

Feasibility Study of Inspira Televisi Indonesia As a New Digital Television Company

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Abstract

Applying the Discounted Cash Flow (DCF) as the most commonly used methodology to value company, this paper analyze Inspira Televisi Indonesia's value as a new digital television company by using Net Present Value (NPV) and Internal Rate of Return (IRR) calculation. Those methods are calculated at three assumptions (Optimist, Moderate, and Pessimist) as the measurement to know in which assumption is this project to be a feasible investment. As this company is a new brand company, the analysis would like to know how much the company is worth to the investor, therefore, the valuation is being applied in calculating company's value. The analysis uses Free Cash Flow to Firm (FCFF) model as a part of DCF method, with Weighted Average Cost of Capital (WACC) as a discounting factor. Based on NPV calculation, this project concludes that this company is a feasible investment for investor at two assumptions (Optimist and Moderate) as those two assumptions show positive NPVs. Meanwhile, based on IRR calculation, this project conclude that this company is a feasible investment for investore at two assumptions as well (Optimist and Moderate) as those two assumptions show higher number of IRR more than the company's WACC.

Keywords: valuation, discounted cashflow, net present value, internal rate of return, weighted average cost of capital free cashflow to firm

1. Introduction

On December 12th 2012, Federal Communications Commission (FCC) changed the television marketplace and technology should permit cable operators more flexibility in meeting their legal obligation to ensure that all broadcast stations are "viewable" to subscribers (<http://www.fcc.gov/> accessed: January 4th, 2015). Ever since, a hybrid cable system operator may choose to carry some or all local broadcast stations only in digital format (instead of carrying these stations in both digital and analog format). This is a decision made by subscriber's cable company and not required by the federal government. If the cable operator companies decides to carry certain local broadcast stations only in digital format, FCC rules require that it offers the companies the necessary equipment (for example, a set-top box, digital transport adaptor (DTA), or a Cable CARD) either for free or at an affordable cost. Cable operators must also provide at least 30 days notice to subscribers and local broadcast stations before carrying a broadcast station only in digital format. In other word, the television company should change its broadcasting system from analogue television to digital television.

The differences between analogue and digital television are on the systems of broadcasting and its hardware transmitter. Analogue television transmitting the sound and the picture on analogue signal, as digital television transmitting them through digital signal which has benefits giving a better output [1]. Based on industry statistics, percentage of households that using digital television is higher than analogue television. The usage of digital television is increasing from 2008 with only 40,226 millions of households to 100,453 millions of households in 2012 and bouncing up reaching 220,422 millions in 2014, as in the end of 2014, the total of Asean population is approximately 618 millions of people. It is forecasted that in 2018, Asean households are going to use digital television. It approves that the demand towards digital television is increasing, as it will force analogue television companies to switch to use digital instead of analogue television[5].

In valuation, there are several models such as Gordon Model, Free Cash Flow to Equity (FCFE), and Free Cash Flow to Firm (FCFF). In this case, Inspira Televisi Indonesia will be evaluated

through one of those three methods. On the result, the researcher wants to know the company's valuation based on the firm's aspect, not only from the equity aspect. In another hand, the company's capability to pay is pay out fewer than its dictated by its cash flow [8]. Free Cash Flow to Equity (FCFE) showing the valuation only from the equity aspect. There is still, to use Gordon Model, Inspira Televisi Indonesia's capability to pay dividend is pay out fewer. Thus, the appropriate model to value Inspira Televisi Indonesia is using Free Cash Flow to Firm (FCFF) method. In doing valuation, there are valuation method that will be used, that is consists of Net Present Value (NPV), Internal Rate of Return (IRR).

All relevant data is extracted from the company's financial report to forecast the company financial situation in the near future. This research will also show calculations of Inspira television Indonesia's net present value (NPV), internal rate of return (IRR). Considering if NPV and IRR showing different result, NPV result is preferred as it better reflects the primary goal, which is to grow the company's financial wealth [10]. So, the researcher wants to value Inspira Televisi Indonesia's financial projection by counting it's FCFF, NPV, and IRR. In the end, the title of this research would be valuation of Inspira Televisi Indonesia as a new digital television company. Based on the background, there are several goals for this journal:

1. To know Inspira Televisi Indonesia's FCFF
2. To know Inspira Televisi Indonesia's NPV
3. To know Inspira Televisi Indonesia's IRR
4. To know the feasibility to invest in Inspira Televisi Indonesia

2. Literature Review Valuation

The valuation in this research will be emphasized on the concept Discounted Cash Flow (DCF) along to the free cash flow. They value of the firm's stock is calculated by forecasting free cash flow to the firm (FCFF) and discounting these cash flow back to the present at the appropriate required rate of return. In this case, FCFF will be used, that is the cash available to all of the firm's investors, including stockholders and bondholders, after the firm buys and sells products, provides services, pays its cash operating expenses, and makes short- and long-term investments.

FCFF is the appropriate models to use under three conditions: the first is when the firms not be able to pay dividends at all or pays out fewer dividends than dictated by its cash flow, the second is free cash flow tracks profitability and the last is when the analyst takes a corporate control perspective [9].

Valuation Method: Discounted Cashflow

DCF analysis can be divided into two main categories; Net Present Value (NPV), and Internal Rate of Return (IRR). These two has many similarities, yet also have some important differences. The following section will explain a general model of DCF analysis and explain the differences between NPV and IRR. According to [7], there is formula of FCFF to be used to figure the cash flow.

$$FCF = CF + \frac{FCInv}{1 - (t \times (1 - \tau))} \dots \dots \dots \text{Equation 2.4}$$

Where:

- FCFF = free cash flow to firm CFO = cash flow from operations
- Int = interest t = tax rate
- FCInv = fixed capital investment

There is also the discount rate in order to get the NPV. The purpose of the discount rate is to find the present value of future cash flows. This measure is often called "WACC", or Weighted Average Cost of Capital. In words, we calculate the weighted average cost of capital for a firm that uses only debt and common equity in following equation:

$$WACC = \frac{D}{D+E} (r_D \times (1 - t)) + \frac{E}{D+E} r_E \dots \dots \dots \text{Equation 2.2}$$

Where:

- r_D = rate of return by debt holders r_E = rate of return by equity holders
- t = marginal tax rate D = value of debt
- E = value of equity

Cost of debt is the interest rate company pays for their debt. The two fractions represent debt and equity ratios. In order to calculate WACC, companies need an estimate of the cost of equity (r_E). Many companies that listed on the market use the Capital Asset Pricing Model (CAPM) to calculate the cost of equity. The next formula presents the CAPM formula [7]. The next section

explains the model in further detail.

$$r_{E} = r_{f} + \beta (r_{M} - r_{f}) \dots \dots \dots \text{Equation 2.3}$$

Where:

- r_{E} = Cost of equity
- r_{M} = Systematic risk of the equity
- r_{f} = Risk free interest rate
- r_{M} = Expected return of the market portfolio

Discounted Cash Flow Techniques

NPV

The most used DCF technique is NPV. The output of the analysis is the NPV figure, telling the decision makers or investors how much is the project is worth in terms of money at the date of the analysis. The net present value can be expressed as follows:

$$NPV = \sum_{t=1}^n \frac{FCF_t}{(1+k)^t} - IO \dots \dots \dots \text{Equation 2.4} \quad \text{Where,}$$

- FCF_t = the annual free cash flow in time period t
- k = the appropriate discount rate
- t = the time of the cash flow
- IO = the initial cash outlay

The project will be accepted if $NPV \geq 0$

IRR

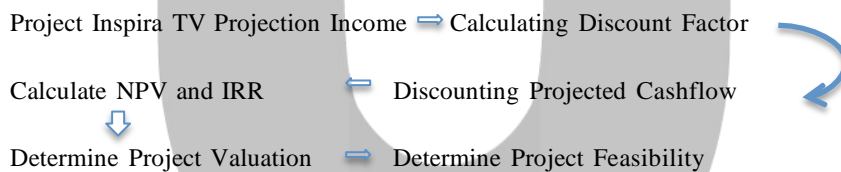
The output of IRR analysis is the project’s internal rate of return. The internal rate of return is defined as the rate of discount that makes $NPV=0$. Finding the IRR of a project lasting t years is solved for IRR in following formula:

$$0 = \sum_{t=1}^n \frac{FCF_t}{(1+IRR)^t} - IO \dots \dots \dots \text{Equation 2.5} \quad \text{Where:}$$

- FCF_t = the annual free cash flow in time period t
- IO = the initial cash outlay
- n = the project’s expected life
- t = The time of the cash flow of
- IRR = the project’s internal rate

The project will be accepted if $IRR \geq WACC$

Research Framework



Source: Processed Data

3. Data And Methodology

Operational Variable

A variable is anything that can take on differing or varying values [2]. A good theoretical framework identifies and defines the important variables in the situation that are relevant to the problem and subsequently describes and explains the interconnection among these variables. There are several variables that will be used on valuing the company project with DCF are FCFE, WACC, NPV and IRR.

Research Phases

According to Rosenbaum and Pearl [11], there are steps in doing DCF analysis as follow:

1. Study the target and determine key performance drivers
2. Project free cash flow to firm
3. Calculate weighted average cost of capital
4. Calculate NPV
5. Calculate IRR
6. Determine Valuation

4. Results And Discussion

Free Cashflow to firm And Weighted Average Cost of Capital Calculation
Free Cashflow to Firm Projection

TABLE 4.1
INSPIRA TELEVISI INDONESIA FCFF (OPTIMIST)

	2015	2016	2017	2018	2019	2020	2021	2022
Revenue								
TV ads.	2.783.800.000	3.117.856.000	3.304.927.360	3.998.962.106	4.358.868.695	5.056.287.686	5.614.479.332	6.285.976.852
CaG		12%	6%	21%	9%	16%	11%	11%
Broadcasting Time	173.987.500	194.866.000	206.557.960	249.935.132	271.429.293	316.017.421	350.779.958	392.873.553
CaGR		12%	6%	21%	9%	16%	11%	12%
Partnership	521.962.500	584.598.000	619.673.880	749.805.395	817.287.880	948.053.941	1.052.339.875	1.178.620.660
C.GR		12%	6%	21%	9%	16%	11%	11%
Total Revenue	3.479.750.000	3.897.320.000	4.131.159.200	4.998.702.632	5.448.585.869	6.320.359.608	7.015.599.165	7.857.471.065
Expenses								
Cost of Good sold								
Programming Cost								
Local Program	847.088.000	906.384.160	969.831.051	1.037.719.225	1.110.359.571	1.188.084.740	1.271.250.672	1.360.238.219
Foreign Program	0	0	0	0	0	0	0	0
Broadcasting Cost								
Satellite and Transponder Services	229.478.400	259.310.592	293.020.969	331.113.695	374.158.475	422.799.077	477.762.957	539.872.141
Gross Margin								
Selling Expenses	521.962.500	584.598.000	619.673.880	619.673.880	619.673.880	619.673.880	619.673.880	619.673.880
General & Admin								
Employee's fee	576.000.000	576.000.000	576.000.000	576.000.000	576.000.000	576.000.000	576.000.000	576.000.000
Total Expenses	2.174.528.900	2.326.292.752	2.458.525.900	2.564.506.500	2.680.191.926	2.806.557.698	2.944.687.509	3.095.784.241
EBITDA	1.305.221.100	1.571.027.248	1.672.633.300	2.434.195.832	2.768.393.943	3.513.801.910	4.070.911.655	4.761.686.824
Depreciation								
Building				50.000.000	50.000.000	50.000.000	50.000.000	50.000.000
Equipment	27.100.000	27.100.000	27.100.000	27.100.000	27.100.000	27.100.000	27.100.000	27.100.000
Amortization								
EBIT	1.278.121.100	1.543.927.248	1.645.533.300	2.357.095.832	2.691.293.943	3.436.701.910	3.993.811.655	4.684.586.824
Tax	0%	20%	20%	20%	20%	20%	20%	20%
Tax-adjusted EBIT	1.278.121.100	1.235.141.798	1.316.426.640	1.885.676.666	2.153.035.154	2.749.361.528	3.195.049.324	3.747.669.459
O&A	27.100.000	27.100.000	27.100.000	77.100.000	77.100.000	77.100.000	77.100.000	77.100.000
CapEx	10.000.000	10.000.000	10.000.000	30.000.000	30.000.000	30.000.000	30.000.000	30.000.000
Free Cashflow								
Net Profit	1.295.221.100	1.252.241.798	1.166.473.360	1.932.776.666	2.200.135.154	2.796.161.528	3.242.149.324	3.794.769.459
Year								
WACC	16%	0.86	0.74	0.64	0.55	0.48	0.41	0.35
FCFF		1.079.518.792	866.879.727	1.238.248.202	1.215.118.060	1.331.431.731	1.330.715.079	1.342.701.494

*In Rupiah

Source: Data Processed (2015)

TABLE 4.2
INSPIRA TELEVISI INDONESIA FCFF (MODERATE)

	2015	2016	2017	2018	2019	2020	2021	2022
Revenue								
TV ads.	2.783.800.000	3.062.180.000	3.169.356.300	3.771.533.997	4.035.541.377	4.600.517.170	5.014.563.715	5.516.020.086
CaG		10%	4%	19%	7%	14%	9%	10%
Broadcasting Time	173.987.500	191.386.250	198.084.769	235.720.875	252.221.336	287.532.323	313.410.232	344.751.255
CaGR		10%	4%	19%	7%	14%	9%	10%
Partnership	521.962.500	574.158.750	594.254.306	707.162.624	756.664.008	862.596.969	940.230.697	1.034.253.766
C.GR		10%	4%	19%	7%	14%	9%	10%
Total Revenue	3.479.750.000	3.827.725.000	3.961.695.375	4.714.417.496	5.044.426.721	5.750.646.462	6.268.204.643	6.915.025.108
Expenses								
Cost of Good sold								
Programming Cost								
Local Program	847.088.000	906.384.160	969.831.051	1.037.719.225	1.110.359.571	1.188.084.740	1.271.250.672	1.360.238.219
Foreign Program	0	0	0	0	0	0	0	0
Broadcasting Cost								
Satellite and Transponder Services	229.478.400	259.310.592	293.020.969	331.113.695	374.158.475	422.799.077	477.762.957	539.872.141
Gross Margin								
Selling Expenses	521.962.500	574.158.750	594.254.306	594.254.306	594.254.306	594.254.306	594.254.306	594.254.306
General & Admin								
Employee's fee	576.000.000	576.000.000	576.000.000	576.000.000	576.000.000	576.000.000	576.000.000	576.000.000
Total Expenses	2.174.528.900	2.315.853.502	2.433.106.326	2.539.087.226	2.654.772.352	2.781.138.144	2.919.267.936	3.070.364.667
EBITDA	1.305.221.100	1.511.871.498	1.528.589.049	2.175.330.270	2.389.654.369	2.969.508.338	3.348.936.708	3.124.660.441
Depreciation								
Building				50.000.000	50.000.000	50.000.000	50.000.000	50.000.000
Equipment	27.100.000	27.100.000	27.100.000	27.100.000	27.100.000	27.100.000	27.100.000	27.100.000
Amortization								
EBIT	1.278.121.100	1.484.771.498	1.501.489.049	2.198.230.270	2.310.554.369	2.919.508.338	3.271.836.708	3.747.560.441
Tax	0%	20%	20%	20%	20%	20%	20%	20%
Tax-adjusted EBIT	1.278.121.100	1.187.817.198	1.201.191.239	1.678.584.216	1.850.043.495	2.313.926.671	2.617.469.366	2.998.048.353
O&A	27.100.000	27.100.000	27.100.000	77.100.000	77.100.000	77.100.000	77.100.000	77.100.000
CapEx	10.000.000	10.000.000	10.000.000	30.000.000	30.000.000	30.000.000	30.000.000	30.000.000
Free Cashflow								
Net Profit	1.295.221.100	1.204.917.198	1.281.708.761	1.725.684.216	1.897.143.495	2.361.026.671	2.664.569.366	3.045.148.353
Year								
WACC	16%	0.86	0.74	0.64	0.55	0.48	0.41	0.35
FCFF		1.038.721.723	952.518.402	1.108.572.535	1.047.775.464	1.124.115.528	1.093.651.858	1.077.463.410

*In Rupiah

Source: Data Processed (2015)

TABLE 4.3
INSPIRA TELEVISI INDONESIA FCFF (PESSIMIST)

	2015	2016	2017	2018	2019	2020	2021	2022
Revenue								
TV ads	2,783,800,000	3,006,504,000	3,066,634,080	3,587,961,874	3,767,359,967	4,219,443,163	4,514,804,185	4,875,988,520
CaGR		8%	2%	17%	5%	12%	11%	8%
Bidding Time	173,987,500	187,906,500	191,664,630	224,247,617	235,459,998	263,115,198	282,175,262	304,749,282
Partnership	521,962,500	563,719,500	574,993,890	672,742,851	706,379,994	791,145,593	846,525,785	914,247,847
							11%	8%
caGR		8%	2%	17%	5%	12%		
Total Revenue	3,479,750,000	3,758,130,000	3,833,292,600	4,484,952,342	4,709,199,959	5,274,303,954	5,643,505,231	6,094,985,649
Expenses								
Cost of Good sold								
Programming Cost								
Local Program	847,088,000	906,384,160	969,831,051	1,037,719,225	1,110,359,571	1,188,000,740	1,271,250,672	1,360,238,219
Forow, Proeram	0	0	0	0	0	0	0	0
Broadcasting Cost								
Satellite and Transponder Services	329,468,500	353,310,500	373,993,960	374,003,690	374,003,690	420,799,800	404,063,980	394,893,980
General and Admin								
Employee's fee	576,000,000	576,000,000	576,000,000	576,000,000	576,000,000	576,000,000	576,000,000	576,000,000
Total Expenses	2,174,528,900	2,305,414,252	2,413,845,910	2,519,826,810	2,635,511,936	2,761,877,708	2,900,007,519	3,081,104,251
EBITDA	1,305,221,100	1,452,715,748	1,419,446,690	1,965,115,532	2,073,688,023	2,512,426,247	2,743,497,711	3,043,881,399
Depredation								
Building				50,000,000	50,000,000	50,000,000	50,000,000	50,000,000
Equipment	27,100,000	27,100,000	27,100,000	27,100,000	27,100,000	27,100,000	27,100,000	27,100,000
Amortization								
EBIT	1,278,121,100	1,425,615,748	1,392,346,690	1,888,025,532	1,996,588,023	2,435,326,247	2,666,397,711	2,966,781,399
Tax	0	0	0	20%	20%	20%	20%	20%
Tox-odjusted EBIT	1,278,121,100	1,425,615,748	1,392,346,690	1,510,420,426	1,597,270,419	1,948,260,997	2,133,118,169	2,373,425,119
D&A	27,100,000	27,100,000	27,100,000	77,100,000	77,100,000	71,100,000	77,100,000	77,100,000
C.pEx	10,000,000	10,000,000	10,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000
Il In Net Working Capital			2,500,000,000					
Net Profit	1,295,221,100	1,442,715,748	1,090,553,310	1,557,520,426	1,644,370,419	1,995,360,997	2,180,218,169	2,420,525,119
Year	1	2	3	4	5	6	7	8
WACC	16%	0.86	0.74	0.64	0.55	0.48	0.41	0.35
FCH	1	1,243,720,472	810,458,762	997,837,413	908,171,144	950,017,341	894,853,661	856,453,265

*In Rupiah

Source: Data Processed (2015)

Weighted Average Cost of Capital Projection

TABLE 4.4
CAPITAL OF INSPIRA TELEVISI INDONESIA

Hutang kepada bank (Bank Loan)	3,000,000,000
Hutang kepada pihak ketiga	7,000,000,000
Modal awal	13,000,000,000
Total	23,000,000,000

*In Rupiah

Source: Financial Report Inspira Televisi

TABLE 4.5
CAPITAL STRUCTURE INSPIRA TELEVISI INDONESIA

Debt to Capital	Equity to Capital
2014	
43,48%	56,52%

Source: Data Processed (2015)

TABLE 4.6

BETA CALCULATION

Company Name	Company's television	Company's Beta
PT. Surya Citra Media	Indostar, SCTV	0,756
PT. Media Nusantara Citra	Global TV, MNC TV, INEWS, RCTI	0,935
Average Beta		0,845

Source: Research Findings

a. Capital Asset Pricing Model Calculation

There is Capital Asset Pricing Model (CAPM) as a tool in calculating the cost of equity. The CAPM model can be seen as follow:

$$\begin{aligned}
 R_{E} &= R_{f} + \beta(R_{M} - R_{f}) \\
 &= 7,50\% + 0,845 (7,9\% - 7,50\%) \\
 &= 15\%
 \end{aligned}$$

b. Cost of Debt Calculation

After CAPM, there is cost of debt calculation. As company's cost of debt interest rate is 22,5%, the calculation would be as follow:

$$\begin{aligned}
 K_{d} &= K_{dt} (1 - t) \\
 &= 0,225 (1 - 0,2) \\
 &= 18\%
 \end{aligned}$$

c. Weighted Average Cost of Capital Calculation

After cost of equity and cost of debt estimation have been weighted, the CAPM can be calculated. The WACC calculated in the following model:

$$\begin{aligned}
 WACC &= \frac{E}{E+D} (R_E) + \frac{D}{E+D} (R_D) \\
 &= (0,4348 \times 0,15) + (0,5652 \times 0,18) \\
 &= 16\%
 \end{aligned}$$

WACC at 12% means that the company expects to get 12% rate of return.

4.2 NPV Calculation

TABLE 4.7

Year	PV Optimist	PV Moderate	PV Pessimist
2015	1,079,518,792	1,038,721,723	1,243,720,472
2016	-866,879,727	-952,518,402	-810,458,762
2017	1,238,248,202	1,105,572,835	997,837,413
2018	1,215,115,060	1,047,775,464	908,171,144
2019	1,331,431,731	1,124,115,528	950,017,341
2020	1,330,715,079	1,093,651,858	894,853,661
2021	37,595,641,823	19,753,495,851	11,562,119,076
Total PV	42,923,790,960	24,210,814,857	15,746,260,345
Initial Outlay	23,000,000,000	23,000,000,000	23,000,000,000
NPV	19,923,790,960	1,210,814,857	-6,397,286,390

*In Rupiah

Source: Research Findings

According to table 4.7 above, the NPV project at optimist assumption shows to accept the project because its NPV is higher than 0 (19,923,790,960 > 0), NPV project at moderate assumption shows to accept the project because its NPV is higher than 0 (1,210,814,857 > 0), and NPV project at pessimist assumption shows to reject the project because its NPV is lower than 0 (-6,397,286,390 < 0).

IRR Calculation

IRR at Positive Assumption

$$0 = -C_0 + \frac{C_1}{(1+r)^1} + \frac{C_2}{(1+r)^2} + \dots + \frac{C_t}{(1+r)^t}$$

$$\begin{aligned}
 0 &= -2,300,000,000 + \frac{1,079,518,792}{(1+r)^1} + \frac{-866,879,727}{(1+r)^2} + \frac{1,238,248,202}{(1+r)^3} + \frac{1,215,115,060}{(1+r)^4} + \frac{1,331,431,731}{(1+r)^5} + \frac{1,330,715,079}{(1+r)^6} + \frac{37,595,641,823}{(1+r)^7} \\
 &\quad - \frac{23,000,000,000}{(1+r)^0} \\
 &= 32\%
 \end{aligned}$$

The calculation above shows the IRR of the company at optimist assumption is 32%. It means that the project tells to accept the project because company's IRR is higher than it's WACC (32% > 16%).

IRR at Moderate Assumption

$$\begin{aligned}
 0 &= -2,300,000,000 + \frac{1,038,721,723}{(1+r)^1} + \frac{-952,518,402}{(1+r)^2} + \frac{1,105,572,835}{(1+r)^3} + \frac{1,047,775,464}{(1+r)^4} + \frac{1,124,115,528}{(1+r)^5} + \frac{1,093,651,858}{(1+r)^6} + \frac{19,753,495,851}{(1+r)^7} \\
 &\quad - \frac{23,000,000,000}{(1+r)^0} \\
 &= 24\%
 \end{aligned}$$

The calculation above shows the IRR of the company at moderate assumption is 24%. It means that the project tells to accept the project because company's IRR is higher than its WACC, same as optimistic assumption ($24\% > 16\%$).

IRR at Pessimist Assumption

$$0 = -2,300,000,000 + \frac{11\% \cdot 1\% \cdot 1\% \cdot 1\% \cdot 1\%}{(1+11\%)^1} + \frac{11\% \cdot 1\% \cdot 1\% \cdot 1\% \cdot 1\%}{(1+11\%)^2} + \frac{11\% \cdot 1\% \cdot 1\% \cdot 1\% \cdot 1\%}{(1+11\%)^3} + \frac{11\% \cdot 1\% \cdot 1\% \cdot 1\% \cdot 1\%}{(1+11\%)^4} + \frac{11\% \cdot 1\% \cdot 1\% \cdot 1\% \cdot 1\%}{(1+11\%)^5} + \frac{11\% \cdot 1\% \cdot 1\% \cdot 1\% \cdot 1\%}{(1+11\%)^6} + \frac{11\% \cdot 1\% \cdot 1\% \cdot 1\% \cdot 1\%}{(1+11\%)^7} + \frac{11\% \cdot 1\% \cdot 1\% \cdot 1\% \cdot 1\%}{(1+11\%)^8} + \frac{11\% \cdot 1\% \cdot 1\% \cdot 1\% \cdot 1\%}{(1+11\%)^9} + \frac{11\% \cdot 1\% \cdot 1\% \cdot 1\% \cdot 1\%}{(1+11\%)^{10}}$$

$$\frac{11\% \cdot 1\% \cdot 1\% \cdot 1\% \cdot 1\%}{(1+11\%)^1} = 11\%$$

The calculation above shows the IRR of the company at pessimist assumption is 11%. It means that the project tells to reject the project because the company's IRR is less than its WACC (11% < 16%).

5. Conclusions

Conclusion

As the research has been completed, there are several points that can be concluded for the use of both academic and practitioners. After calculation that has been done, the conclusion has been broken down into several points as follow:

1. The projection of Inspira Televisi Indonesia were analyzed at three assumptions, those are optimist, moderate, and pessimist. From the FCFE projection, NPV and IRR of Inspira Televisi Indonesia can be calculated as the measurement to know in which assumption is this project to be a feasible investment. In this projection, NPV and IRR calculated in three assumptions as well.
2. According to NPV calculation, both optimist and moderate assumption are feasible investment as both assumptions show positive NPV 19,923,790,960, and 1,210,814,857 respectively. While the pessimist assumption is not a feasible project to invest as it shows the negative NPV that is -6,397,286,390.
3. According to IRR calculation, those two assumptions are feasible project to invest as those two assumptions IRR shows higher number rather than its project WACC, 32% and 24% respectively. Meanwhile, the company's IRR at pessimist assumption shows lower number rather than the project's WACC at 11 %, with WACC at 16%.
4. The financial Result of this projection is to accept two assumptions: optimist and moderate, and to reject the pessimist assumption. So the feasible investment for this project is at optimist and moderate assumption.

REFERENCES

- [1] Asean Radio Television and Telecommunication (2012). *Households Accessing Digital Television*. Online. <http://www.crtc.gc.ca/>. [January 4th, 2015]
- [2] Bodie, Zvi., Kane, Alex. & Marcus, Alan J. (2009). *Investments (8th Ed.)*, New York: McGraw-Hill, International Edition.
- [3] Bodie, Zvi., Kane, Alex. & Marcus, Alan J. (2013). *Investments (10th Ed.)*, New York: McGraw-Hill, International Edition.
- [4] Damodaran, Aswath. (2012). *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset*, New York: Wiley.
- [5] Federal Communications Commission (2012). *Regulates Interstate and International Communications by Radio, Television, Wire, Satellite, and Cable*. Online. <http://www.fcc.gov/>. [January 4th, 2015]
- [6] Graham, Benjamin. (2010). *The Intelligent Investor: The Definitive Book on Value Investing (Revised Ed.)*. New York: HarperCollins.
- [7] Keown, Arthur J., Martin, John D., Petty, J. William & JR, David F. Scott (2013). *Financial Management, International Edition (12th Ed.)*. New Jersey: Pearson.
- [8] Kuhlman, Bruce. (2005). *CFA Fundamentals: The Schweser Study Guide to Getting Started*, Berkshire: Kaplan Publishing.
- [9] Princeton University (2009). *The Difference Between Analogue and Digital Television*.

Online. <http://www.princeton.edu/>. [January 4th,2015]

- [10] Reilly, Frank K. & Brown, Keith C (2009). *Investment Analysis and Portfolio Management, Canada: Cengage*
- [11] Rosenbaum, Joshua. & Pearl, Joshua. (2009). *Investment Banking: Valuation, Leveraged Buyouts, and Mergers & Acquisitions, New Jersey: Wiley.*
- [12] Sekaran, Uma. & Bougie, Roger. (2010). *Research Methods for Business: A Skill Building Approach, New York: Wiley.*



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