Financial Modeling – Certification Quiz Questions

Module 5 – 3-Hour 3-Statement Modeling Test and Debt vs. Equity Case Study

1. Consider the Income Statement projections for EasyJet shown below, which were created using half-year periods rather than annual periods:

		Projected							
Income Statement:	*Units:*	**1H 19**	**2H 19**	**1H 20**	**2H 20**	**1H 21**	**2H 21**	**1H 22**	**2H 22**
Passenger Revenue:	*£ M*	£ 2,081.6	£ 3,269.5	£ 2,294.2	£ 3,569.6	£ 2,469.1	£ 3,805.2	£ 2,619.2	£ 3,997.8
Ancillary Revenue:	*£ M*	562.2	859.4	637.7	965.6	703.0	1,054.5	760.4	1,129.6
Total Revenue:	*£ M*	**2,643.8**	**4,128.9**	**2,931.8**	**4,535.3**	**3,172.1**	**4,859.7**	**3,379.6**	**5,127.3**
Fuel Expense:	*£ M*	(569.2)	(768.3)	(617.9)	(825.5)	(657.0)	(850.6)	(662.8)	(849.9)
Non-Fuel Operating Expense:	*£ M*	(1,689.7)	(2,295.6)	(1,861.2)	(2,502.8)	(2,010.1)	(2,675.3)	(2,148.5)	(2,830.0)
Depreciation:	*£ M*	(111.8)	(114.8)	(122.3)	(125.1)	(131.2)	(133.8)	(139.4)	(141.5)
Depreciation on Right-of-Use Assets:	*£ M*	(178.9)	(183.6)	(196.8)	(201.6)	(212.2)	(216.9)	(226.5)	(230.9)
Amortisation of Intangibles:	*£ M*	(7.6)	(8.1)	(8.4)	(8.9)	(9.3)	(9.9)	(10.3)	(10.8)
Total Operating Expenses:	*£ M*	**(2,557.3)**	**(3,370.4)**	**(2,806.6)**	**(3,664.0)**	**(3,019.8)**	**(3,886.4)**	**(3,187.4)**	**(4,063.1)**
Operating Profit / (Loss):	*£ M*	**86.6**	**758.5**	**125.2**	**871.3**	**152.3**	**973.3**	**192.2**	**1,064.3**
Interest Income:	*£ M*	9.7	11.1	12.1	11.8	12.5	11.7	10.8	9.8
Interest Expense:	*£ M*	(18.9)	(14.3)	(19.0)	(14.5)	(18.8)	(13.1)	(15.0)	(9.9)
Interest Element of Operating Lease Payments:	*£ M*	(99.4)	(104.9)	(111.7)	(118.2)	(122.8)	(130.1)	(133.6)	(141.5)
Net Finance Charges:	*£ M*	**(108.5)**	**(108.1)**	**(118.6)**	**(120.8)**	**(129.1)**	**(131.5)**	**(137.7)**	**(141.6)**
Profit / (Loss) Before Tax:	*£ M*	**(22.0)**	**650.4**	**6.6**	**750.5**	**23.2**	**841.8**	**54.4**	**922.7**
Income Tax (Expense) / Benefit:	*£ M*	4.2	(123.6)	(1.1)	(127.6)	(3.9)	(143.1)	(9.3)	(156.9)
After-Tax Profit / (Loss):	*£ M*	**-£ 17.8**	**£ 526.8**	**£ 5.5**	**£ 622.9**	**£ 19.3**	**£ 698.7**	**£ 45.2**	**£ 765.8**
Basic Shares Outstanding:	*# Shares*	394.7	395.5	396.3	397.2	398.0	399.0	399.9	401.0
Basic Earnings per Share (EPS):	*p as Stated*	(4.5)	133.2	1.4	156.8	4.8	175.1	11.3	191.0

These projections also use half-year periods for the Balance Sheet, Cash Flow Statement, Debt & Equity Schedule, and Key Metrics and Ratios.

Which of the following statements is NOT true of quarterly or half-year projections, compared with the standard annual projections?

a. Revenue, or the key drivers for revenue, such as Revenue Passenger Kilometers and Passenger Yield, should be projected based on Year-Over-Year (YoY) growth rates for each half-year period to capture the seasonality.

b. Working Capital line items that are linked to Income Statement line items (e.g., Accounts Receivable as % of Revenue) should be based on the LTM (Last Twelve Months') Income Statement numbers rather than figures from only half the year.

c. Although these projections forecast each number in each half-year period separately, we could have just as easily forecast the annual numbers and then split them into 1H and 2H figures based on simple percentages.

d. Although there's clear seasonality in these numbers, not every single line item will be seasonal because the company also has fixed expenses, such as Interest and Leases.

2. Consider the Debt & Equity Schedule for EasyJet, shown below in the "Extreme Downside Case," with 100% of the company's required funding set to Debt Issuances:

Debt & Equity Schedule:	Units:	Projected							
		1H 19	2H 19	1H 20	2H 20	1H 21	2H 21	1H 22	2H 22
LTM EBITDA:	£ M	962.1	744.0	692.6	628.4	742.5	837.9	893.6	926.7
(+) Interest Income:	£ M	9.7	9.4	7.2	5.3	7.7	10.6	16.0	12.4
(-) Interest Expense:	£ M	(18.9)	(14.3)	(19.0)	(14.5)	(31.0)	(33.7)	(65.9)	(50.2)
Net Interest Expense:	£ M	**(9.1)**	**(4.8)**	**(11.9)**	**(9.1)**	**(23.3)**	**(23.1)**	**(49.9)**	**(37.7)**
Seats Flown (Millions):	M Seats	46.2	58.0	47.7	59.3	46.0	57.0	43.8	54.2
ASK per Seat:	ASK / Seat	1,075.0	1,130.0	1,083.0	1,140.0	1,090.0	1,150.0	1,100.0	1,160.0
Minimum Liquidity per Seat:	£ / Seat	26.0	26.0	27.0	27.0	28.0	28.0	29.0	29.0
Minimum Liquidity Required:	£ M	1,202.0	1,509.1	1,288.5	1,600.0	1,287.9	1,595.5	1,268.9	1,572.7
Actual Liquidity Before Additional Funding:	£ M	2,260.2	1,643.1	1,486.3	771.7	679.6	504.8	1,424.2	637.7
Additional Funding Required:	£ M	-	-	-	828.3	608.2	1,090.7	-	935.0
Debt Issued:	£ M	-	-	-	828.3	608.2	1,090.7	-	935.0
Equity Issued:	£ M	-	-	-	-	-	-	-	-
Cash Flow Available for Revolver Repayment:	£ M	126.2	-	-	-	-	-	-	-
Drawn Revolver - Beginning:	£ M	-	-	-	-	750.0	750.0	750.0	750.0
(+) Revolver Borrowing Required:	£ M	-	-	-	750.0	-	-	-	-
(-) Revolver Repayment:	£ M	-	-	-	-	-	-	-	-
Drawn Revolver - Ending:	£ M	**-**	**-**	**-**	**750.0**	**750.0**	**750.0**	**750.0**	**750.0**
Revolver - Undrawn Portion:	£ M	750.0	750.0	750.0	-	-	-	-	-
Eurobonds + Finance Leases - Beginning:	£ M	977.0	957.5	938.0	910.3	960.8	1,464.3	2,450.3	2,345.6
(-) Debt Repayments & Maturities:	£ M	(19.5)	(19.5)	(27.8)	(27.8)	(104.8)	(104.8)	(104.8)	(104.8)
(+) Additional Borrowing:	£ M	-	-	-	78.3	608.2	1,090.7	-	935.0
Eurobonds + Finance Leases - Ending:	£ M	**957.5**	**938.0**	**910.3**	**960.8**	**1,464.3**	**2,450.3**	**2,345.6**	**3,175.8**

Which of the following statements is/are VALID based on JUST the output of this schedule above?

a. The Leverage Ratio is more likely to be a problem for the company here than the Interest Coverage Ratio.

b. If the company's maximum available Revolver were greater than £750 million, it would have significantly less in Total Debt by the end of this period since it could issue less in Eurobonds + Finance Leases.

c. One key problem here is that the company's Seats Flown are declining, which reduces its cash flow, but its Minimum Liquidity per Seat keeps increasing.

d. All of the above.

e. Answer choices 1 and 2.

f. Answer choices 2 and 3.

g. Answer choices 1 and 3.

3. Consider the Key Metrics and Ratios for EasyJet, shown below on an annual basis in the Downside Case with 100% Debt funding:

		Historical			Projected			
Key Metrics and Ratios:	***Units:***	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**
LTM EBITDA:	*£ M*	1,007.0	983.0	1,171.0	990.4	926.7	1,116.3	1,232.1
LTM Interest Expense:	*£ M*	125.1	122.5	206.6	237.5	259.1	282.9	336.5
LTM Net Interest Expense:	*£ M*	115.1	112.5	191.6	217.6	242.6	266.9	308.3
Total Debt + Lease Liabilities:	*£ M*	1,062.1	1,337.0	1,506.7	1,702.4	2,352.2	3,928.1	5,027.9
Net Debt + Lease Liabilities:	*£ M*	86.1	2.0	122.7	598.0	1,486.6	2,379.0	3,339.6
Capital Employed:	*£ M*	2,778.5	2,784.3	3,362.0	3,935.0	4,888.6	5,963.1	7,120.4
Normalised Operating Profit After Tax (NOPAT):	*£ M*	524.6	395.8	511.0	312.3	229.0	370.1	455.5
Return on Capital Employed (ROCE):	*%*		14.2%	16.6%	8.6%	5.2%	6.8%	7.0%
YoY Revenue Growth:	*%*		8.1%	16.9%	6.0%	4.2%	4.4%	2.1%
Operating Margin:	*%*	13.1%	9.9%	10.8%	6.2%	4.2%	6.6%	7.9%
EBITDA Margin:	*%*	21.6%	19.5%	19.9%	15.8%	14.2%	16.4%	17.8%
Net Margin:	*%*	9.1%	6.0%	6.1%	2.2%	0.4%	2.2%	2.9%
(Total Debt + Lease Liabilities) / EBITDA:	*x*	1.1 x	1.4 x	1.3 x	1.7 x	2.5 x	3.5 x	4.1 x
(Net Debt + Lease Liabilities) / EBITDA:	*x*	0.1 x	0.0 x	0.1 x	0.6 x	1.6 x	2.1 x	2.7 x
EBITDA / Interest Expense:	*x*	8.1 x	8.0 x	5.7 x	4.2 x	3.6 x	3.9 x	3.7 x
EBITDA / Net Interest Expense:	*x*	8.7 x	8.7 x	6.1 x	4.6 x	3.8 x	4.2 x	4.0 x
(Total Debt + Lease Liabilities) / Equity:	*x*	0.4 x	0.5 x	0.5 x	0.5 x	0.7 x	1.1 x	1.3 x
(Net Debt + Lease Liabilities) / Equity:	*x*	0.0 x	0.0 x	0.0 x	0.2 x	0.4 x	0.7 x	0.9 x

Company management argues that EasyJet will be "OK" in this Downside scenario because its Return on Capital Employed (ROCE) stays in about the same range, its NOPAT increases in the final two years, and its Interest Expense (including the Interest element of the Lease Expense) only rises modestly.

What's the best counter-argument to this claim?

a. The ROCE is being propped up by the company's large and growing Cash balance, so it's not the most accurate metric.

b. The Leverage Ratio and Debt / Equity Ratio (both counting Lease Liabilities as Debt) both rise to much higher levels by the end, which means limited flexibility for additional fundraising.

c. While NOPAT increases by the final year, it does not deduct the growing Interest Expense (including the Interest element of the Lease Expense), so it does not reflect the company's true financial condition.

d. The company's EBITDA Margin falls to much lower levels by the final year, indicating business trouble – even if some of the other metrics and ratios look fine.