Finance Assignment- Sample

EXPRESS DISSERTATION

Table of Contents

EXPRESS DISSERTATION

List of Tables & Figures

EXPRESS DISSERTATION

Section I: Ratio Analysis

The procedure of determination and interpretation of relations among the elements of financial statements to significantly understand the performance and financial position of any enterprise is described as ratio analysis (Chandra, 2011). Ratio analysis behaves as an explanatory method to present financial variables in a simpler, shorter, comprehensible and logical way. Ratio analysis is aimed at assessing an organisation's earning competency, financial accuracy in addition to operating effectiveness. The application of ratio to analyse the accounts facilitates the management by offering knowledge in terms of profitability, monetary state and operating effectiveness of a business organisation (Van Hone and Wachowicz, 2011). Furthermore, accounting ratio is a term employed to elucidate important relations existing between figures presented in a balance sheet as well as profit and loss statement in a budgetary control system or any other division of the accounting management. The current report will examine the financial stability of FDW Air Parts in terms of quantitative and qualitative Analysis.

1.1. Quantitative Analysis

The different ratios which are identified in the current report along with their formula is given in the appendix I

1.1.1. Profitability Ratios

An organisation's capability of selling its products mainly forms the basis of the functional profit margin. Arnold (2008) describes the term operating margin of a business enterprise as a ratio between the actual operating income of the firm (that is, income before tax as well as interest) in addition to the overall sales made by the enterprise. The net profit margin of a business enterprise is considered to be the money that remains subsequent to the calculation of the cost of sales (Atrill, 2000). Thus, many investigators make use of this margin as it offers details regarding the company's entire profits. When talking about profitability ratios the following figure clearly shows the trends followed by gross margin, operating margin and net margin. Gross margin had been declining from the year 2008 (37.72%) until 2011 (32.64%) when it started showing gradual increase. Both operating margin took a dip in the year 2009 (6.21% and 3.87% respectively) but were on steady increase until 2012 (9.11% and 6.69% respectively) when they dropped again.

Figure 1: Profitability Ratios I
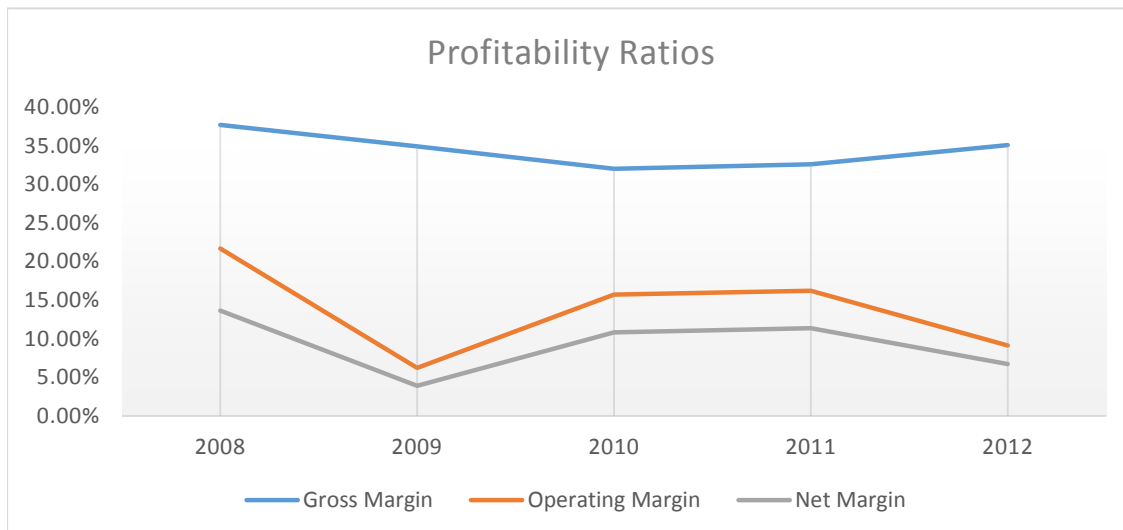
To identify net efficacy as well as profitability of various investments related to the company, Return on Capital Employed (ROCE) is used. The term ROCE may be described as the ratio of the company's income prior to interest and tax and dividing them by the difference between the entire assets in addition to existing liabilities. However, it is argued by Collier (2009) that the ROCE may be used to identify the competency of the organisation's investments. Furthermore, the return on equity or the return on shareholder funds has a role in helping to understand the returns obtained in terms of shareholder equity. ROE is calculated by dividing the gross income by the overall shareholder equity. This in turn helps the shareholders of the enterprise to know company's competency in terms of investment changes done by the investors affecting the returns. From the following figure, return on equity, net assets and capital employed are identified. It is observed that return on equity, net assets and capital employed lowered in the year 2009 (8.13%, 5.14% and 8.24% respectively) but shot up again in the year 2010 (27.80%, 21.67% and 31.49% respectively). With slight lowering in the year 2011 (23.67%, 21.30% and 30.34% respectively), they further dipped by 2012 (12%, 12% and 16.33 % respectively).

Figure 2: Profitability Ratios
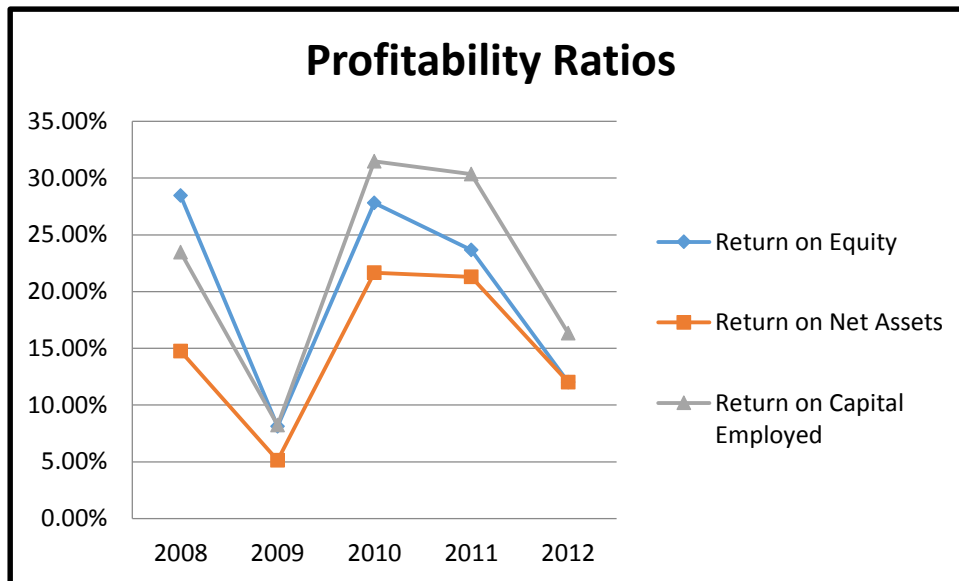
1.1.2. Efficiency Ratios

The present report examines efficiency ratios comprising of the net asset turnover ratio and the stock turnover ratio. Firstly, for identifying the operational effectiveness related to the company, net asset turnover ratio is employed which aids in understanding the existing association among the revenue made by the enterprise and the associated revenue made by the enterprise (Brealey, 2012). Secondly, the other efficiency ratio employed in the present report is the stock turnover ratio. This ratio is considered to facilitate an enterprise in converting their whole stock (inventory) into final sales. Efficiency ratio includes average collection period, average payment period, asset turnover ratio and stock turnover ratio. Efficiency ratio has been stagnant more or less with only a considerable change in the stock turnover ratio from the years 2008 (129.78) to 2010 (32.88). This is not effective as there has been an overall decrease in the efficiency of operations of the organisation due to their inability to turn their efficiency in operations positively.

Figure 3: Efficiency Ratio

	2008	2009	2010	2011	2012
Average Collection Period	30	30	30	30	30
Average Payment Period	29	28	31	30	30
Asset Turnover Ratio	0.97	1.18	1.66	1.54	7.25
Stock Turnover Ratio	129.78	301.61	32.88	11.99	7.25
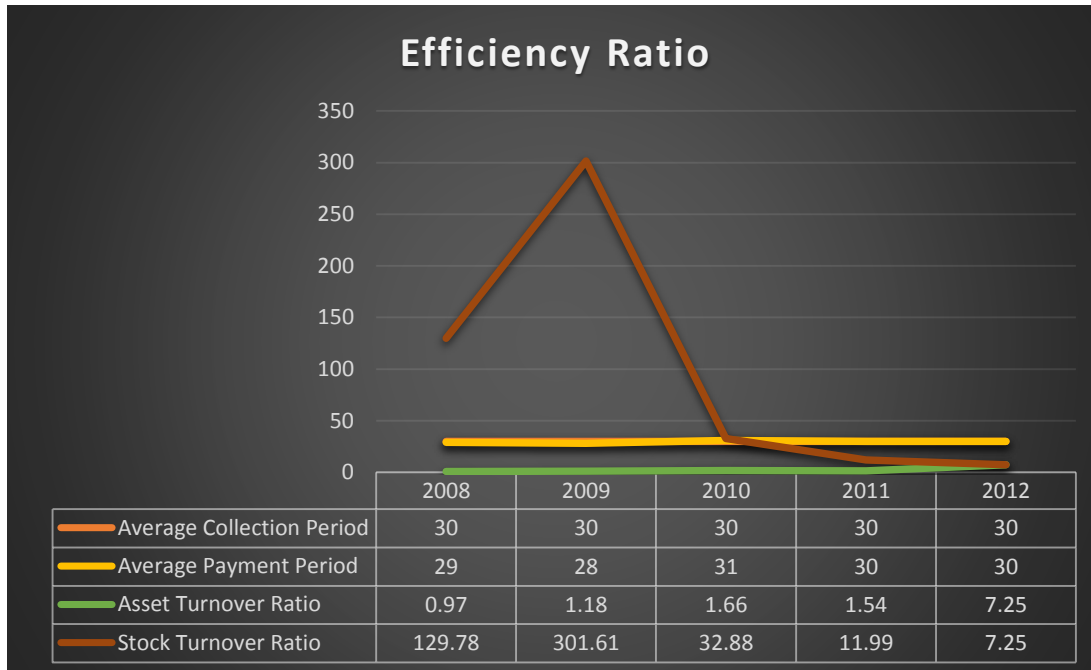
1.1.3. Liquidity Ratios

A company's liquidity ratios are considered to be the ratios which aids in identifying the liquidity or capabilities of meeting debts. There are three types of liquidity ratios that have been employed in this research. The first one is the current ratio, which is employed for identifying the association among the company's liquid assets in addition to its existing liabilities. Secondly, quick ratio has been used in the research which aids in understanding the organisation's liquidity on a short-term basis. For example, an organisation's inventories as well as the prepayments to determine liquidity are not considered by such ratio (Lewellen, 2004).Finally, cash ratio has been used in the present study in terms of liquidity. Cash ratio is considered very helpful when it comes to understanding the ratio of entire cash divided by organisation's current liabilities. This in turn helps in identifying the instant ability for meeting the organisational needs. Liquidity ratios include current ratio, quick ratio, and cash ratio. As the figure depicts, liquidity ratios followed a trend of lowered values from 2008 (5.7, 5.66, and 4.89 respectively) to 2010 (3.3, 2.9, and 2.12 respectively). Though the values are increasing ever since, they are still lower than 2008. It can be argued that the possible reduction in liquidity is associated with the recession. However, a significant increase is the last few years shows a significant improvement in performance.

4

Figure 4: Liquidity Ratios
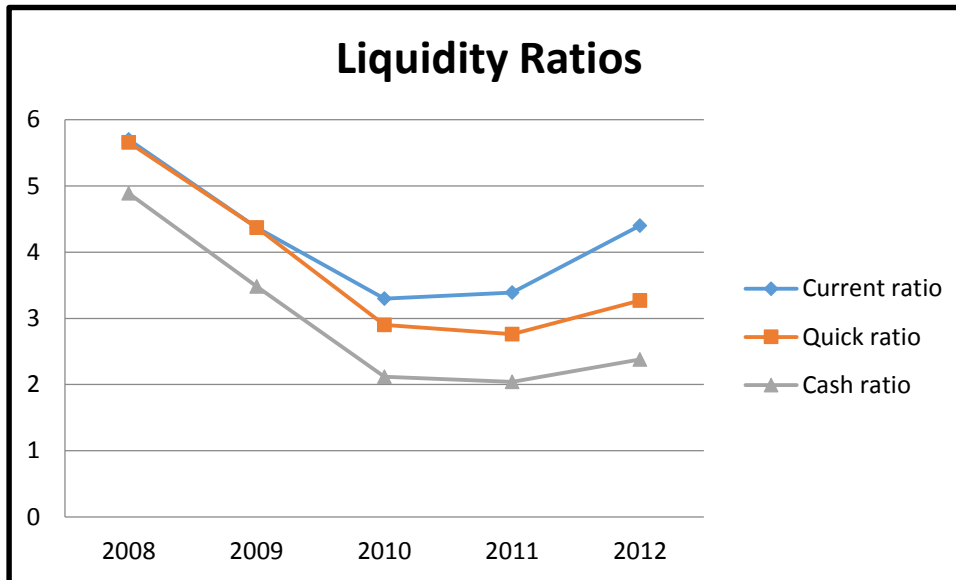
1.1.4. Gearings Ratio

Gearings ratio is the last ratio that is to be used in the present study.Gearings ratio is very helpful since it facilitates in offering details regarding the external sources that an organisation can make use of for maintaining its operations. However, an enterprise must have a comparatively low gearings ratio which is suggestive of the enterprise capable of sustaining its operations by being dependant merely on its equity (Fraser, 1990). The debt/equity ratio of an enterprise is considered to be a determinant of the whole economic leverage available to the enterprise. Such ratio is, therefore, employed by the enterprise for financing the assets. The debt to equity ratio is described as a ratio that should not be too high or else it may lead to volatile earnings. Gearing ratio includes net gearing, long term debt to equity and interest coverage ratio. While the net gearing and the long term debt to equity have remained insignificantly changed, interest coverage ratio witnessed a lot of variation in the years 2009 (4.47) to 2012 (0). It is clear that there is a significant reduction of gearings, indicating that there is no significant debt for the organisation.

Figure 5: Gearing Ratio

Gearing Ratio

	2008	2009	2010	2011	2012
Interest coverage ratio	9.6	4.47	28.58	60.85	0
Long term Debt to Equity	0.54	0.44	0.36	0.26	0.14
Net gearing	0.93	0.58	0.28	0.11	0
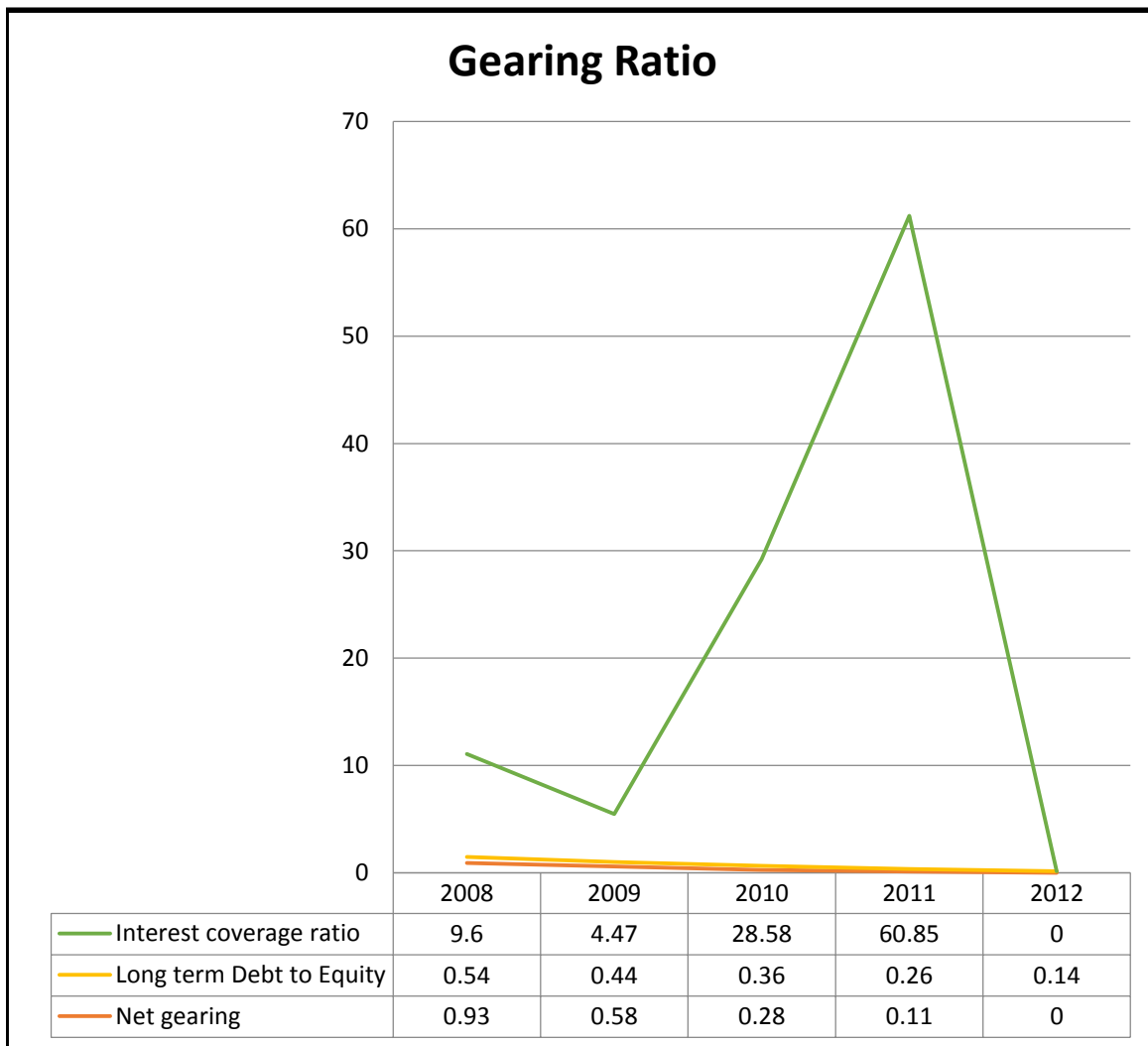
EXPRESS DISSERTATION

1.1.5. Limitations of Ratios

Table 1 Limitations of Ratio Analysis

1. Different divisions of a multinational company may have differences in accounting which may lead to a need to re-examine the role of ratio limitations.
2. Inflation may impact the efficacy of ratio analysis.
3. If different companies use different methods for ratio analysis, it makes it difficult to compare
4. Ratios only compare historic performance leading to an increase in problems associated with the ratio analysis process.

1.2. Qualitative Analysis

To qualitatively assess the performance of the organisation, this report adopted a qualitative analysis of the airline industry in the UK and relevance to FDW (Borenstein et al., 2013; Keynote 2013; Report Linker, 2013).

Strengths

- Entrenched, safe and highly effective mode of transportation especially for long-distance travel.
- Provides a powerful consumer base since nearly half of the people in UK used air travel in 2011 leading to increase in demand for planes, which may positively influence the performance of the FDW Airparts.
- Numerous low fare airlines are based out of the UK so more number of contractors for FDW Airparts.
- There is a significant market for aerospace and airline parts.

Weaknesses

- Adverse economic conditions affect the air travel industry by lowering the demand in business and leisure travel leading to decrease in need for airline parts.
- Increasing price of oil leads to hiked air fares that may lower consumer demand leading to a reduction in number of airlines currently in use. This may be associated with the possible reduction in the demand for the airparts and the decrease in stock turnover.

- Tax levied on airlines has increased by nearly 8% in 2012 which maybe linked to the reduction in net profits for the FDW

Opportunities

- Many airlines are restructuring themselves to accommodate the economic stress which could result in efficiency and lowered costs. FDW can adopt a similar approach to aerospace industry support.
- Since the Airports Authority (BAA) has been mandated to put up a number of airports for sale the increased competition would result in lower costs. This may increase the demand for products by FDW.
- UK airlines expand continually by offering new destinations and routes.

Threats

- Because of the capacity limitations faced by Heathrow airport, airlines may have to look at other options which may result in reduction in business for FDW impacting their gross profit margin
- Inclusion of aviation industry in the EU emission trading scheme (ETS) could result in hiked costs for a few UK airlines. FDW maybe asked to improve its sustainability standards which may reduce the liquidity ratios.
- Extra requirements could be enforced on airlines because of the pressure from regulators and environmental groups regarding the effects on climate change.
- It is likely that airlines will suffer in terms of operating revenues because of the increasing oil prices.

Section II: Financial Management

2.1. Financing Options

There are two types of financing options which the board can adopt including both internal and external financing. The term internal financing is the one in which financial sources are attained from inside of the company or enterprise while external sources involves a third party. In general, business is not affected by internal financing, but the external financing involves a third party and contains added cost to the company. It is observed from the financial ratio analysis, that the organisation has a zero gearings ratio, which is not every optimal. Therefore, the current report suggests the use of an external financing option.

Loan :In case of requirement of finance for a stipulated time period, a bank loan can be used. In an ideal situation, that particular time period must be associated to the life of the asset or the intention of this funding in the company. There are three ways of obtaining a loan, i.e.short-term, medium-term or long-term finance. In case of any problem or delay in repayment conditions, lender possesses the authority of taking steps for getting back the loan amount (FAO, n.d). However, the drawback of such a method is that there is a need for prior knowledge about the cost of loan is stated since the interest begins from the moment the enterprise borrows the amount devoid of the time of its use.

Mortgages: A mortgage case is the one in which the bank or some financial organisation consents to offer certain amount of money to the enterprise, and where a business asset is generally held as security. Mortgage has the benefit of being extremely fast. But, it also has a drawback where in a situation when the lender believes that the borrowed business is unable to repay and the time period of the mortgage is over, the lender has the authority to take hold of the business assets in addition to causing the business to close straight away (FAO, n.d).

The researcher also suggests that internal financing options using both ordinary shared and preference shares be promoted. For a business capital, ordinary share is considered as a chief source. An important aspect for the company is that, in terms of limited enterprises, in situations of liquidity or solvency, no liability would be there beyond the assets of the enterprise. The business performance will affect the share values; which means that the rate of the share will increase in a situation where the company is flourishing, whereasthe share price will go down in a situation where the business is not doing well (Brigham and Houston, 2011). Thus, such sort of financingmay be truly considered as type of partnership. Ordinary shares are a durable financing source. On the other hand, the preference shares may be regarded as a type of share which obtains a fixed profit despite the business's condition. But, there will be no change in the price of share. Thus, the shareholders have reduced threats from such type of shares, but there will be a sort of pre-set and comprehensible consistency for the company (Moyer, 2012).

This report concludes that it is more preferable to raise external finance rather than internal finance.

2.2. Weighted Average Cost of Capital

The composite or overall cost of a firm's capital may be regarded as the weighted average of the costs of diverse resource of finances. In case of taking monetary decisions, weights are used in relation to every resource of finances in the capital structure. The weighted average

cost of capital is evaluated by computing the price of exact resource of finance, further multiplying the price of all the resources by its proportionin capital structure. Therefore, weighted average cost of capital is the weighted average post tax expenses of eachelement of the company's capital structure. That is, individual calculation is done forpost-tax price of every debt and equity and added jointly to a single overall cost of capital.From the following table, it is observed that the WACC from book weights is at 12.57% and market weights is at 12.43%. However, Bringham and Houston (2011) remark that the most commonly used methods of WACC is the market weights approach which is applicable in the market.

Table 2: Cost of Capital

1. Cost of Capital							
A. Cost of equity							
Dividend Discount model							
Formula	(D1/P0)(1-f)+g						
D1	Dividend in year 1						
P0	Price in year 0						
g	growth rate						
f	flotation cost						
D0	2.1						
Market price (P0)	12						
growth	4%						
flotation cost	12%						
D1	2.184						
	ke	20.02%					
Year	Dividend	Equity	Dividend %	Growth			
2010	5.5	550	1.00%				
2011	27.5	550	5.00%	4.00			
2012	27.5	550	5.00%	-			

Table 3: Cost of Debt

B. Cost of debt							
Formula		I(1-t)/P0	I	Interest			
			P0	Market price			
I		9%					
t		30%					
P0		105					
kd		5.91%					

Table 4: Cost of Preferred Equity

C. Cost of Preferred Equity							
Formula		Dividend/P0					
Dividend		10%					
Price(P0)		97					
kp		10.31%					

Table 5: Weighted Avg Cost of Capital

2.Weighted Avg Cost of Capital							
A.BOOK WEIGHTS							
Particulars	**Number**	**Per number**	**Amounts**	**Weights**	**Cost**	**Weighted Cost**	
Equity	100,00,000	10	1000,00,000	0.41	20.02%	8.20%	
Debt	9,52,381	100	952,38,095	0.39	5.91%	2.30%	Assumed to be at 100
Preferred Equity	5,15,464	95	489,69,072	0.20	10.31%	2.07%	Assumed to be at 95
			2442,07,167		WACC	**12.57%**	
B.MARKET WEIGHTS							
Particulars	**Number**	**Per number**	**Amounts**	**Weights**	**Cost**	**Weighted Cost**	
Equity	100,00,000	10	1000,00,000	0.40	20.02%	8.01%	
Debt	9,52,381	105	1000,00,000	0.40	5.91%	2.36%	
Preferred Equity	5,15,464	97	500,00,000	0.20	10.31%	2.06%	
			2500,00,000		WACC	**12.43%**	

2.3. Sales Promotion reduction versus Development

According to Hall (2000) R&D investments have a key role to play in the promotion of organisational competition, profitability and market share. Furthermore, Jefferson (2006) identifies that R&D investments bring about an increase in organisational profits, but the drawback is that there is a possibility of a time lag associated with the process. Lev andAboody (2001) contend that this drawback of delay in results had made organisations invest in sales promotions and other activities rather than research and development. FDW Airparts should consider these arguments before they decide to invest in R&D.

According to Lev (1999), an increase in investment in R&D in manufacturing can impact the organisational productivity by reducing the associated cost of production. This can be applicable to FDW. For instance, if the R&D process improves the lean production management of the organisation, there is bound to be a reduction in costs. This is an advantage. On the other hand, it is important to note that, there is a possibility of R&D expenses exceeding expectations. This is because R&D is not a fixed cost and the increase in expense of R&D may not be associated with inflation, but due to unforseen factors. This may increase the variable costs and may have a negative impact on cost of sales.

It is therefore concluded that there should be a significant considerations of the above factors before investing in R&D.

2.4. Projections

Capital budgeting, in other terms known as investment appraisal, is described as the method of planning to assess the significance of pursuing the long term investments, major capital, or expenditures. The current research will estimate two different capital projections,

Net Present Value

For estimating the value of every possible project by making use of discounted cash flow (DCF) valuation, net present value (NPV) is employed. This assessment needs to estimate the size and time of each of the incremental cash flows from the project. Discount rate acts as major factor to affect NPV.Therefore taking right decisions is critically dependant on the selection of appropriate rate, also known as hurdle rate.

Internal Rate of Return

The internal rate of return (IRR) is term described as a discount rate that offers zero as the net present value (NPV). IRR is usually employed for measuring the effectiveness of an investment. Furthermore, the results of IRR and NPV are similar in case of non-mutually selected ventures in a free setting and in common situations where a negative cash flow is there during the project initiation, followed by the positive cash flows. However, in cases of mutually exclusive projects, the ruling decision to opt the project having maximum IRR, which is generally employed, might choose a project having minimum NPV.

Projections Analysis

- In the incremental analysis, it is assumed that there are no changes in the current trends in company investment. Based on this NPV is at 449.67 and IRR is at 67.67% . From this it is observed that the investment in R&D will bring about an effective increase in organisational performance.
- In the negative projections, it was assumed that there is to be a 35% increase in fixed overheads and 10% increase in stock upkeep costs. Based on this NPV is at 62.9 and IRR is at 20.16%.
- The optimistic analysis on the other hand, identifies that there would be an optimistic increase in the sales with a marginally less cost of sales and overhead costs. The NPV which is calculated is at 589.45 and IRR is at 82.49%.

It is shown that, since the NPV is effectively higher, there is no significant differences in terms of either a decrease (or increase) in cost of sales and overheads. It is argued that despite these projections, the overall investment in R&D is an effective venture for the organisation.

Table 6: Normal Projections Incremental Analysis

A.Normal Projections- Incremental Analysis							
	£m	£m	£m	£m	£m	£m	
Particulars	2012	2013	2014	2015	2016	2017	
Initial Investment	250.0						
Sales		405.5	466.3	536.3	493.4	460.5	
Cost of Sales*		-78.9	-82.5	-86.2	-90.1	-94.1	
Gross Profit (Loss)		326.6	383.9	450.1	403.3	366.4	
Overheads							
Fixed Overheads		55.4	55.4	55.4	-	-	
Stock Upkeep Cost		16.9	16.9	16.9	16.9	16.9	assumed same as that in 2012 as incremental
Promotion		35.0	35.0	35.0	35.0	35.0	assumed fresh promotion
Research and Development		50.0	50.0	-	-	-	assumed fresh R&D
Market Research		15.0	15.0	15.0	15.0	15.0	assumed same as that in 2012 as incremental
Depreciation		40.0	40.0	40.0	40.0	40.0	
Operating Profit (Loss)		114.3	171.6	287.8	296.4	259.5	
Less:Tax @ 30%		34.3	51.5	86.3	88.9	77.8	
PAT		80.0	120.1	201.5	207.5	181.6	
Add:Depreciation		40.0	40.0	40.0	40.0	40.0	

Add:Sale of investment						32.5	
Total Cash inflow		120.0	160.1	241.5	247.5	254.1	
Discount @ 12.43%		0.9	0.8	0.7	0.6	0.6	
Discounted cash inflow		106.8	126.7	169.9	154.9	141.5	
NPV	449.7						
Total discounted cash inflow @ 66%		0.602	0.362897	0.21861	0.1316945	0.079334	
Total discounted cash outflow		72.3	58.10406	52.7902	32.591666	20.160261	
NPV	-14.0527						
IRR		0.677					

Table 7: Pessimistic Projections-Incremental Analysis

B.Pessimistic Projections-Incremental Analysis							
	£m	£m	£m	£m	£m	£m	
Particulars	2012	2013	2014	2015	2016	2017	
Initial Investment	250						
Sales		324.4	373.0595	429.018	411.142701	322.335878	
Cost of Sales*		-105	-109.951	-114.9	-120.06962	-125.47275	6% increase
Gross Profit (Loss)		219.2	263.1082	314.119	291.073082	196.863125	
Overheads							
Fixed Overheads		**64.58**	**64.5785**	**64.5785**	**0**	**0**	35% increase
Stock Upkeep Cost		18.61	20	22.52	2477.26%	2724.98%	10% increase
Promotion		40	40	40.00	4000.00%	4000.00%	
Research and Development		70	80	-	0.00%	0.00%	
Market Research		15.15	**15**	15.4545	15.60906	**1576.52%**	1% increase
Depreciation		40	40	40	40	40	
Operating Profit (Loss)		**-29.2**	2.754993	131.566	170.69145	73.848145	
Less:Tax @ 30%		-8.75	0.8264979	39.4697	51.207435	22.154444	
PAT		**-20.4**	**1.9284951**	**92.096**	**119.48401**	**51.693702**	
Add:Depreciation		40	40	40.00	4000.00%	4000.00%	
Add:Sale of invesment						3250.00%	
Total tCash inflow		19.59	**42**	132.096	159.48401	**12419.37%**	
Discount @ 12.43%		0.8894	0.7911076	0.703645	0.6258513	0.55665863	
Discounted cash inflow		17.424	33.169953	92.94867	99.8132776	69.1334959	
NPV	62.48935						
Total discounted cash inflow @ 20%		0.8333	0.6944444	0.578704	0.48225309	0.40187757	
Total discounted cash outflow		16.325	29.11701	76.44447	76.9116583	49.9106633	
NPV	- 1.291406						
IRR		0.2016					

Table 8: Optimistic Projections-Incremental Analysis

C.Optimistic-Incremental Analysis							
	£m	£m	£m	£m	£m	£m	
Particulars	2012	2013	2014	2015	2016	2017	
Initial Investment	250						
Sales		459.57	528.50102	607.7762	493.371242	460.479826	
Cost of Sales*		-70.14	-73.300898	-76.5994	-80.046413	-83.648502	4% increase
Gross Profit (Loss)		389.42	455.20012	531.1767	413.324829	376.831324	
Overheads							
Fixed Overheads		55.353	55.353	55.353	0	0	30% increase
Stock Upkeep Cost		17.766	18.6543	19.58702	20.5663658	21.594684	5% increase
Promotion		30	30	30	30	30	
Research and Development		45	35	10	0	0	
Market Research		15	15	15	15	15	
Depreciation		40	40	40	40	40	
Operating Profit (Loss)		186.3	261.19282	361.2367	307.758463	270.23664	
Less:Tax @ 30%		55.891	78.357845	108.371	92.3275388	81.0709919	
PAT		130.41	182.83497	252.8657	215.430924	189.165648	
Add:Depreciation		40	40	40	40	40	
Add:Sale of investment						32.5	
Total Cash inflow		170.41	222.83497	292.8657	255.430924	261.665648	
Discount @ 12.43%		0.8894	0.7911076	0.703645	0.6258513	0.55665863	
Discounted cash inflow		151.57	176.28645	206.0734	159.861775	145.658441	
NPV	589.4516						
Total discounted cash inflow @ 82%		0.5495	0.3018959	0.165877	0.09114114	0.05007755	
Total discounted cash outflow		93.633	67.272966	48.57965	23.2802651	13.1035742	
NPV	-4.130642						
IRR		0.8249					

Section III: Management Accounting

3.1. Merits and Demerits of Management Accounting Methods

- In absorption costing both fixed and variable costs are considered while in marginal costing only variable cost is considered.

- In absorption costing, fixed costs are charged to overall cost of production. On the other hand, in marginal costs, fixed cost is considered as the cost of a specific period.

- In absorption costing net profit is determined after fixed overheads are deducted. In marginal cost, the product data is presented in a manner that it highlights overall contribution from each product.

3.2. Comparison of Marginal Costing and Absorption Costing Contribution

Table 9: Marginal Costing Method

Marginal Costing Method					
	£m	£m	£m	£m	£m
Particulars	2008	2009	2010	2011	2012
Sales	1,458.66	1,622.37	2,730.00	2,816.52	2,703.33
Less:Variable Cost					
Opening stock	-	7.00	-	113.00	204.00
Materials	869.00	1,000.00	1,892.00	1,912.00	1,753.00
Labour	46.00	49.00	76.00	76.00	77.00
(-) Closing stock	7.00	-	113.00	204.00	280.00
Variable Cost of goods available for sale	908.00	1,056.00	1,855.00	1,897.00	1,754.00
Contribution	550.66	566.37	875.00	919.52	949.33

Table 10: Absorption Method Particulars

	£m	£m	£m	£m	£m
Absorption Method Particulars	**2008**	**2009**	**2010**	**2011**	**2012**
Sales	1,458.66	1,622.37	2,730.00	2,816.52	2,703.33
Opening stock	-	7.80	-	134.51	291.71
Materials	869.00	1,000.00	1,892.00	1,912.00	1,753.00
Labour	46.00	49.00	76.00	76.00	77.00
Production overheads	68.00	79.90	77.91	71.82	64.64
Stock upkeep	-	1.05	-	16.92	30.55
(-) Closing stock	7.80	-	134.51	291.71	516.60
Variable Cost of goods available for sale	975.20	1,129.95	1,911.40	1,785.03	1,408.59
Contribution	483.46	492.42	818.60	1,031.49	1,294.74

3.3. Variance Analysis

According to Brigham and Houston (2011), the purpose of a variance analysis is to assess the difference between the standard cost and actual cost of every element of cost. In the current research, the standard cost is calculated based on variable cost, fixed costs, labour costs and material costs. The sales variance is identified as the difference between actual sales and expected sales. The following table, presents a variance analysis of sales and material carried out for 2008.

When the actual cost is more than the standard cost then the variance is adverse. However, when it is lower if is favourable. Adverse effects are to be avoided and favourable effects are to be promoted.

If one were to consider the sales variance, it is observed that the overall variance in sales for 2008 is at 34A. This means that the expected sales is more than the actual sales. It is interesting to note that the adverse effect is observed with N2.

If one were to consider material costs, it is observed that that overall material cost variance is marginally better. For instance, it is at 51F. However, an assessment of quantity and price shows that N2 shows favourable outcomes in terms of both quantity and price. Therefore, when the overall material cost is less, it should be important to assess while sales is low. It is also important to look at other parameters like labour.

For instance, labour assessment in 2008, shows that adverse results are observed only for S1 product. It is interesting to note that the efficiency is better for N2 when compared to the other products. Therefore, it cannot be the cost of labour.

Table 11: Variance Analysis of Sales

A.Sales Variance					
	2008				
Particulars	BQ*BP	RAQ*BP	AQ*BP	AQ*AP	
S1	750.00	733.70	750.00	750.00	
N2	742.50	693.34	708.75	708.75	
W3	-	-	-	-	
	1,492.50	**1,427.04**	**1,458.75**	**1,458.75**	
	Yield	**Mix**			
S1	16A	16F			
N2	49A	15F			
W3	0F	0F			
	65A	**32F**			
	Quantity	**Price**			
S1	0F	0F			
N2	34A	0F			
W3	0F	0F			
	34A	**0F**			
	Sales				
S1	0F				
N2	34A				
W3	0F				
	34A				

Table 12: Variance Analysis of Material Costs

Material Variance				
	2008			
Particulars	SQ*SP	RAQ*SP	AQ*SP	AQ*AP
S1	480.00	473.32	480.00	481.00
N2	440.00	421.26	427.20	387.68
W3	-	-	-	-
	920.00	**894.58**	**907.20**	**868.69**
	Yield	**Mix**		
S1	7F	7A		
N2	19F	6A		
W3	0A	0A		
	25F	**13A**		
	Quantity	**Price**		
S1	0A	1A		
N2	13F	40F		
W3	0A	0A		
	13F	**39F**		
	Material			
S1	1A			
N2	52F			
W3	0A			
	51F			

Table 13: Variance analysis of Labour

C.Labour Variance				
2008				
Particulars	SH*SR	RAH*SR	AH*SR	AH*AR
S1	22.50	22.19	22.50	24.00
N2	23.38	22.38	22.70	22.96
W3	-	-	-	-
	45.88	**44.57**	**45.20**	**46.96**
	Sub efficiency	**Mix**		
S1	0F	0A		
N2	1F	0A		
W3	0A	0A		
	1F	**1A**		
	Efficiency	**Rate**		
S1	0A	2A		
N2	1F	0A		
W3	0A	0A		
	1F	**2A**		
	Labour			
S1	2A			
N2	0F			
W3	0A			
	1A			
2009				
Particulars	SH*SR	RAH*SR	AH*AR	AH*AR
S1	26.25	26.27	26.38	26.03
N2	23.38	22.89	22.99	23.26
W3	-	-	-	-
	49.63	**49.16**	**49.37**	**49.29**
	Sub efficiency	**Mix**		

S1	0A	0A		
N2	0F	0A		
W3	0A	0A		
	0F	**0A**		
	Efficiency	**Rate**		
S1	0A	0F		
N2	0F	0A		
W3	0A	0A		
	0F	**0F**		
	Labour			
S1	0F			
N2	0F			
W3	0A			
	0F			

3.4. Questions for Managers

- Why does N2 product have a lower sales than expected?

- Why is there a low quantity production for S1 and W3?

- There is no adverse impact of material costs or labour costs on N2, therefore why is there lower sales? Is it because of reduction in demand?

- Provide the breakup of the variable and fixed overhead costs for the separate products to assess impact.

References

Arnold, G. 2008. *Corporate Financial Management*, 4th ed. Harlow: Pearson Prentice Hall.

Atrill, P. 2000. *Financial Management for Non-specialists*, 2nd ed. Harlow: Pearson Education Limited.

Borenstein, S. and Rose, N. L. 2013. How airline markets work… or do they? Regulatory reform in the airline industry. In *Economic Regulation and Its Reform: What Have We Learned?*. University of Chicago Press.

Brealey, R. A. 2012. *Principles of corporate finance*. Tata McGraw-Hill Education.

Brigham, E. and Houston, J. 2011. *Fundamentals of financial management*. Cengage Learning.

Chandra, P. 2011. *Financial management*. Tata McGraw-Hill Education.

Collier, P.M. 2009. *Accounting for Managers*, 3 rd ed. London: John Wiley & Sons. Ltd.

FAO (n.d). Basic finance for marketers. [Online], Available at :http://www.fao.org/docrep/w4343e/w4343e08.htm(Accessed on April 14, 2014).

Fraser, G. 1990. *Decision Accounting*, Oxford: Basil Blackwell Ltd.

Hall, B. and Reenen, V. J. 2000. How effective are fiscal incentives for R&D? A review of the evidence. *Research Policy*, 29, pp. 449-469.

Jefferson, G., Huamao, B., Xiaojing, G. and Xiaoyun, Y. 2006. R&D Performance in Chinese Industry. *Economics of Innovation and New Technology*, 15(4/5), pp. 345-366.

Keynote 2013. Airlines Market Report 2013. [Online], Available at :http://www.keynote.co.uk/marketintelligence/view/product/10661/airlines/chapter/1/executive-summary(Accessed on April 14, 2014).

Lev, B. and Zarowin, P. 1999. The Boundaries of Financial Reporting and How to Extend Them. *Journal of Accounting Research*, 37(2).

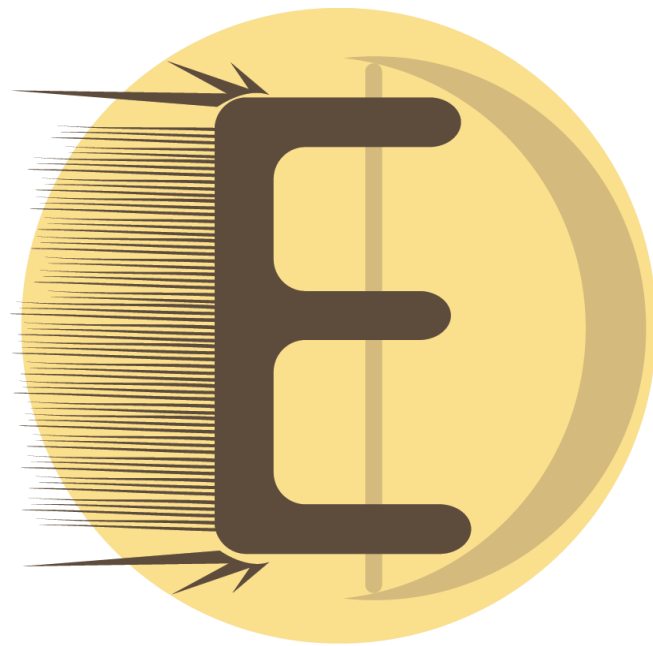Lev, B. and Aboody, D. 2001. *R&D productivity in the chemical industry*. Working paper.

Lewellen, J. 2004. Predicting returns with financial ratios. *Journal of Financial Economics*, 74(2), pp.209-235.

Moyer, R. C. 2012. *Contemporary financial management*. Cengage Learning.

Report Linker 2013. Airlines Market Report 2013 [Online], Available at :http://www.keynote.co.uk/market-intelligence/view/product/10661/airlines/chapter/1/executive-summary(Accessed on April 14, 2014).

Van Horne, J. C. and Wachowicz, J. M. 2008. *Fundamentals of financial management*. Pearson Education.