:								
NON-CURRENT LIABILITIES:								
Non-Current Borrowings	32,5%	21,5%	24,9%	32,9%	28,9%	23,5%	19,7%	16,0%
Finance leases	0,1%	0,0%	0,0%	0,7%	0,4%	0,2%	0,0%	0,0%
Provisions	0,9%	1,2%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%
Deferred tax liabilities	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%
Trade and other payables	0,0%	0,0%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Total non-current liabilities	***33,6%***	***22,7%***	***27,3%***	***36,0%***	***31,7%***	***26,1%***	***22,0%***	***18,4%***
CURRENT LIABILITIES:								
Current Borrowings	12,5%	25,4%	22,7%	5,6%	3,8%	16,9%	3,7%	3,6%
Trade and other payables	7,2%	8,2%	8,3%	8,9%	9,0%	9,1%	9,2%	9,3%
Finance leases	0,0%	0,0%	0,0%	0,8%	0,3%	0,2%	0,2%	0,0%
State and other public entities	0,1%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Other current liabilities	11,8%	11,2%	9,9%	10,2%	10,3%	10,3%	10,4%	10,5%
Bank overdrafts	0,0%	0,0%	0,0%	5,1%	10,0%	0,7%	15,3%	16,5%
Total current liabilities	***31,6%***	***45,2%***	***41,1%***	***30,8%***	***33,7%***	***37,5%***	***39,1%***	***40,1%***
Liabilities referring to assets for sale	0,0%	0,5%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Total Liabilities	***65,2%***	***68,4%***	***68,4%***	***66,8%***	***65,4%***	***63,5%***	***61,2%***	***58,5%***
Total Equity and Liabilities	***100,0 %***	***100,0 %***	***100,0 %***	***100,0 %***	***100,0 %***	***100,0 %***	***100,0 %***	***100,0 %***

Source: Author

Appendix 7: Common-Size Income Statement

Income Statement	2016	2017	2018	2019F	2020F	2021F	2022F	2023F
Revenue	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**	**100,0%**
Cost of Revenue	39,2%	40,0%	42,8%	39,9%	38,4%	37,2%	35,9%	34,8%
Gross Profit	60,8%	60,0%	57,2%	60,1%	61,6%	62,8%	64,1%	65,2%
SG&A Expenses	53,0%	52,8%	46,6%	48,2%	48,3%	48,7%	48,9%	49,5%
EBITDA	**7,9%**	**7,2%**	**10,5%**	**11,9%**	**13,4%**	**14,1%**	**15,2%**	**15,7%**
D&A	1,7%	1,8%	2,0%	3,0%	3,0%	3,0%	2,9%	2,9%
Impairments	0,3%	11,9%	1,6%	1,5%	1,5%	1,5%	1,5%	1,4%
EBIT	**5,8%**	**-6,5%**	**6,9%**	**7,3%**	**8,9%**	**9,7%**	**10,8%**	**11,3%**
Interest expenses	3,6%	3,3%	3,2%	4,4%	4,2%	4,0%	3,7%	3,4%
EBT	**2,3%**	**-9,8%**	**3,7%**	**2,9%**	**4,7%**	**5,7%**	**7,1%**	**7,9%**
Income Taxes	0,9%	0,9%	1,8%	1,0%	1,3%	1,6%	1,9%	2,2%
Net Income	**1,3%**	**-10,7%**	**1,8%**	**1,9%**	**3,3%**	**4,1%**	**5,1%**	**5,7%**

Source: Author

Appendix 8: Forecasting Assumptions

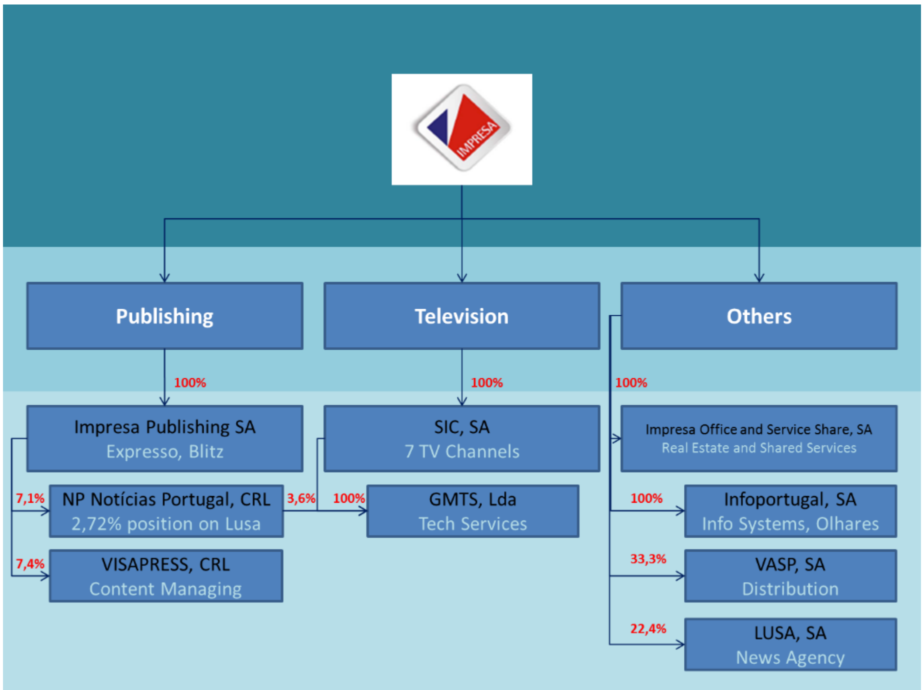
INCOME STATEMENT	2019F	2020F	2021F	2022F	2023F	Assumption
Television						
Services rendered - External clients:						
Advertising revenues	*1,7%*	*2,4%*	*1,3%*	*2,1%*	*1,1%*	Television advertising forecast of the E&M Outlook, PwC for Portugal
Subscription revenues	*2,3%*	*1,6%*	*0,7%*	*0,4%*	*0,5%*	Forecast of the E&M Outlook, PwC for Portugal, number of subscriptions
Others revenues	*8,0%*	*8,0%*	*8,0%*	*8,0%*	*8,0%*	Expected expansion of IVRs
Services rendered - Inter-segments	1,0%	1,7%	1,7%	1,8%	1,9%	Equal to 2018 nominal value; adjusted for expected inflation rate
Other operating - External clients	1,0%	1,7%	1,7%	1,8%	1,9%	Equal to 2018 nominal value; adjusted for expected inflation rate
Other operating revenue - Inter-segments	1,0%	1,7%	1,7%	1,8%	1,9%	Equal to 2018 nominal value; adjusted for expected inflation rate
Cost of programs broadcast and goods sold	-2,0%	-2,0%	-2,0%	-2,0%	-2,0%	Following the tendency of "Golpe de Sorte" which had a 20% cost cut comparing to traditional
External supplies and services	1,0%	1,7%	1,7%	1,8%	1,9%	Equal to 2018 nominal value; adjusted for expected inflation rate
Personnel costs	1,5%	2,6%	2,6%	2,7%	2,9%	1.5 times the expected inflation rates to compensate the cuts that were made in recent years
Amortization and depreciation						Detailed in Appendix
Provisions and impairment losses	0,0%	0,0%	0,0%	0,0%	0,0%	Equal to 2018 nominal value
Other operating expenses	1,0%	1,7%	1,7%	1,8%	1,9%	Equal to 2018 nominal value; adjusted for expected inflation rate
Gain / (loss) on associated companies	-100,0%	0,0%	0,0%	0,0%	0,0%	
Other Financial Results	-100,0%	0,0%	0,0%	0,0%	0,0%	
Publishing						
Services rendered - External clients:						
Advertising revenues	*-4,0%*	*-3,9%*	*-3,7%*	*-3,5%*	*-3,3%*	Newspapers advertising forecast of the E&M Outlook, PwC for Portugal
Others revenues	*1,0%*	*1,7%*	*1,7%*	*1,8%*	*1,9%*	Equal to 2018 nominal value; adjusted for expected inflation rate
Services rendered - Inter-segments	1,0%	1,7%	1,7%	1,8%	1,9%	Equal to 2018 nominal value; adjusted for expected inflation rate
Sales	1,1%	0,3%	-0,5%	-0,6%	-1,5%	Newspapers circulation forecast of the E&M Outlook, PwC for Portugal
Other operating - External clients	1,0%	1,7%	1,7%	1,8%	1,9%	Equal to 2018 nominal value; adjusted for expected inflation rate
Cost of programs broadcast and goods sold	1,1%	0,3%	-0,5%	-0,6%	-1,5%	Same as Sales growth. Newspapers circulation forecast of the E&M Outlook, PwC for Portugal
External supplies and services	1,0%	1,7%	1,7%	1,8%	1,9%	Equal to 2018 nominal value; adjusted for expected inflation rate
Personnel costs	1,5%	2,6%	2,6%	2,7%	2,9%	1.5 times the expected inflation rates to compensate the cuts that were made in recent years
Amortization and depreciation						Detailed in Appendix
Provisions and impairment losses	0,0%	0,0%	0,0%	0,0%	0,0%	Equal to 2018 nominal value
Other operating expenses	1,0%	1,7%	1,7%	1,8%	1,9%	Equal to 2018 nominal value; adjusted for expected inflation rate
Gain / (loss) on associated companies	-100,0%	0,0%	0,0%	0,0%	0,0%	
Other Financial Results	-100,0%	0,0%	0,0%	0,0%	0,0%	
Others						
Services rendered - External clients:						
Digital cartography	*1,0%*	*1,7%*	*1,7%*	*1,8%*	*1,9%*	Equal to 2018 nominal value; adjusted for expected inflation rate
Others revenues	*1,0%*	*1,7%*	*1,7%*	*1,8%*	*1,9%*	Equal to 2018 nominal value; adjusted for expected inflation rate
Services rendered - Inter-segments	1,0%	1,7%	1,7%	1,8%	1,9%	Equal to 2018 nominal value; adjusted for expected inflation rate
Other operating - External clients	1,0%	1,7%	1,7%	1,8%	1,9%	Equal to 2018 nominal value; adjusted for expected inflation rate
Cost of programs broadcast and goods sold	1,0%	1,7%	1,7%	1,8%	1,9%	Equal to 2018 nominal value; adjusted for expected inflation rate
External supplies and services	1,0%	1,7%	1,7%	1,8%	1,9%	Equal to 2018 nominal value; adjusted for expected inflation rate
Personnel costs	1,5%	2,6%	2,6%	2,7%	2,9%	1.5 times the expected inflation rates to compensate the cuts that were made in recent years
Amortization and depreciation						Detailed in Appendix
Provisions and impairment losses	0,0%	0,0%	0,0%	0,0%	0,0%	Equal to 2018 nominal value
Other operating expenses	1,0%	1,7%	1,7%	1,8%	1,9%	Equal to 2018 nominal value; adjusted for expected inflation rate
Gain / (loss) on associated companies	-100,0%	0,0%	0,0%	0,0%	0,0%	
Other Financial Results	-100,0%	0,0%	0,0%	0,0%	0,0%	
Taxes						Detailed in Appendix
Interests			4,6%			Equal to 4,6% interest expense over total borrowings and finance leases (average 5 years)

Source: Author

BALANCE SHEET	2019F	2020F	2021F	2022F	2023F	Assumption
Assets						
Goodwill	0,0%	0,0%	0,0%	0,0%	0,0%	Equal to 2018 in nominal value. No impairments for the forecasted period
Intangible assets	0,0%	0,0%	0,0%	0,0%	0,0%	Intangible assets are not amortized. Subjected to impairment tests.
Tangible assets						Detailed in Appendix
Investments	0,1%	0,1%	0,1%	0,1%	0,1%	Increase with percentage of revenues - based on historic values
Investments properties	0,0%	0,0%	0,0%	0,0%	0,0%	Equal to 2018 nominal value
Program broadcasting rights	-0,2%	-0,2%	-0,2%	-0,2%	-0,2%	Increase with percentage of revenues - based on historic values
Other non-current assets	0,0%	0,0%	0,0%	0,0%	0,0%	Equal to 2018 nominal value
Deferred tax assets	0,0%	0,0%	0,0%	0,0%	0,0%	Equal to 2018 nominal value
Program broadcasting rights	0,3%	0,3%	0,3%	0,3%	0,3%	Increase with percentage of revenues - based on historic values
Inventories			0,4%			Percentage of operating revenues
Trade and other receivables			18,0%			Percentage of operating revenues
State and other public entities	0,0%	0,0%	0,0%	0,0%	0,0%	Equal to 2018 nominal value - Zero
Other current assets	1,0%	1,7%	1,7%	1,8%	1,9%	Equal to 2018 nominal value; adjusted for expected inflation rate
Cash and cash equivalents			2,0%			2% of total operational revenues.
Assets classified for sale	-100,0%	0,0%	0,0%	0,0%	0,0%	
Equity						
Share capital	0,0%	0,0%	0,0%	0,0%	0,0%	Equal to 2018 nominal value
Share premium	0,0%	0,0%	0,0%	0,0%	0,0%	Equal to 2018 nominal value
Legal reserve	0,0%	0,0%	0,0%	0,0%	0,0%	Equal to 2018 nominal value
Retained earnings	100,0%	100,0%	100,0%	100,0%	100,0%	All earnings are retained. No dividends.
Non-controlling interest	0,0%	0,0%	0,0%	0,0%	0,0%	Equal to 2018 nominal value
Liabilities						
Borrowings (non-current)						Detailed in Appendix
Finance leases (non-current)						Detailed in Appendix
Provisions	0,0%	0,0%	0,0%	0,0%	0,0%	Equal to 2018 nominal value
Deferred tax liabilities	0,0%	0,0%	0,0%	0,0%	0,0%	Equal to 2018 nominal value
Trade and other payables	0,0%	0,0%	0,0%	0,0%	0,0%	
Borrowings (current)						Detailed in Appendix
Trade and other payables			19,0%			Percentage of operating revenues
Finance leases (current)						Detailed in Appendix
State and other public entities			0,6%			Percentage of operating revenues
Other current liabilities	1,0%	1,0%	1,0%	1,0%	1,0%	Equal to 2018 adjusted below inflation

Source: Author

Appendix 9: Business Structure



Source: Author compilation and company information

Appendix 10: IPR's universe

Source: Company information

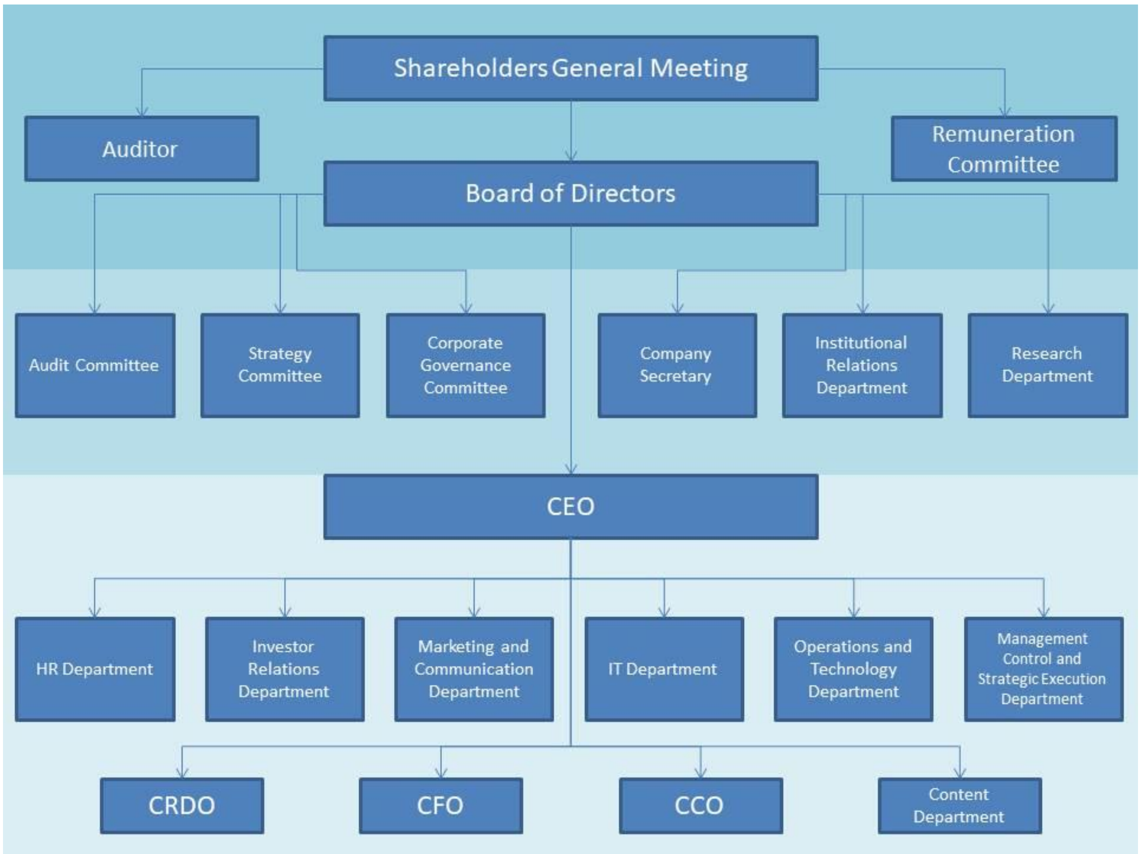
Appendix 11: Borrowings and financial leases

Borrowings (EUR '000)	Interest rate	Non-Current	Current	2018	2019	Non-Current	Current	2020	Non-Current	Current	2021	Non-Current	Current	2022	Non-Current	Current	2023	Non-Current	Current
Banco Português de Investimento	Euribor6M+2,5%	55826	9984	9984	9984	45843	9984	9984	35859	9984	9984	25875	9984	9984	15892	9984	9984	5908	9984
Banco Popular	Euribor6M+2,25%	500	1000	1500	1000		500	500											
Caixa Central de Crédito Agrícola	Euribor6M+2,6%		1500	1425	1500														
Banco BIC Português	Euribor6M+1,875%		4188	2013	4188														
Bonds (issue 12/11/2014)	Euribor6M+4%			30000															
Banco Português de Investimento	Euribor6M+5%	10625	2125	2125	2125	8500	2125	2125	6375	2125	2125	4250	2125	2125	2125	2125	2125		2125
Caixa Económica Montepio Geral	Euribor6M+2,5%	3667	1000	333	1000	2667	1000	1000	1667	1000	1000	667	1000	1000		667	667		
Caixa Económica Montepio Geral	Euribor6M+2,5%	537	1288	2253	1288		537	537											
Banco Comercial Português	Euribor6M+2,25%+1% agency		2168	2200	2168														
Guaranteed accounts	Current market rate		46124		46124														
Bank overdrafts	Current market rate		5696		5696														
Factorings	1,5%<interest<1,95%	5833	7988		7988		5833	5833											
Novo Banco	3,77%	21508	1654	1012	1654	19790	1717	1717	18007	1783	1783	16155	1852	1852	14233	1923	1923	12236	1996
Bonds (issue 04/07/2019)	4,50%					51000			51000				51000	51000					
Foreseen Borrowings		98496	84714	52844	84714	127799	21696	21696	112908	14892	14892	46947	65960	65960	32250	14698	14698	18145	14105
Financial leases		5910	1900	258	1900	2756	3154	3154	1428	1328	1328	714	714	714		714	714		
Future Borrowings												45000			45000			45000	
Total Borrowings and Financial Leases		104405	86614	52844	86614	130556	24850	24850	114335	16220	16220	92661	66674	66674	77250	15412	15412	63145	14105
Total Borrowings (without overdrafts)						127799	21696		112908	14892		91947	65960		77250	14698		63145	14105
Total current and non-current borrowings (without overdrafts)						149496			127799			157908			91947			77250	

	2019F	2020F	2021F	2022F	2023F
Cash Period Start	9639	3625	3698	3742	3802
Minimum cash desired	3625	3698	3742	3802	3844
Cash generated through the year	-25799	-19025	36137	-57366	-4876
Cash surplus/(deficit)	-19785	-19098	36093	-57426	-4919

Source: Author compilation, forecast and company information

Appendix 12: Corporate Structure



Source: Company information

Appendix 13: Key Members Remunerations

Key Members Remunerations			
Name	**Non Executive**	**Fixed Remuneration of the Board of Directors 2018**	**Other positions in the Group**
Dr. Francisco José Pereira Pinto de Balsemão	Chairman of the Board of Directors	106.400,00 €	•Chairman of the Board of Directors IMPRESA PUBLISHING, S.A. •Chairman of the Board of Directors SIC
Eng. Francisco Maria Supico Pinto Balsemão	Deputy Chairman of the Board of Directors	49.000,00 €	•Deputy Chairman of the Board of Directors IMPRESA PUBLISHING, SA •Deputy Chairman of the Board of Directors SIC
Dr. Francisco Pedro Presas Pinto de Balsemão	Chief Executive Officer (CEO)	280.000,00 €	•Chairman of the Board of Directors INFOPORTUGAL – Sistemas de Informação e Conteúdos, SA •Chairman of the Board of Directors IMPRESA OFFICE & SERVICE SHARE – Gestão de Imóveis e Serviços, SA. •Director of IMPRESA PUBLISHING, SA •Director of SIC •Chairman of the Management Board of GMTS (Global Media e Technology Solutions) Serviços Técnicos e Produção Multimédia, Sociedade Unipessoal, Lda.
Dr. Manuel Guilherme Oliveira da Costa	Chairman of the Audit Committee	40.012,00 €	
Dr. Ana Filipa Mendes de Magalhães Saraiva Mendes	Member of the Audit Committee	40.012,00 €	
Dr. Maria Luísa Coutinho Ferreira Leite de Castro Anacoreta Correia	Member of the Audit Committee	40.012,00 €	
Eng. João Nuno Lopes de Castro	Member of the Board of Directors	30.002,00 €	
	Total>>	585.438,00 €	

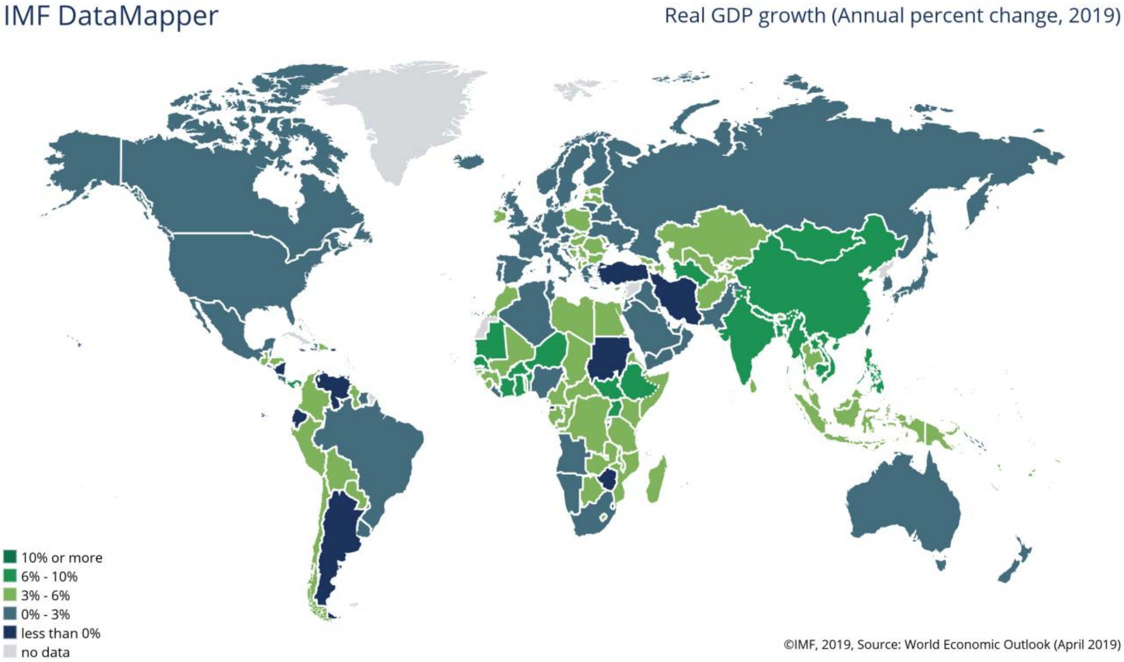
Source: Company information

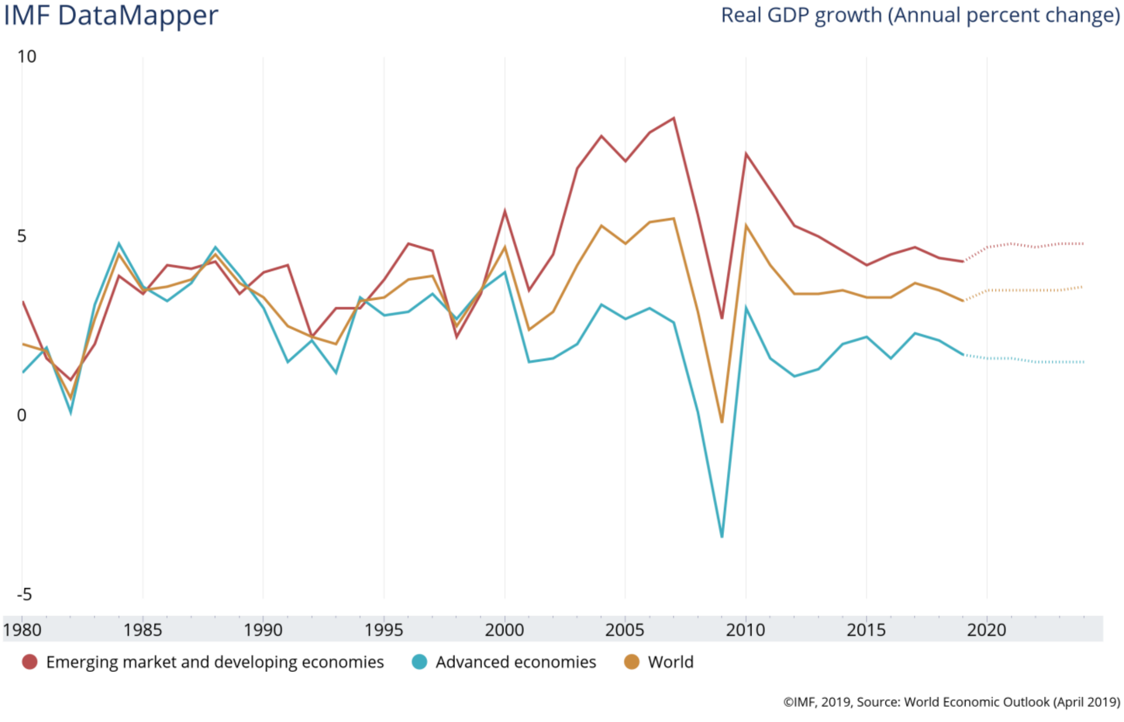
Appendix 14: Social Responsibility Vectors

Social Responsibility Vectors	Objectives	Details
• SIC Esperança	Sensitize civil society to existing social problems in Portugal and contribute to its resolution. With special attention to children and youngsters, it supports child safety programs, pediatric palliative care, programming courses for children and financial support for young people from private social solidarity institutions to attend higher education. It also supports other social issues such as refugees, fire victims, development of accessibilities and public health.	Is recognized as an entity of the highest public interest and acquires the status of Private Institution of Social Solidarity (IPSS) in 2007. In 15 years of existence, managed to raise more than 8.5M€, established partnerships with 443 companies, supported 1834 institutions and benefited more than 350000 people.
• Culture	Support cultural events through the dissemination of content and special advertising conditions.	In 2018, in the area of musical and cultural shows, the support of the group reached 70 events related to culture.
• Institutional Initiatives:	Promote and distinguish people and institutions and draw attention to the major themes of our time:	
Prémio Pessoa	Attributed annually to a Portuguese personality with relevant intervention in scientific, artistic or literary panorama.	Launched in 1987 by Expresso, this prize is awarded in partnership with Caixa Geral de Depósitos.
Prémio Primus Inter Pares	Has the intent to contribute to the development of a culture of rigor, professionalism and excellence in business management and awards three finalists of the last year of the Master's Degree following a degree in Business Management, Economics or Engineering an MBA in a Business School of national and international prestige.	Launched as a partnership of Expresso with Banco Santander Totta.
Prémio Branquinho da Fonseca	Encourages the emergence of young writers of children's and young people's literature.	Promoted by Expresso in partnership with the Calouste Gulbenkian Foundation.
Prémio Branquinho da Fonseca	Encourages the emergence of young writers of children's and young people's literature.	Promoted by Expresso in partnership with the Calouste Gulbenkian Foundation.
ESSILOR Carro do Ano | Troféu Volante de Cristal	Aims to reward the car model that represents, simultaneously, a significant technological advance in the scope of the national automobile market and the best commitment for the portuguese driver in terms of economy (price and costs of use), safety and driving pleasantness.	Reference, also, for the prize Ecológico do Ano. A special distinction reserved for vehicles with electric or hybrid engines. In this category the focus is the energy efficiency, consumption, emissions and autonomy.
Global Management Challenge	In this competition of strategy and management, the teams have a company to manage. Throughout the test, they make decisions about the destiny of the same and in the end wins the one that gets the best results. Works as a formative experience, complementary to academic training, and as an opportunity to test knowledge and to reinforce teamwork and leadership.	This Portuguese initiative, launched in 1980, in a partnership between Expresso and SDG - Simuladores e Modelos de Gestão, is currently implemented around 40 countries, spread across 4 continents. During its lifetime, more than half a million participants, mostly university students and business executives.
Global Investment Challenge	Competition with the purpose to increase financial literacy, where each participant can invest and test their knowledge on the Stock Exchange. The winner is the participant whose portfolio is more profitable.	Launched in 2012 by Expresso and SDG - Simuladores e Modelos de Gestão, it is a free registration competition, supported by Euronext, using Banco Best's online trading platform.
Prémios Expresso Economia	Awards a group of companies and entrepreneurs for their merit, courage and excellence and distinguishes The Entrepreneur of the Year.	Prize created in 2018 by Expresso with the support of Informa D&B and Deloitte in partnership with Caixa Geral de Depósitos.
• Relationship with Stakeholders	IPR maintains a presence in the various associations and regulating bodies which allows to actively participate in decisions that are relevant to its activity, namely through intervention in debates and proposals for diplomas and directives that the government and other entities, on national and european level, submitt to the public consultation or entities where the group is represented.	In 2018, IPR maintained its presence in 24 associative bodies and regulators and monitored the evolution of the main initiatives of the Government and the Assembly of the Republic in the area of social communication. In partnership with the Universidade Nova de Lisboa with the collaboration of Radio Renascença promoted the 7th edition of the Postgraduation in Multiplatform Journalism.
• Relationship with Investors	The Investor Relations Department has the objective of ensuring the institutional and informative relationship with the vast universe of shareholders, potential investors and analysts, as well as with the market exchange where the shares of IPR are admitted to trading and respective entities of regulation and supervision, disclosing relevant facts and periodic financial statements.	in 2018 this department held 2 roadshows between Lisbon and Madrid, 19 meetings with investors and analysts, 4 conference calls on quarterly results and a public presentation for the annual results.
• Spectator Service	An important service that addresses the issues of viewers, ensuring direct feedback while at the same time tightens the relationship with them.	In 2018, 33041 contacts were received,approximately 68% of those arrived via e-mail and respected requests for information (61.8%), suggestions for jornalistic topics (24%), criticism (11.2%), praise (1.3%) and other miscellaneous matters (1.7%).
• Field Trips	Visits to the group's facilities where schools, study centers and private institutions of social solidarity are the most frequent guests. Occasionally, there are visits from companies.	In 2018, 22 visits were organized with a total of 569 visitors (average of 26 people per visit).
• Internal Measures	Internally IPR bets on training, performance management, an own code of conduct for journalists, gender equality and human rights policies, as well as fight against corruption as a way to promote social awareness inside the group.	In 2018, the IPR maintained its objective of working towards greater motivation, involvement and enrichment of the workers by assigning a set of benefits in addition to those provided for in the Labor Code.

Source: Company information

Appendix 15: Real GDP Growth





Source: IMF

Appendix 16: SWOT

Strenghts

- Biggest Media Group in PT with diverse portfolio
- Presence in Multiplatforms
- Good track record in reducing operating costs
- Targets audience with more purchasing power – Higher Power Ratio. Reached 45% of TV adversing investment in Portugal (2018)
- Centralized all brands in one building

Weeknesses

- Won't raise Capital – Family Company
- Highly leveraged with continuing declining revenues
- Dependent of economic cycles and advertising
- No dividend policy
- Business segments with high competition
- Underperformance in Stock Exchange

Opportunities

- Investment in non related companies – Equity for Advertisement space – SIC Ventures
- Sell contents to new markets. Ex: Soap Operas to Portuguese speaking African Countries
- M&A Media Sector in Portugal or in Portuguese Speaking Countries

Threats

- Exposure of the Portuguese economy to sharp oscillations
- Diversion of advertising to other media due to changes in supply and consumption patterns
- Impairments on the sale of assets
- Privatization of RTP

Source: Author

Appendix 17: Risk Matrix

IMPACT \ PROBABILITY	Low	Medium-Low	Medium	Medium-High	High
High			• Net Profit Decrease	• Cash to Service Debt • Advertisers	
Medium-High		• Tech Failure	• Austerity Policies • Market Share Wars • Interest Rates	• Sharks Entrance	
Medium	• Device Partners	• Talent Retaining	• Taxes • Recessions	• Content Providers	
Medium-Low			• Exchange Rate • Legal Proceedings	• Piracy & Cybersecurity	
Low			• Trade Wars		

Source: Author

Appendix 18: CAPEX; NWC; D&A

(EUR '000)	2016	2017	2018	2019F	2020F	2021F	2022F	2023F
Increase in tangible fixed assets TV	2154	980	8995	1813	1849	1871	1901	1922
TV increase Fixed Assets/Revenues	*1%*	*0%*	*5%*	*1%*	*1%*	*1%*	*1%*	*1%*
Increase in tangible fixed assets Publishing	92	176	375	181	185	187	190	192
Publishing increase Fixed Assets/Revenues	*0,0%*	*0,1%*	*0,2%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*	*0,1%*
Increase in tangible fixed assets Others	1449	3898	6753	3625	3698	3742	3802	3844
Others increase Fixed Assets/Revenues	*1%*	*2%*	*4%*	*2%*	*2%*	*2%*	*2%*	*2%*
Total increase Tang. Fixed Assets	***3695***	***5053***	***16123***	***5619***	***5731***	***5800***	***5893***	***5959***
Total increase Tang. Fixed Assets/Revenues	*2%*	*3%*	*9%*	*3%*	*3%*	*3%*	*3%*	*3%*
D&A TV	2738	2864	2761	4275	4289	4312	4340	4373
D&A TV/Total	*78%*	*78%*	*78%*	*78%*	*78%*	*78%*	*78%*	*78%*
D&A Publishing	120	123	109	219	220	221	223	224
D&A Publishing/Total	*3%*	*3%*	*3%*	*4%*	*4%*	*4%*	*4%*	*4%*
D&A Others	644	665	652	986	990	995	1002	1009
D&A Others/Total	*18%*	*18%*	*19%*	*18%*	*18%*	*18%*	*18%*	*18%*
D&A Total	***3501***	***3652***	***3521***	***5481***	***5499***	***5529***	***5564***	***5607***
D&A n/ Tang. Assets n-1	12,57%	12,93%	11,78%	13,00%	13,00%	13,00%	13,00%	13,00%
CAPEX	-42	-30022	13725	5438	5547	5612	5703	5766
NWC	-17952	-8482	-12009	-16126	-15843	-15537	-15223	-14882
dNWC	10038	9470	-3528	-4116	283	306	314	341

Source: Author

Appendix 19: Beta

Unlevered beta corrected for cash - Over time

Industry Name	Beta	Effective Tax rate	Unlevered beta	2015	2016	2017	2018	Average (2015-19)	BL
Broadcasting	1,02	2,54%	0,49	0,83	0,75	0,70	0,65	0,69	1,158
Cable TV	1,13	3,61%	0,74	0,70	0,89	0,82	0,67	0,77	1,271
Publishing & Newspapers	1,26	12,00%	0,82	0,88	1,07	0,96	0,83	0,93	1,413
		Average>>	0,69					Average>>	1,285

Source: Damodaran

Appendix 20: Taxes

Taxes		Individual rates	Total rates
IRC		21,00%	21,00%
Municipal		1,50%	22,50%
Extra Surcharge			
Income between:			
1.500.000,00 €	7.500.000,00 €	3,00%	25,50%
7.500.000,00 €	35.000.000,00 €	5,00%	27,50%
>	35.000.000,00 €	9,00%	31,50%

Tax Shield	2019F	2020F	2021F	2022F	2023F
Financing deductions					
Max of	1.000.000,00 €	1.000.000,00 €	1.000.000,00 €	1.000.000,00 €	1.000.000,00 €
or 30% EBITDA	6.448.869,76 €	7.411.964,26 €	7.935.024,89 €	8.651.385,67 €	9.046.880,83 €
EBIT	13.237.494,06 €	16.429.767,74 €	18.143.029,53 €	20.495.704,75 €	21.771.244,72 €
Deductible Interest Costs	6.448.869,76 €	7.411.964,26 €	7.457.738,69 €	7.032.344,57 €	6.549.665,38 €
Collectable Profit	6.788.624,31 €	9.017.803,47 €	10.685.290,83 €	13.463.360,18 €	15.221.579,35 €
Total Tax	1.731.099,20 €	2.479.895,96 €	2.938.454,98 €	3.702.424,05 €	4.185.934,32 €
Effective Tax rate	**25,50%**	**27,50%**	**27,50%**	**27,50%**	**27,50%**

Source: Author

Appendix 21: Multiples

EV Multiple analysis				
Ticker	Peer name	EV/Sales	EV/EBITDA	P/E
CFN.LS	Cofina SGPS SA	1,02	6,47	8,80
GGTV.MI	Giglio Group SpA	1,67	11,38	32,10
MCP.LS	Grupo Media Capital SGPS SA	1,37	6,93	10,10
PSMGn.DE	Prosiebensat 1 Media SE	1,40	5,40	14,10
RWAY.MI	Rai Way SpA	6,86	12,42	21,40
TFFP.PA	Television Francaise 1 SA	0,84	3,91	13,60
	Average from selection>>	1,36	11,90	13,60
	Impresa SGPS SA	1,28	11,94	9,13
IMPA.LS	Impresa SGPS SA 2019	Sales	EBITDA	Earnings
		181.267.293 €	21.496.233 €	0,02 €

(=) EV	247.388.530 €	255.801.130 €	
(-) Net Debt	197.051.410,43 €	197.051.410,43 €	
Value of Equity	50.337.119,75 €	58.749.719,29 €	
#Shares	168000000	168000000	
Multiples Equity value per share 2019	0,30 €	0,35 €	0,28 €
Upside potential %	22%	42%	13%

Source: Author

Appendix 22: Monte Carlo

Statistics	DCF Equity value per share 01/08/2019	Perpetuity WACC · 1	Terminal g · 1
Trials	30000	30000	30000
Base Case	0,34 €	7,3%	1,5%
Mean	0,37199956	0,073097549	0,014987356
Median	0,33 €	7,3%	1,5%
Standard Deviation	0,23 €	0,9%	0,4%
Variance	0,052336261	8,09666E-05	1,59919E-05
Skewness	1,59 €	0,6%	-0,5%
Kurtosis	11,43309244	3,019525884	2,980000262
Coeff. of Variation	0,61 €	12,3%	26,7%
Minimum	-0,125116214	0,031762191	-0,001864512
Maximum	4,09 €	10,8%	3,0%
Range Width	4,217665302	0,076303833	0,032310691
Mean Std. Error	0,00 €	0,0%	0,0%

Percentiles	DCF Equity value per share 01/08/2019	Perpetuity WACC · 1	Terminal g · 1
5%	0,08 €	5,8%	0,8%
95%	0,79 €	8,8%	2,2%

Percentiles:	Forecast values
0%	-0,13 €
10%	0,13 €
20%	0,19 €
30%	0,24 €
40%	0,29 €
50%	0,33 €
60%	0,39 €
70%	0,45 €
80%	0,53 €
90%	0,66 €
100%	4,09 €

Source: Author

Appendix 23: DCF Model

t		0,42	1,42	2,42	3,42	4,42	
DCF analysis	**2018**	**2019F**	**2020F**	**2021F**	**2022F**	**2023F**	**Residual**
Cost of Equity							
Rf	-0,3%	-0,3%	-0,3%	-0,3%	-0,3%	-0,3%	-0,3%
CRP	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%
MRP	7,2%	7,2%	7,2%	7,2%	7,2%	7,2%	7,2%
Beta Levered - BL	1,3	1,3	1,3	1,3	1,3	1,3	1,3
Cost of Equity	12,9%	12,9%	12,9%	12,9%	12,9%	12,9%	12,9%
Cost of Debt							
Cost of Debt	2,9%	4,6%	4,6%	4,6%	4,6%	4,6%	4,6%
Marginal Tax rate	25,5%	25,5%	27,5%	27,5%	27,5%	27,5%	27,5%
After tax Cost of Debt	2,2%	3,4%	3,3%	3,3%	3,3%	3,3%	3,3%
WACC							
Weight of equity	31,6%	33,2%	34,6%	36,5%	38,8%	41,5%	41,5%
Weight of debt	68,4%	66,8%	65,4%	63,5%	61,2%	58,5%	58,5%
WACC	5,6%	6,6%	6,6%	6,8%	7,0%	7,3%	7,3%
(1+Wacc)^t		102,7%	109,5%	117,3%	126,2%	136,5%	136,5%
EBIT(1-Tc)	8.798.788,23 €	9.861.933,08 €	11.911.581,61 €	13.153.696,41 €	14.859.385,94 €	15.784.152,42 €	15.784.152,42 €
D&A	3.521.332,00 €	5.480.506,46 €	5.498.547,81 €	5.528.821,43 €	5.564.015,50 €	5.606.792,71 €	5.606.792,71 €
Change NWC	-3.527.516,00 €	-4.116.302,01 €	283.039,83 €	305.566,89 €	313.942,06 €	340.849,78 €	340.849,78 €
CAPEX	16.122.500,00 €	5.438.018,78 €	5.546.537,25 €	5.612.462,93 €	5.702.971,89 €	5.766.325,95 €	5.766.325,95 €
FCFF	-274.863,77 €	14.020.722,77 €	11.580.552,34 €	12.764.488,01 €	14.406.487,49 €	15.283.769,41 €	15.283.769,41 €
Reinvestment Rate	103,1%						
ROE	2,5%						
g	2,6%						1,5%

Terminal g	1,5%
Perpetuity WACC	7,3%
Terminal Value	267.369.659,12 €
PV Terminal Value	195.851.095,23 €
NPV FCFF	57.719.778,41 €
Enterprise Value	253.570.873,64 €
Net Debt	197.051.410,43 €
Value of Equity	56.519.463,21 €
#Shares	168000000
DCF Equity value per share 01/08/2019	0,34 €
Price 01/08/2019	0,25 €
Upside potential	37%

Source: Author

Appendix 24: Power Ratio

Advertising Investment (without discounts)	2011	2012	2013	2014	2015	2016	2017	2018
SIC Revenue (EUR '000)	875784	761177	1132237	1186195	1364990	1822714	2595937	2917775
SIC channels Revenue (EUR '000)	1028096	882807	1244559	1310751	1507672	1945845	2733456	3064174
TVI Revenue (EUR '000)	1850157	1661656	1832324	2190054	2350473	2655132	2886334	3296981
RTP1 Revenue (EUR '000)	529852	500637	456320	573181	656252	704667	744157	790991
Audience Share SIC	22,70%	21,92%	21,10%	19,10%	18,70%	17,60%	17,10%	16,50%
Audience Share SIC Channels	24,70%	24,90%	24,30%	22,50%	22,10%	20,86%	20,52%	19,90%
Audience Share TVI	25,70%	24,50%	24,60%	23,50%	22,50%	21,47%	20,96%	19,95%
Audience Share RTP1	21,60%	14,98%	13,10%	15,60%	14,80%	13,68%	12,41%	12,16%
Total Market Revenue (EUR '000)	3735207	3421115	3951572	4597750	5123422	6086990	7328696	8299523
Power Ratio SIC	1,03	1,02	1,36	1,35	1,42	1,70	2,07	2,13
Power Ratio SIC Channels	1,11	1,04	1,30	1,27	1,33	1,53	1,82	1,85
Power Ratio TVI	1,93	1,98	1,88	2,03	2,04	2,03	1,88	1,99
Power Ratio RTP1	0,66	0,98	0,88	0,80	0,87	0,85	0,82	0,78
% Invest SIC	23,45%	22,25%	28,65%	25,80%	26,64%	29,94%	35,42%	35,16%
% Invest SIC Channels	27,52%	25,80%	31,50%	28,51%	29,43%	31,97%	37,30%	36,92%
% Invest TVI	49,53%	48,57%	46,37%	47,63%	45,88%	43,62%	39,38%	39,72%
% Invest RTP1	14,19%	14,63%	11,55%	12,47%	12,81%	11,58%	10,15%	9,53%
Total SIC Channels+TVI+RTP1	91,24%	89,01%	89,41%	88,61%	88,11%	87,16%	86,84%	86,18%
Other Channels	8,76%	10,99%	10,59%	11,39%	11,89%	12,84%	13,16%	13,82%

Source: IPG Mediabrands/MediaMonitor - data from YUMI/ADfast

Appendix 25: SIC's impairments 2017

Impairments/Goodwill SIC 2017:						
Discount rate used	7,70%					
g perpetuity	2,00%					
g	2,00%					
CF 2017	11.008.626,00 €					
Y	2018	2019	2020	2021	2022	Perpetuity
t	1	2	3	4	5	
	1,08	1,16	1,25	1,35	1,45	0,06
	10.425.996,77 €	9.874.203,07 €	9.351.612,93 €	8.856.680,77 €	8.387.942,79 €	196.996.465,26 €
PV Total	243.892.901,60 €					
49% of PV Total	119.507.521,78 €					
Goodwill raised in 2005	133.757.979,00 €					
Possible impairment	14.250.457,22 €					

Source: Author

Appendix 26: Publishing in Portugal

Publishing Portugal	2014	2015	2016	2017	2018	2019F	2020F	2021F	2022F	2023F
Newspaper and consumer magazine in Portugal $M	534,2	515,71	492,62	473,75	464,24	454,52	444,19	433,37	422,75	411,62
Consumer magazine $M	310,06	306,24	291,51	277,51	271,74	265,63	259,16	252,53	245,88	239,17
Consumer magazine advertising $M	118,36	115,35	100,37	88,59	85,69	82,87	80,11	77,42	74,83	72,16
Digital consumer magazine advertising $M	6,03	6,56	7,17	7,9	8,67	9,52	10,43	11,4	12,48	13,48
Print consumer magazine advertising $M	112,34	108,79	93,2	80,69	77,02	73,35	69,68	66,02	62,35	58,68
Consumer magazine circulation $M	191,69	190,89	191,15	188,92	186,05	182,76	179,05	175,12	171,06	167,01
Digital consumer magazine circulation $M	6,66	8,5	10,58	12,39	13,92	14,94	15,49	15,81	16,03	16,26
Print consumer magazine circulation $M	185,03	182,39	180,56	176,54	172,13	167,82	163,56	159,31	155,03	150,75
Newspaper $M	224,14	209,48	201,11	196,24	192,5	188,89	185,04	180,83	176,87	172,46
Newspaper advertising $M	131,83	125,64	120,99	115,63	110,7	106,23	102,13	98,37	94,92	91,76
Digital newspaper advertising $M	8,53	9	9,62	10,21	10,77	11,35	11,91	12,45	12,98	13,49
Print newspaper advertising $M	123,3	116,64	111,37	105,41	99,93	94,88	90,22	85,91	81,94	78,27
Newspaper circulation $M	92,31	83,84	80,12	80,62	81,8	82,66	82,91	82,47	81,95	80,7
Digital newspaper circulation $M	8,48	11,58	15,51	20,09	24,47	28,12	30,5	31,91	32,75	32,55
Print newspaper circulation $M	83,83	72,26	64,61	60,53	57,34	54,54	52,41	50,56	49,2	48,14
Newspaper average daily unit circulation digital in Portugal (000)	47,85	55,14	56,31	57,91	59,78	61,71	63,62	65,47	66,39	66,92
Newspaper average daily unit circulation print in Portugal (000)	394,23	322,58	267,57	228,86	201,17	182,63	168,96	160,03	152,04	144,81
Newspaper average daily unit circulation total in Portugal (000)	442,08	377,71	323,88	286,78	260,95	244,33	232,58	225,5	218,43	211,73

Source: Author compilation. PwC

Appendix 27: Global Publishing

Publishing Global	2014	2015	2016	2017	2018	2019F	2020F	2021F	2022F	2023F
Global Newspaper and consumer magazine $M	209352	203619	199167	192202	186995	182473	178139	174115	170399	166887
Consumer magazine $M	79389	77709	76999	75452	74208	72959	71683	70402	69131	67842
Consumer magazine advertising $M	32476	31710	31129	29900	29162	28453	27760	27111	26485	25878
Digital consumer magazine advertising $M	5974	7001	7958	8858	9637	10324	10907	11443	11916	12325
Print consumer magazine advertising $M	26502	24709	23171	21042	19525	18129	16853	15668	14570	13552
Consumer magazine circulation $M	46912	45999	45870	45552	45046	44507	43923	43291	42645	41964
Digital consumer magazine circulation $M	1917	2504	3014	3497	3907	4242	4486	4664	4789	4855
Print consumer magazine circulation $M	44996	43495	42856	42056	41139	40265	39437	38627	37856	37109
Newspaper $M	129964	125909	122168	116750	112787	109514	106456	103713	101269	99046
Newspaper advertising $M	67831	64208	60676	56017	52943	50639	48743	47170	45883	44830
Digital newspaper advertising $M	8799	9272	9840	10434	10984	11556	12113	12638	13162	13672
Print newspaper advertising $M	59032	54935	50836	45583	41959	39083	36630	34532	32721	31158
Newspaper circulation $M	62132	61702	61492	60733	59844	58875	57713	56543	55386	54216
Digital newspaper circulation $M	2052	2547	3111	3677	4197	4669	5115	5539	5937	6293
Print newspaper circulation $M	60080	59155	58381	57056	55646	54207	52598	51004	49448	47923
Global Newspaper average daily unit circulation digital (000)	11955	15912	20306	25905	31896	36794	41546	46013	50091	53629
Global Newspaper average daily unit circulation print (000)	541037	542483	537319	536675	534894	532814	532148	529748	523080	513858
Global Newspaper average daily unit circulation total (000)	552992	558395	557625	562580	566791	569608	573694	575761	573171	567486

Source: Author compilation. PwC

Appendix 28: Television, advertising and internet in Portugal

Television, Advertising and internet - Portugal	2014	2015	2016	2017	2018	2019F	2020F	2021F	2022F	2023F
Apps (no. of downloads) in Portugal M	92	145	206	256	301	332	356	367	389	407
Business information in Portugal $M	157	160	164	167	171	174	177	181	184	187
Business information (financial) $M	51	52	53	54	55	57	58	60	61	63
Business information (marketing) $M	58	60	62	64	65	67	68	69	70	71
Business information (industry) $M	48	48	49	49	50	51	51	52	53	54
Cable TV households in Portugal M	1	1	1	1	1	1	1	1	1	1
Digital cable TV households M	1	1	1	1	1	1	1	1	1	1
Cable TV penetration in Portugal (%)	0	0	0	0	0	0	0	0	0	0
Directory advertising in Portugal $M	64	63	61	59	55	52	48	43	39	36
Digital directory advertising $M	9	10	12	13	14	15	16	17	18	18
Print directory advertising $M	55	53	50	46	41	36	31	26	21	17
Fixed broadband households PT M	3	3	3	4	4	4	4	4	4	4
High-speed fixed broadband households M	2	3	3	3	3	4	4	4	4	4
Medium-speed fixed broadband households M	1	1	1	1	0	0	0	0	0	0
Fixed broadband penetration in Portugal (%)	71%	77%	83%	89%	92%	93%	95%	97%	98%	98%
Internet access in Portugal $M	1960	2198	2419	2623	2775	2891	2999	3102	3193	3273
Mobile Internet access $M	1084	1233	1370	1498	1583	1658	1723	1779	1829	1868
Fixed broadband access $M	876	965	1049	1126	1192	1233	1276	1323	1364	1404
Internet advertising in Portugal $M	94	110	134	154	174	191	207	220	234	245
Mobile Internet advertising $M	24	33	48	60	73	85	96	106	116	123
Wired Internet advertising $M	70	77	86	94	101	106	111	114	119	122
IPTV households in Portugal M	1	2	2	2	2	2	2	2	2	2
IPTV penetration in Portugal (%)	34%	38%	42%	46%	48%	50%	51%	51%	51%	51%
Mobile Internet connections PT M	16	16	16	16	16	17	17	17	17	17
High-speed mobile Internet connections M	1	3	6	8	10	12	13	15	15	16
Low-speed mobile Internet connections M	3	2	1	1	1	0	0	0	0	0
Medium-speed mobile Internet connections M	12	11	9	8	6	4	3	2	1	0
Mobile Internet penetration in Portugal (%)	54%	60%	66%	68%	70%	72%	73%	75%	77%	79%
Mobile Internet subscribers in Portugal M	6	6	7	7	7	7	7	8	8	8
Mobile phone ownership PT M	16	16	16	16	16	16	16	15	15	15
Non-smartphone ownership M	12	11	9	8	6	5	4	2	1	1
Smartphone ownership M	4	6	7	9	10	11	12	13	14	14
Non-smartphone penetration in Portugal (%)	75%	66%	55%	46%	38%	30%	22%	15%	9%	5%
OTT video in Portugal $M	12	20	32	49	62	74	90	105	120	136
Subscription VOD $M	3	8	19	35	46	58	73	87	101	116
Transactional VOD $M	9	11	13	14	16	16	17	18	19	20
Satellite TV households in Portugal M	1	1	1	1	1	1	1	1	0	0
Smartphone penetration in Portugal (%)	25%	34%	45%	54%	62%	70%	78%	85%	91%	95%
Subscription TV households in Portugal M	3	4	4	4	4	4	4	4	4	4
Subscription TV penetration in Portugal (%)	83%	86%	90%	92%	93%	94%	95%	94%	94%	93%
Tablet ownership in Portugal M	2	2	2	2	2	2	2	2	2	2
Traditional TV and home video in Portugal $M	1688	1735	1807	1866	1912	1946	1969	1975	1976	1979
Physical home video $M	79	74	69	64	59	54	49	43	38	34
Public license fee $M	128	128	128	128	128	127	127	126	125	124
TV subscription $M	1481	1533	1610	1673	1725	1765	1793	1806	1813	1821
TV advertising in Portugal $M	230	237	246	249	252	256	263	266	271	274
Broadcast TV advertising $M	229	236	245	247	249	253	258	261	266	269
Online TV advertising $M	1	1	2	2	3	4	4	5	5	6

Source: Author compilation. PwC

Appendix 29: Television, Advertising and internet – Global

Television, Advertising and internet - Global	2014	2015	2016	2017	2018	2019F	2020F	2021F	2022F	2023F
Global Apps (no. of downloads) M	92110	113584	130363	144878	154063	160729	165673	169671	172319	175735
Global Business information $M	91412	95280	99198	103155	107257	111403	115430	119346	123266	127158
Global Cable TV households M	524	520	486	457	439	429	425	420	417	417
Global Cable TV penetration (%)	37%	37%	35%	32%	30%	29%	29%	28%	27%	27%
Global Data consumed (MB M)	487355998	643027736	833765737	1083536489	1368342390	1726909290	2187705318	2798922045	3523693799	4419799489
Global Directory advertising $M	19096	18482	18006	17507	17124	16774	16528	16299	16079	15859
Global Fixed broadband households M	696	760	839	910	962	995	1021	1042	1059	1074
Global Fixed broadband penetration (%)	44%	47%	51%	55%	57%	58%	59%	60%	60%	60%
Global Internet access $M	442577	496065	551362	610203	654965	699937	745203	789029	831702	871297
Global Internet advertising $M	131745	158501	189792	226376	269496	306228	340086	371020	399663	424808
Global IPTV households M	87	105	148	187	212	230	243	256	266	275
Global IPTV penetration (%)	6%	7%	11%	13%	15%	16%	16%	17%	17%	18%
Global Mobile Internet connections M	3090	3616	4070	4420	4880	5228	5508	5736	5919	6082
Global Mobile Internet penetration (%)	0	0	0	1	1	1	1	1	1	1
Global Mobile Internet subscribers M	2152	2452	2761	2955	3148	3340	3531	3723	3919	4114
Global Mobile phone ownership M	5679	5771	5928	6005	6160	6261	6332	6371	6389	6375
Global Non-smartphone penetration (%)	61%	53%	46%	40%	35%	30%	25%	22%	18%	16%
Global OTT video $M	12537	16934	23306	31115	38173	45268	52394	59211	66089	72754
Global Pay DTT households M	8	9	10	11	12	13	13	14	14	15
Global Pay DTT penetration (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Global Satellite TV households M	199	207	218	222	227	233	238	242	246	249
Global Satellite TV penetration (%)	14%	15%	16%	16%	16%	16%	16%	16%	16%	16%
Global Smart speaker ownership M	1	3	8	37	88	155	227	300	367	440
Global Smartphone penetration (%)	39%	47%	54%	60%	65%	70%	75%	78%	82%	84%
Global Subscription TV households M	819	840	862	876	890	905	918	932	944	956
Global Subscription TV penetration (%)	59%	59%	62%	62%	62%	62%	62%	62%	62%	62%
Global Tablet ownership M	612	746	824	898	930	959	978	992	1003	1015
Global Tablet penetration (%)	11%	13%	14%	15%	16%	16%	16%	16%	16%	17%
Global Traditional TV and home video $M	248212	253794	258263	257121	252734	248289	246616	245360	244757	244447
Global TV advertising $M	156490	158716	162787	161348	164668	166300	172105	172925	176313	177714
Global VR $M	0	0	420	1435	2240	2906	3585	4269	5018	6109
Global VR units M	0	0	22	36	50	58	65	71	77	87

Source: Author compilation. PwC

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Glossary

(EUR '000)	Thousand euros
1B	Billion 10^{12}
1G	Giga 10^{9}
1K	Thousand 10^{3}
1M	Million 10^{6}
AI	Artificial intelligence
AR	Augmented reality
B2C	Business to consumer
CAGR	Compound annual growth rate
CAPEX	Capital expenditures
CCO	Chief communications officer
CEO	Chief executive officer
CFO	Chief financial officer
CRM	Client relationship manager
D&A	Depreciations and amortizations
D/E	Debt to equity
DCF	Discounted cash flow
DNA	Deoxyribonucleic acid
E&M	Entertainment and media
EBIT	Earnings before interest and taxes
EBITDA	Earnings before interest, taxes, depreciations and amortizations
ECB	European central bank
EPS	Earnings per share
EV	Enterprise value
FTA	Free to air
GDP	Gross domestic product
IMF	International monetary fund
IPR	Impresa SGPS
M&A	Merge and acquisitions
MB	Megabyte
NWC	Net working capital
P/E	Price to earnings
PV	Present Value
Rd	Cost of debt
Re	Cost of equity
Rf	Risk free rate
ROA	Return on assets
ROCE	Return on capital employed
ROE	Return on equity
SG&A	Selling, general and administrative expenses
TV	Television
VR	Virtual Reality
WACC	Weighted average cost of capital

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Level of Risk	SELL	REDUCE	HOLD/NEUTRAL	BUY	STRONG BUY
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