



University Assignment

Corporate Finance Project

Arabtec and Aldar

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1. Corporate Governance Analysis

1.1 Chief Executive Officer

Arabtec

The company is not a family business and the CEO was appointed from outside the company. Mohammed Al Fahim is the acting CEO since June 2014. He, in addition to other board members, represents the 35.27% stake of Aabar Investments in Arabtec. He represents Aabar in other boards as well, in addition to his previous experiences as a head of financing at Abu Dhabi National Oil Company (ADNOC), projects and export financing at HSBC and financial consulting with KPMG. There is no information or exact figures about executive pay or packages at Arabtec. However, the current acting CEO aims at cutting costs and jobs to get rid of the corporate fat he inherited from the previous CEO, Hassan Ismaik, who used to get paid more than 550,000 AED per month and used also to hold the largest stake in the company.

Aldar

The company is not a family business and the CEO was appointed from within the company. Mohammed Al Mubarak is the CEO and since July 2014. He joined the company in 2006 and prior to his current position he was the deputy chief executive and the chief portfolio management officer at Aldar. In addition, he is the chairman of Farah Leisure, which is the operator-company behind Ferrari World Abu Dhabi and Yas Waterworld; a board member of the Abu Dhabi Tourism and Culture Authority; and chairman of Aldar Academies. Before all of that he worked at Barclays Capital in London, focusing on investment and finance in the MENA region. There is no information or exact figures about executive pay or packages at Aldar.

1.2 Board of Directors

Arabtec

The board of directors is chaired by Khadem Al Qubaisi, who represents the stake of Aabar, and includes:

Mohammed Al Mohairi (director representing Aabar)
Mohammed Al Fahim (director, CEO and representing Aabar)
Khalif Al Mohairi (director representing Aabar)
Nabil Al Kendi (director)
Riad Kamal (director and co-founder)
Tareq Abu Shareeh (director)
Mohammed Al Suwaidi (director)
Wassel Al Fakhouri (director and general counsel)

In addition to Aabar as a major stockholder, there is the former CEO, Hassan Ismaik, who still holds 11.81% of the company's shares.

Aldar

Chairman of the board is Abu Baker Al Khoori. He is also the vice chairman of General Holding Corporation-Senaat and Al Waha Capital PJSC, a board member of Abu Dhabi Securities Market, Abu

Dhabi Chamber of Commerce & Industry, Khalifa Fund for Development, Abu Dhabi Pension Fund, Khalifa Ports and Abu Dhabi Airports Company.

The vice chairman is Ali Al Mehairi. He is the Executive Director of Mubadala Real Estate and Infrastructure, the chairman of Abu Dhabi Finance Company PJSC, Emirates Ship Investment Company LLC and Khadamat Facilities Management LLC. He is also on the boards of Al Hikma Development Company PJSC and Abu Dhabi Health Services Company PJSC.

Aldar's board includes:

HE Sultan Al Jaber	(director, minister of state and CEO of Mubadala Energy)
Ahmed Al Mehairi	(director)
Mubarak Al Humairi	(director)
Mohammed Al Khoori	(director)
Ali Al Mansouri	(director)
Ali Al Falasi	(director and CEO of Hydra Properties)
Martin Edelman	(director)
Mansour Al Mulla	(director)

All of the board members hold several positions in government and semi-government entities but Mubadala Development Company is the major shareholder with 29.75% of Aldar.

1.3 Share Voting Structure

For both companies, there are no preferred stocks and there is no information about any unconventional voting structure.

1.4 Financial Market Concerns

Arabtec

According to the company, there are eight financial analysts covering the Arabtec - HSBC Securities, Al Nahdha Investments, Beltone Financial, UBS Investment Bank, Morgan Stanley & Co, Deutsche Bank, EFG Hermes and Securities & Investment Company B.S.C.

The trading volume of the stock as of

Aldar

According to Bloomberg Business week, there are four financial analysts covering the company. The trading volume of the stock as of

1.5 Societal Constraints

Both companies mention the importance of Corporate Social Responsibility in their websites and corporate literature, but there weren't any noticeable CSR activities for any of them and there are no pressures or calls from society for more involvements directed at Arabtec or Aldar. Due to that neutrality of social reputation, the companies' financial and stock market performance is currently the main shaper of the company's reputation.

2 Stockholder Analysis

2.1 Stockholders

It is impossible to determine the number of stockholders because it keeps changing with every transaction in the market. In general, Arabtec has 4,395.30 million stocks outstanding and major stockholders are Aabar Company 35.27% and the businessman Hassan Ismaik 11.81%. Aldar has 7,862.63 million shares outstanding with Mubadala Development Company holding 29.75%. Both companies are publically listed the UAE only.

2.2 Insider Holdings

The only known insider stockholder in this case is the former CEO of Arabtec Hassan Ismaik, he holds 11.81% of Arabtec shares and he isn't holding any position currently in Arabtec. Aabar company managed to acquire stocks gradually from Hassan Ismaik in order to lower his stake as a part of restructuring process after disputes within the board about Hassan's performance as a CEO of the company. There is no information about employees' ownership of stocks in Arabtec or Aldar.

Regarding insider transactions for Arabtec, 403,598,006 were bought in 2014 by insiders over ten days in May, June, November and December. The last insider trades before that were in 2011.

For Aldar, 2,249,027 stocks have been bought in 2014 over 7 days in February, May, November and December, and 1,085,500 stocks have been sold over 4 days in February and June. There were insider trades for Aldar stocks in 2013 as well.

3 Risk and Return

In order to come up with the elements used in analyzing risk and return of ARTC and DAR stocks we gathered some data about these two stocks, in addition to the performance of the markets where they are being traded (DFM and ADEX) and information about some other companies from the same industry. The data we collected includes monthly closing prices, monthly closing market performance, in points, and the traditional financial statements; all of the collected data covers the last five years. Please see Index X.

After collecting the data and calculating percentage return, in terms of capital gains, we ran a graphic regression analysis using scattered charts. The analysis provided some important statistical data, such as betas and least squares. Please see Index X.

In addition to the above, we used Excels built-in non-graphic regression analysis tool in order to measure the reliability and significance of the outcome given the data we used. Please see Index x.

3.1 Historical Risk Parameters

- The regression equation of ARTC against DFM is: $y = 1.309x + 0.0042$ $R^2 = 0.4836$
- The regression equation of DAR against ADEX is: $y = 2.2672x - 0.0155$ $R^2 = 0.6115$

Intercepts: the intercepts, also known as Alphas, from the equations tell how better, or worse, is the stock performing in comparison to the market. Positive Alphas represent the excess return of a stock in comparison to the main market index, while negative Alphas would represent how bad is the stock is doing against the main market index.

The Alpha of ARTC is 0.0042, which means that ARTC stock performed better than its market. While DAR's Alpha is a negative 0.0155, which means that the stock performed lower than its market.

Slopes: the slopes, also known as Betas, from the equations tell you how far a certain stock is deviating from the market index in terms of risk. It is piece of data to measure the volatility of a stock. Given that a market index will have a beta of 1. Stocks with Betas over 1 will be considered riskier than the ones with betas less than 1. But the choice of which stock to invest in is usually governed by the investment philosophy or preference of the decision maker himself; some would prefer to try riskier stocks and wish for high returns, while others would accept slow or less returns of the less risky stocks.

ARTC has a beta of 1.309 while DAR has a beta of 2.2672. This means that DAR is riskier than ARTC, each in its own market. Even by looking at the regression graphs one would notice than the points in DAR's case are more randomly scattered than those of ARTC.

When looking at standard deviations to analyze total risk, ARTC's stock with standard deviation of 16.1% is riskier than DAR's 14.2%. But the key in using betas is the relational risk where risk is measured for stocks in relations to the markets they operate in.

Preciseness: to measure the preciseness and validity of the out the outcomes mentioned in the previous paragraphs we used Excel's built-in regression analysis tables. First we looked at the t-stats, they are more than 7 and 9 (more than 2) for ARTC and DAR respectively; and these are indications of the coefficients' significance with more than 95% confidence. The second check is the p-value, this measure is used to make sure that the outcome isn't a result of mere luck or chance, so the smaller than the value of p-value the better. We got significantly small p-values, 6.99129E-10 for ARTC and 1.63527E-13 for DAR, which means that the outcome wasn't the result of mere luck. Also, there is an estimated range of the beta that is given by the same regression analysis; the range for ARTC is between 0.95 and 1.66, and for DAR it is between 1.79 and 2.74.

Market and firm-specific factors: here we looked at the R-squared, also called the coefficient of determination. It is used to measure how close the data is to the fitted regression line, which explains the variability of the outcome around the data's mean. The R-squared value in this case will give a percentage interpretation of degree of market influence over a stock, and all is based on the entered historical data. For ARTC, R-squared is around 48% and this is the risk attributed by market factors, while 52% (the result of $1 - 0.48$) is attributed to firm-specific factors. DAR has an R-squared of around 61% attributed to market factors and 39% of this risk is attributed to firm-specific factors.

Business factors: business risk, or operating leverage, stems from the variation in companies' income, which increase the uncertainty of future cash flows. And investors will need to compensate for this risk of uncertainty. One way to measure the operating leverage is to divide the standard deviation of EBIT over its mean. Here we used the available annual income statements for eight years up to December

2013, which are the available annual reports currently. For ARTC is the risk attributed to business operations is around 61% and for DAR it is about 215%.

Financial leverage: there are several ways to measure a company's financial leverage, and the popular ways to do it are by the debt-asset and debt-equity ratios. The debt-asset ratio defines the total amount of debt relative to assets and the debt-equity ratio tells the same story but relative to equity. From the latest balance sheets publically available (Q2 financial reports up to June 2014) we can calculate both ratios using the formulas (Total Debt ÷ Total Shareholders' Equity) and (Total Debt ÷ Total Assets). The choice of data from the balance sheet to arrive at this result was similar to the one used by Zawya.com.

The debt-asset ratio for ARTC is about 9.7% which means that this portion of assets is financed by debt. We arrived at this result by dividing the company's total debt (98.903 million of long-term bank borrowings and about 1.191 billion of short-term bank borrowings) by its total assets (about 13.3 billion). The debt-equity ratio is about 22.5% which means that for each dirham of shareholders' equity there are 22.5 filses of debt. We arrived at this result by dividing the company's total debt (same as above) by its equity attributed to equity holders (about 5.731 billion).

DAR's debt-asset ratio is about 26.6% which means that this portion of assets is financed by debt. We arrived at this result by dividing the company's total debt (about 7.118 billion of long-term bonds, sukuk and bank borrowings and about 2.9 billion of short-term bonds, sukuk and bank borrowings) by its total assets (about 37.82 billion). DAR's debt-equity ratio is about 59.8% which means that for each dirham of shareholders' equity there are 59.8 filse of debt. We arrived at this result by dividing the company's total debt (same as above) by its equity attributed to equity holders (about 16.791 billion).

3.2 Default Risk & Cost of Debt

Arabtec (not rated)

There is no data about a recent borrowing by the company per se, but based on the total debt the company has up to December 2013 and the interest expenses paid on its latest income statement for the year ended December 2013 the cost of debt is 5.1%. To estimate the company's synthetic rating we used the risk-free rate (5% Dubai government bonds) and the company's latest interest expenses and EBIT (as of December 2013). The resulting synthetic rating we got is AA with interest coverage ratio of 7.65, an estimated default spread of 0.5% and an estimated cost of capital of 5.5%.

Aldar (rated)

The company doesn't have bonds outstanding currently. It is rated by Moody's and S&P, but there was no exact information about the associated default spread and interest rate. Moody's upgraded Aldar from Baa3 from Ba1 in November 2014; and S&P rated Aldar BBB- over the long-term and A-3 over the short-term. Both ratings imply a positive and stable outlook according to the two credit rating agencies.

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3.3 Estimated Cost of Capital

Arabtec

Market value of equity = shares outstanding * share price

Shares outstanding = 4,395.3 million

Share price = 3.27 dirhams as of December 28, 2014

$$\text{Market value of equity} = 4,395.3 * 3.27 = 14,372.631 \text{ million dirhams}$$

To get the value of debt, we used the latest annual data from the balance sheet of the company and summed up the total long-term and short-term debt the company has.

$$\text{Total debt} = 1,019.196 \text{ million dirhams}$$

Then, we summed up both values and used the result to come up with the weights.

$$\text{Weight of equity} = 14,372.631 / 15,391.827 = 0.934$$

$$\text{Weight of debt} = 1,019.196 / 15,391.827 = 0.066$$

In order for us to calculate the cost of capital for the firm we managed to find the following data:

$$\text{Cost of Equity} = R_f + B (R_m - R_f)$$

$R_f = 0.053$ (Dubai government bonds)

$B = 1.309$ (from our own regression analysis)

$(R_m - R_f) = 0.065$ (from an analyst report)

$$\text{Cost of equity} = 0.053 + 1.309 (0.065) = 0.138$$

Cost of debt = interest expense / total debt

$$\text{Cost of debt} = 51,984 / 1,019,196 = 0.0510$$

Since there are no taxes in the UAE, we will calculate the WACC without taxes as follows:

$$\text{WACC} = W_e * R_e + W_d * R_d$$

$$\text{WACC} = 0.934 * 0.138 + 0.066 * 0.0510 = 0.1322$$

We didn't consider tax in Arabtec case because it was taxed only on its operations outside UAE and Bahrain. When we looked at disclosures in the financial reports there was no information about the basis of taxes and the only information available is that the company is taxes between 10% and 35% outside the UAE and Bahrain. When we calculated the marginal tax rate we found out that it is very small (as you will see in Part V) so we decided to disregard it.

Aldar

Market value of equity = shares outstanding * share price

Shares outstanding = 7,862.630 million

Share price = 2.81 dirhams as of December 28, 2014

$$\text{Market value of equity} = 7,862.630 * 2.81 = 22,093.9903 \text{ million dirhams}$$

To get the value of debt, we used the latest annual data from the balance sheet of the company and summed up the total long-term and short-term debt the company has.

$$\text{Total debt} = 13,916.697 \text{ million dirhams}$$

Then, we summed up both values and used the result to come up with the weights.

$$\text{Weight of equity} = 22,093.9903 / 36,010.6873 = 0.613$$

$$\text{Weight of debt} = 13,916.697 / 36,010.6873 = 0.387$$

In order for us to calculate the cost of capital for the firm we managed to find the following data:

Cost of Equity = $R_f + B (R_m - R_f)$

$R_f = 0.055$ (Abu Dhabi government bonds)

$B = 2.2672$ (from our own regression analysis)

$(R_m - R_f) = 0.0542$ (from an analyst blog)

$$\text{Cost of equity} = 0.055 + 2.2672 (0.0542) = 0.178$$

Cost of debt = interest expense / total debt

$$\text{Cost of debt} = 727,020 / 13,916,697 = 0.0522$$

Since there are no taxes in the UAE, we will calculate the WACC without taxes as follows:

$$\text{WACC} = 0.613 * 0.178 + 0.387 * 0.0522 = 0.129$$

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4 Measuring Investment Returns

4.1 Accounting Return on Projects

Return on Equity

The data used to come up with the ROE is derived from annual balance sheets and income statements. To find the ROE we need to divide the annual net income by the average stockholders' equity, we did that for each of the last four years to have a better understanding of trends if any.

The ROE is a profitability metric that measures how much profit the company is making in comparison to its stockholders' equity.

$$\text{ROE} = \frac{\text{Annual Net Income}}{\text{Average Stockholders' Equity}}$$

Arabtec

The ROEs of Arabtec during the last four years were 12.07%, 9.22%, 4.72% and 8.93%. In general the company is picking good projects but it needs to work harder to keep it above 10% or aim at 15% to 20%. In addition, the company's ROE seems unstable; although fluctuations in ROE are not always a big issues but a stable one is always preferred.

Aldar

The ROEs for Aldar were -120.20%, 11.33%, 17.56% and 18.3%. Although it had a big negative ROE in 2010, it established a stable upward trend of positive ROEs with a very good one of 18.3% for the year 2013. The company is picking good projects.

Average Shareholder's Equity

Year	Arabtec	Aldar
2013	$(5,514,568+2,946,553)/2 = 4,230,560.5$	$(16,374,623+8,179,507)/2 = 12,277,065$
2012	$(2,946,553+2,953,095)/2 = 2,949,824$	$(8,179,507+7,093,575)/2 = 7,636,541$
2011	$(2,953,095+2,697,874)/2 = 2,825,484.5$	$(7,093,575+4,246,676)/2 = 5,670,125.5$
2010	$(2,697,874+2,391,727)/2 = 2,544,800.5$	$(4,246,676+16,800,412)/2 = 10,523,544$

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ROE

Year	Arabtec	Aldar
2013	377,777/4,230,560.5 = 8.93%	2,246,294/12,277,065 = 18.3%
2012	139,171/2,949,824 = 4.72%	1,340,658/7,636,541 = 17.56%
2011	260,540/2,825,484.5 = 9.22%	642,491/5,670,125.5 = 11.33%
2010	307,118/2,544,800.5 = 12.07%	(-12,658,414)/10,523,544 = -120.29%

Return on Capital Employed

The general equation for Return on Capital Employed (ROCE) is as follows:

$$ROCE = \frac{EBIT - Taxes}{Equity + Debt + Minority Interest - Cash}$$

The data used to come up with the ROCE is derived from annual balance sheets and income statements. It is a measure the company's efficiency in allocating its resources to generate profit.

ROCE

Year	Arabtec	Aldar
2013	(507,554-10318)/(5514568+1019196+249458-2452981) = 11.5%	(1034830-0)/(16374623+13916697+273336-4294081) = 3.9%
2012	(210427-1506)/(2946553+938480+398792-812400) = 6.0%	(2493234-0)/(8179507+14523195+0-2259773) = 12.2%
2011	(369337-2714)/(2953095+615718+398792-812400) = 11.1%	(643962-0)/(7093575+19738759+0-4157680) = 2.8%
2010	(449574-6131)/(2697874+940883+404444-588130) = 12.8%	(-890962-0)/(4246676+34009793+109-2431533) = -2.5%
2009	(647575-39360)/(2391727+1013854+336291-634051) = 19.6%	(-573701-0)/(16800412+40135096+109-10312639) = -1.2%

Arabtec

ROCEs of Arabtec during the last five years 2013 to 2009 were 11.5%, 6%, 11.1%, 12.8%, 19.6% respectively. These rates are very low in comparison to the company's WACC we calculated previously. Ideally ROCE needs to be above the company's WACC of 13.22%.

Aldar

The ROCEs of Aldar during the last five years 2013 to 2009 were 3.9%, 12.2%, 2.8%, -2.5%, -1.2% respectively. These rates are very low in comparison to the company's WACC we calculated previously. Ideally, ROCE needs to be above the company's WACC of 12.9%.

In general, there a lot of fluctuations for both companies when using accounting measures. This may mean that the both companies choose projects randomly or based on misleading or weak factors. Both companies have new CEOs and that may indicate that shareholders were not happy with the previous management and future projects should better than the ones both companies executed during the past 5 years.

Economic measures may give a better indication of performance than traditional accounting measures. One important economic measure is the Economic Value Added (EVA) which measures the value created by the company in excess of the required return by investors. Traditional accounting measures will need to make adjustments to the GAAP in order to be able to provide similar measures of the EVA.

Economic Value Added

Book Value of Equity

Book Value of Equity= Total assets - Total liabilities

Year	Arabtec	Aldar
2013	12,800,330 - 6,850,001 = 5,950,329	43,728,047 - 26,118,491 = 17,609,556
2012	8,951,668 - 5,439,754 = 3,511,914	32,040,707 - 23,528,631 = 8,512,076
2011	8,796,036 - 5,270,313 = 3,525,726	40,117,914 - 32,671,457 = 7,446,457
2010	8,680,090 - 5,449,486 = 3,230,604	47,344,182 - 42,280,487 = 5,063,695
2009	9,110,462 - 6,244,718 = 2,865,744	66,344,738 - 48,553,420 = 17,791,318

Book Value of Capital

Book Value of Capital = Book Value of Equity + Book Value of Debt

Year	Arabtec	Aldar
2013	5,514,568 + 1,019,196 = 6,533,764	16,374,623 + 13,916,697 = 30,291,320
2012	2,946,553 + 938,480 = 3,885,033	8,179,507 + 14,523,195 = 22,702,702
2011	2,953,095 + 615,718 = 3,568,813	7,093,575 + 19,738,759 = 26,832,334
2010	2,697,874 + 940,883 = 3,638,757	4,246,676 + 34,009,793 = 38,256,469
2009	2,391,727 + 1,013,854 = 3,405,581	16,800,412 + 40,135,096 = 56,935,508

Economic Value Added

$$\text{EVA} = \text{NOPAT} - (\text{Capital} * \text{Cost of Capital})$$

Year	Arabtec	Aldar
2013	$377777 - (12800330 * 0.125) = -1,222,264.25$	$2246294 - (43728047 * 0.1045) = -2,323,286.912$
2012	$139171 - (8951668 * 0.125) = -979,787.5$	$1340658 - (32040707 * 0.1045) = -2,007,595.882$
2011	$260540 - (8796036 * 0.125) = -838,964.5$	$642491 - (40117914 * 0.1045) = -3,549,831.013$
2010	$307118 - (8680090 * 0.125) = -1,084,704,132$	$-12658414 - (47344182 * 0.1045) = -17,605,881.02$
2009	$494908 - (9110462 * .125) = 381,025.25$	$837373 - (48553420 * 0.1045) = -4,236,459.39$

The results of EVA for both companies for the past five years are all negative, except for one year (2009) for Arabtec. That shows that both companies are not generating positive value in excess of the required return by investors. The results here are different from the ones we got from ROE and ROIC because of the difference in consideration between the economic profit and the accounting profit.

5 Capital Structure Choices

5.1 Benefits of Debt

Arabtec

There are no material taxes applicable and Arabtec pays taxes only on its operations outside UAE and Bahrain, which are not significant. Marginal taxes or effective tax rates were as follows:

$$\text{Marginal Tax Rate} = \frac{\text{Tax Provision}}{\text{Profit Before Taxes}}$$

Year	Arabtec
2013	$10,318 / 515,801 = .020004 = 2.0004\%$
2012	$1,506 / 243,115 = .006195 = 0.6195\%$
2011	$2,174 / 331,155 = .006565 = 0.6565\%$
2010	$6,131 / 337,882 = .018145 = 1.8145\%$
2009	$39,360 / 553,253 = .071143 = 7.1143\%$

Since the marginal tax rates are very low, there will not be any material tax saving impact of having debt in the books. However, cost of debt for Arabtec is around 5.10% and cost of equity (as calculated in the

previous sections of this report) is around 13.8%. It makes sense for the company to have debt in the books because it reduces the WACC.

Aldar

Taxes are not applicable with Aldar and thus, there are no implications of marginal tax. There is no benefit of debt in terms of savings of taxes. However, cost of debt for Aldar is around 5.22% and cost of equity (as calculated in the previous sections of this report) is around 17.8%. It makes sense for the company to have debt in the books because it reduces the WACC.

Free Cash Flow

$$FCF = EBITDA - \text{Change in Net Working Capital} - \text{Capital Expenditure} - \text{Taxes}$$

Year	Arabtec	Aldar
2013	$531736 - 275622 + 274662 - 10318 = 520,458$	$1344018 - 3357039 + 322367 - 0 = -1,690,654$
2012	$491518 - 123985 + 83265 - 1506 = 449,292$	$2,927,821 - 249,495 + 141,883 - 0 = 2,820,209$
2011	$447615 + 150079 + 40657 - 2174 = 636,177$	$1,234,225 + 13,265,553 - 524,393 - 0 = 13,975,385$
2010	$539337 - 496648 + 67054 - 6131 = 103,612$	$-376,837 + 128,566 - 4,039,080 - 0 = -4,287,351$

For both companies FCF has been showing a negative trend over the last four years, which is an issue that might be related to Agency Problems. The decrease of FCF over years means that the company is burning cash and at the same time it is not taking projects that maximize the value of the company. This may rise when there is a conflict between the intentions or the points of view of stockholders and the management of the company. As mentioned earlier in the first part of this project, both companies changes the executive management recently and this might be a move to insure that stockholders' expectations are being met. Both companies can either take on more debt (and bear more default risk with more cost of debt) or work internally to choose better projects or cut more costs.

The annual EBIT trend for Arabtec over the past five years was declining year by year, except for the last year 2013 that witnessed an increase in EBIT. That may be the result of income from earlier previous investments or projects backlog. For Aldar, there was a decline in EBIT at the beginning but then it turned direction and started making positive EBIT with an increasing trend starting from 2011.

When looking at assets in the balance sheet, tangible assets make about 10.8% of total assets in Arabtec and make about 29.4% of total assets for Aldar.

6 Optimal Capital Structure

6.1 Cost of Capital Approach

The cost of capital for Arabtec is 13.22% and for Aldar it is 12.9%, when we increase the debt ratio for both companies the cost of capital will increase because there are no taxes and creditors will ask for

more interest with higher degrees of leverage. Since there are no taxes the value of both companies will be irrelevant to a certain capital structure or debt-equity ratio and the cost of capital will depend entirely on the direct costs of equity and debt in addition to the default rate. But we calculated the rate of leveraged equity (R_s) and assumed that stockholders will at this rate of return. For both companies the 80% debt and 20% equity provided the highest return on leveraged equity.

When increasing the load of debt the interest rate will increase, the earnings per share (EPS) will decrease and the stock price will be lower as well.

6.2 Building Constraint into the Process

As we discussed, a debt ratio of 80% is high and will degrade the company's credit rating because of the increased risk. Companies need good ratings in order to attract long-term investors and to be able take more debt in future when needed. The minimum credit rating should be no less than Bbb/BBB which indicates medium risk, but the company should keep seeking better ratings. But both companies are fine in term of credit ratings at their current levels of debt.

6.3 Relative Analysis

To compare the debt of both companies with the sector it is better to use the debt data from the balance sheets of the sector's companies and figure out the debt percentage of the total capital for each. We used the latest balance sheet because debt amounts overlap over years while company pays some of the debt and acquire more debt. The latest debt data from the balance sheets will give us the net accumulated debt so far.

Debt makes up 25% of Union Properties capital, 9.2% of RAK Properties capital, 17% of Emaar Properties capital, 32% of Drake & Scull capital and 13% of Deyaar's capital. For Arabtec it makes up 6.6% and for Aldar it makes 38.7%. From that data we can see that Arabtec is under levered and Aldar is over levered in comparison to companies from their sector. The rates were based on stock prices as of December 28, 2014.

7 Mechanics of Moving to the Optimal

Arabtec is operating with a nominal debt - equity ratio of 22.5% and debt - asset ratio of 9.7%. It is also generating lower ROE of 8.93%. Arabtec's cost of debt is 5.1% and has 13.8% cost of equity. Arabtec has been growing at a strong growth rate of approx. 24% and there is a sharp increase in order backlog in the last year or so. The company has entered into new markets and has also ventured into high margin Oil & Gas segment. Considering all these factors, it makes for the company to increase some debt exposure and try to reduce overall WACC. This will help the company in further improving valuations and improved returns for the investors.

Aldar is operating at a high debt - equity ratio of 59.8% and debt - asset ratio of 26.6%. It is generating a higher ROE of 18.3%. Aldar's cost of debt is 5.2% and it has 17.8% cost of equity. There has been lumpy growth in the business and the cash flows have been very unstable. It makes sense for the company to reduce some debt exposure and try to have some stability in operations and cash flows. It should also limit paying regular dividends and reinvest the money into the operations for more stability and scalability of the operations.

8 Dividend Policy

8.1 Historical Dividend Policy

Arabtec has not been paying dividends consistently and in the last five years it has paid dividend only in 2011. However, the dividend yield (calculated as "annual dividend" divided by "Share Price") of 0.39% was quite low in 2011.

Aldar has been consistently paying dividends (except for 2010 when the company incurred losses). Dividend yield has also been increasing consistently from 0.78% in 2011, 1.02% in 2012, and 2.09% in 2013.

8.2 Firm Characteristics

In both markets (Dubai and Abu Dhabi) the nature of traders in general can be more towards speculation, given the maturity of the markets and the volatility during the past few years. In such markets, traders usually look for capital gains that can be made over a short to medium range. Both companies didn't make stock buy backs which in some cases makes investors feel that the stock is overvalued. But given that UAE is a tax-free market, dividends are attractive for most investors. Expectations depend on market and economic conditions as well.

There are no bond covenants we could know about. In term of dividend policy comparison to other companies from the same sector, Arabtec and Aldar along with Emaar and RAK properties were the only companies who paid dividends during the past five years.

9 Framework for Analyzing Dividends

Higher dividends may indicate to investors that a stock is underpriced or that the company has fallen on hard times and future dividends will not be as high as previous ones. Similarly a low dividend yield may indicate that the stock is overpriced or that future dividends might be higher.

Arabtec has not been paying dividends despite a consistent positive cash flow profile (refer FCFF profile of the company in the next "Valuations" section). The company has been maintaining healthy cash balance and there is a room for external dividends. This approach will help the company in attracting those investors who look for frequent cash returns from their investment. Distributing dividend will also improve the company positioning in the market where the investors might consider it a fairly priced stock keeping in mind competitive dividend yield.

Aldar has been paying dividends consistently despite having negative cash flows (refer FCFF profile of the company in the next "Valuations" section) and higher debt balance. With an unstable growth in operations, the company's financial condition is vulnerable to any financial crunch. Aldar should ideally defer paying dividend for 2-3 years and start reinvesting into the business. This will help the company in improving investor sentiments followed by improved valuation.

10 Valuations

10.1 Cash Flow Choices – as per DCF Methodology

Since leverage is going to change for both the companies, free cash flow to firm (FCFF) method has been preferred while calculating cash flows.

10.2 Growth Pattern Choice

Arabtec revenue de-grew at a CAGR of 1% between 2009-2013. However there has been high growth in the last two years and the analysts believe the revenue to grow at CAGR of 23% from 2014-18. This is due to sharp increase in order backlog and expansion into new markets.

Though Aldar has achieved a higher revenue growth CAGR of 28.4% between 2009-2013, there was a sharp 50% decline in revenue in 2013. Analysts expect to have a nominal growth in the next five years.

10.3 DCF Valuation

We have followed DCF approach for both the companies. We had assumed growth and margin profile from the broker research reports. We have assumed our calculations for WACC and have assumed 5% as perpetuity growth rate (in line with the expected GDP growth rate) for Arabtec and a lower 3.3% perpetuity growth rate for Aldar due to its weak business growth profile.

The valuation has been done by discounting FCFF by WACC and calculation of Terminal value by using Gordon growth model. The discounted FCFF and Terminal value are added to arrive at the Enterprise Value of the firms. The projections are highly sensitive on perpetuity growth rate assumption and marginally sensitive to margins and WACC assumptions.

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Summary of DCF valuation of Arabtec:

P&L Statement	Projections				
Figures in AEDm	31-Dec-14	31-Dec-15	31-Dec-16	31-Dec-17	31-Dec-18
Revenue	8,966	12,552	15,690	18,514	21,291
<i>Growth %</i>	21.7%	40.0%	25.0%	18.0%	15.0%
Gross Profit	1,134	1,556	1,906	2,202	2,479
<i>Margins (%)</i>	12.6%	12.4%	12.1%	11.9%	11.6%
EBITDA	743	1,008	1,221	1,394	1,550
<i>Margins (%)</i>	8.3%	8.0%	7.8%	7.5%	7.3%
EBIT	619	891	1,098	1,277	1,384
<i>Margins (%)</i>	6.9%	7.1%	7.0%	6.9%	6.5%
Net Profit	466	690	894	1,018	1,086
<i>Margins (%)</i>	5.2%	5.5%	5.7%	5.5%	5.1%

FCFF	Projections				
Figures in AEDm	31-Dec-14	31-Dec-15	31-Dec-16	31-Dec-17	31-Dec-18
EBITDA	743	1,008	1,221	1,394	1,550
Change in WC	(559)	(1,076)	(784)	(565)	(417)
% of change in Rev	-35%	-30%	-25%	-20%	-15%
Capex	(700)	(400)	(250)	(175)	(125)
Taxes	(13)	(18)	(22)	(26)	(28)
% of change in EBIT	2%	2%	2%	2%	2%
FCFF	(529)	(486)	164	629	981

Growth rate (%)	5.0%
Terminal Value	11,750
CoE	13.8%
WACC (%)	13.22%
PV of FCFF	177
Enterprise Value	11,927
<i>Implied EV/EBITDA</i>	22.4x
Net Debt	(1,434)
Equity Value	13,360
<i>Implied P/E</i>	35.4x

The above equity valuation is around 5.2% higher than the current market capitalization of AED 12,700 million.

Summary of DCF valuation of Aldar:

P&L Statement	Projections					
	Figures in AEDm	31-Dec-14	31-Dec-15	31-Dec-16	31-Dec-17	31-Dec-18
Revenue		8,661	9,467	8,047	9,530	11,287
<i>Growth %</i>		61.0%	9.3%	(15.0%)	18.4%	18.4%
Gross Profit		2,815	3,029	2,736	3,129	3,706
<i>% of Rev</i>		32.5%	32.0%	34.0%	32.8%	32.8%
EBITDA		2,321	2,594	2,414	2,675	3,168
<i>% of Rev</i>		26.8%	27.4%	30.0%	28.1%	28.1%
EBIT		1,819	2,177	2,012	2,775	3,268
<i>% of Rev</i>		21.0%	23.0%	25.0%	29.1%	29.0%
Net Profit		1,429	2,461	2,655	2,154	2,647
<i>% of Rev</i>		16.5%	26.0%	33.0%	22.6%	23.4%

FCFF	Projections					
	Figures in AEDm	31-Dec-14	31-Dec-15	31-Dec-16	31-Dec-17	31-Dec-18
EBITDA		2,321	2,594	2,414	2,675	3,168
W.C changes		1,641	201	(355)	(371)	(439)
<i>% of change in rev</i>		50.0%	25.0%	25.0%	25.0%	25.0%
Capex		(200)	(100)	(100)	(100)	(100)
Taxes		-	-	-	-	-
Free Cash Flow Firm		3,762	2,695	1,959	2,204	2,629

Growth rate	3.3%
Terminal Value (AEDm)	18,703
CoE (%)	17.8%
WACC (%)	12.9%
PV of FCFF (AEDm)	9,598
Enterprise Value (AEDm)	28,300
<i>Implied EV/EBITDA</i>	<i>21.1x</i>
Net Debt (AEDm)	9,492
Equity Value (AEDm)	18,809
<i>Implied P/E</i>	<i>8.4x</i>

The above equity valuation is around 2% lower than the current market capitalization of AED 19,185 million.

10.4 Value Enhancement

Arabtec is growing fast and has good growth prospects. With the slight increase in dividend policy and increased debt exposure the company will be able to generate more value for investors.

Aldar's business growth prospects are weak and there are serious initiatives required to improve the business growth and margins. The company also needs to avoid paying dividends and also needs to decrease the debt exposure in order to derive better valuation in the market.

11 Annexure

11.1 Sources for DCF Valuation

Arabtec

Global Research Investment Report- Arabtec - 14 August, 2014 (From FY14-FY18)

We have considered the following P&L items:

- Growth rate of Revenue and margins of Gross Profit, EBITDA, EBIT and Net Profit.

We have considered the following FCFF items:

- Assumed nominal capex in line with growth in revenue, Changes in Working Capital and taxes based on historical trends

Assumptions-Considering historical trends, broader analyst outlook (From FY14-FY18)

- Total Shareholder Equity – Shareholders Equity for the PY + Net Profit for the CY - Dividends Paid
- Perpetuity growth rate - Average GDP growth rate of Dubai of last 3 years. The company has grown at a CAGR of (1.0%) from 2009-2013 and as per analyst (Global Research) estimates it will grow at a CAGR of 23.5% from 2014-2018. We have assumed that perpetual growth rate (in very long term) of company will grow at average of GDP growth rate
- WACC (Refer Section 3.3)
- Cost of Equity (Refer Section 3.3)

Aldar

VTB Capital Report-Aldar-20 November, 2013 (From FY14-FY16)

We have considered the following P&L items:

- Growth rate of Revenue and margins of Gross Profit, EBITDA, EBIT and Net Profit.

We have considered the following FCFF item:

- Assumed nominal capex in line with growth in revenue, Changes in Working Capital and taxes based on historical trends

Assumptions-Considering historical trends, broader analyst outlook

- Perpetuity growth rate – 50% of average GDP growth rate of Abu Dhabi of last 3 years. The company has grown at a CAGR of 28.4% from 2009-2013 and as per analyst (VTB Capital) estimates it will grow at a CAGR of 3% from 2014-2018. We have assumed that perpetual growth rate (in very long term) of company will grow at 50% of GDP growth rate
- Depreciation Schedule (From FY14-FY18)
- Cost of Equity(Refer Section 3.3)
- WACC(Refer Section 3.3)

We have calculated the following based on historical trend/our assumption:

- Revenue, Gross Profit, EBITDA, EBIT, Net profit (From FY17-FY18)

We have considered the following FCFF items:

- Capital Expenditure, Changes in Working Capital (From FY17-FY18)