Advanced Financial Modeling – Certification Quiz Questions

Module 11 – Equity vs. Debt vs. Convertible Bond Analysis from a Blank Sheet (Netflix) (1-Week Case Study)

1. You have built a financing model for Netflix based on its 3 financial statements and 4 main operational scenarios (Upside, Base, Downside, and Extreme Downside). The company plans to raise $4 billion of additional capital to pay for a set of upcoming Debt maturities, but it also needs to comply with various credit stats and ratios, such as a 5x maximum Leverage Ratio and a 50% maximum Debt / Total Capital Ratio.

   You are examining the model results in the Upside Case, and you have assumed that the entire $4 billion issuance is a Convertible Bond with a 1.0% fixed coupon rate and a 30% conversion premium to the company's current share price ($190). This Convertible Bond is recorded as a simple Liability under U.S. GAAP rules.

   A summary of Netflix's valuation and capital structure in the Upside Case, in which the Convertible Bond converts into Equity in Year 2, is shown below:

Valuation and Share Count Projections:	Units:	Projected: FY22	FY23	FY24	FY25	FY26
Selected LTM EBITDA Multiple:	x	16.0 x	15.0 x	14.0 x	13.0 x	12.0 x
Upside	x	16.0 x	15.0 x	14.0 x	13.0 x	12.0 x
Base	x	14.0 x	13.0 x	12.0 x	11.0 x	11.0 x
Downside	x	10.0 x	10.0 x	10.0 x	10.5 x	11.0 x
XT Downside	x	8.0 x	8.0 x	8.0 x	8.5 x	9.0 x
Implied Enterprise Value:	$ M	$ 130,037	$ 151,025	$ 167,919	$ 179,856	$ 189,884
(+) Cash & Non-Core Assets:	$ M	8,952	9,695	10,020	8,879	8,600
(-) Total Debt (Face Value):	$ M	(18,785)	(14,785)	(14,385)	(12,550)	(11,550)
Implied Equity Value:	$ M	**120,204**	**145,935**	**163,554**	**176,185**	**186,934**
Total Stock-Based Compensation:	$ M	515	581	647	709	774
Options Granted:	M Options	5.677	4.434	4.212	4.079	4.062
SBC / Options Granted / Average Stock Price:	#	0.476	0.476	0.476	0.476	0.476
Basic Share Count:	M Shares	436.074	431.260	423.244	412.767	399.797
(+) Shares from Follow-On Offering:	M Shares	0.000	0.000	0.000	0.000	0.000
(+) Shares from Convertible Bond:	M Shares	0.000	16.147	16.147	16.147	16.147
(+) Dilutive Shares from Existing Options:	M Shares	0.000	2.943	5.114	6.597	7.579
(+) Dilutive Shares from New Options - Year 1:	M Shares	0.000	1.752	2.325	2.717	2.976
(+) Dilutive Shares from New Options - Year 2:	M Shares		0.000	0.648	1.090	1.383
(+) Dilutive Shares from New Options - Year 3:	M Shares			0.000	0.492	0.818
(+) Dilutive Shares from New Options - Year 4:	M Shares				0.000	0.357
(+) Dilutive Shares from New Options - Year 5:	M Shares					0.000
Total Diluted Shares:	M Shares	**436.074**	**452.103**	**447.478**	**439.810**	**429.058**
Beginning or Current Share Price:	$ as Stated	190.56	275.65	322.79	365.50	400.59
Implied Share Price, End of Period:	$ as Stated	275.65	322.79	365.50	400.59	435.69
Average Stock Price in Period:	$ as Stated	233.11	299.22	344.15	383.05	418.14

Which of the following statement(s) BEST describe(s) the impact of this conversion into Equity on the company's credit stats and ratios and overall financing strategy (i.e., whether it should use Debt, Equity, or a Convertible Bond)?

a. This possible conversion into Equity is one of the main benefits of the Convertible Bond and should make it easier to comply with the targeted Debt / EBITDA and Debt / Total Capital numbers in the pessimistic cases.

b. This conversion into Equity will reduce the company's Debt / EBITDA and Debt / Total Capital Ratios by similar percentages, but it will make a much smaller impact on the Debt / Interest Ratio.

c. The Convertible Bond may not improve the company's credit stats and ratios significantly, but it will reduce its WACC because the 1.0% fixed coupon rate is substantially lower than the rate Netflix would pay on traditional Debt.

d. This Convertible Bond would be superior to traditional Debt, such as Unsecured Senior Notes, if Netflix's primary constraint were its EBITDA / Interest Ratio or Debt Service Coverage Ratio (DSCR) and the dilution from this potential conversion were a secondary concern.

e. All of the above.

f. Answer choices A and B.

g. Answer choices B and D.

h. Answer choices C and D.

i. Answer choices B, C, and D.

2. Netflix is considering changing its strategy and "refinancing as needed" when its bonds mature rather than raising the $4 billion in capital right now – even though interest rates are expected to rise over the next several years.

   A portion of the company's CURRENT Debt & Equity Schedule – before the company has made this change – is shown below in the Extreme Downside Case.

   This schedule assumes a 5% pricing discount for the Follow-On Equity and a 4.0% fixed coupon rate for the traditional Debt (Senior Notes):

Debt & Equity Schedule:	Units:	Projected: FY22	FY23	FY24	FY25	FY26
Cash Flow and Revolver Calculations:						
Cash - Beginning of Period:	$ M	$ 6,028	$ 7,931	$ 7,291	$ 6,461	$ 4,797
(+) Cash Flow Before Financing:	$ M	(728)	(1,359)	(1,673)	(1,136)	(629)
(+) Initial Senior Note Issuance:	$ M	1,200	-	-	-	-
(+) Initial Convertible Bond Issuance:	$ M	-	-	-	-	-
(+) Initial Equity Issuance:	$ M	2,800	-	-	-	-
(-) Initial Debt Issuance Fees:	$ M	(9)	-	-	-	-
(-) Initial Convertible Bond Issuance Fees:	$ M	-	-	-	-	-
(-) Initial Equity Issuance Fees:	$ M	(35)	-	-	-	-
(-) Convertible Bond Removal After Conversion:	$ M	-	-	-	-	-
(-) Convertible Bond Conversion Into Equity:	$ M	-	-	-	-	-
(-) Debt Maturities:	$ M	(700)	-	(400)	(1,835)	(1,000)
(-) Cash Reserved for Upcoming Debt Maturities:	$ M	(3,235)	(3,235)	(2,835)	(1,000)	-
(-) Minimum Cash for Operations:	$ M	(4,696)	(4,056)	(3,633)	(3,807)	(4,133)
Cash Flow Surplus / (Deficit):	$ M	**625**	**(719)**	**(1,250)**	**(1,317)**	**(966)**
BoP Revolver:	$ M	-	-	719	1,000	1,000
Revolver (Repayments) / Drawdowns:	$ M	-	719	281	-	-
EoP Revolver:	$ M	**-**	719	1,000	1,000	1,000
Commitment Fee:	$ M	1	1	0	-	-
Additional Funding Required (Senior Notes):	$ M	-	-	969	1,317	966
Stock Repurchases:	$ M	(625)	-	-	-	-
Total Debt Issuance Costs:	$ M	9	-	7	10	7
Convertible Issuance Costs:	$ M	-	-	-	-	-

Which of the following elements of this Debt & Equity Schedule would CHANGE if Netflix decided to refinance as needed?

a. You would have to assume a higher coupon rate on the Debt or increase it over time to reflect the rising interest rates.

b. The "Initial Issuances" of the Senior Notes, Convertible Bonds, and Equity would be set to $0.

c. You could delete the "Cash Reserved for Upcoming Debt Maturities" line because the company would not need to reserve Cash in this case.

d. The "Stock Repurchases" line should be set to $0 because the company should not be allowed to repurchase Stock unless it's raising capital initially.

e. You should remove the Revolver because there's no point in using it if the company needs to issue additional Senior Notes continuously through this period.

f. All of the above.

g. Answer choices A, B, C, and D.

h. Answer choices A, B, and C.

i. Answer choices A and B.

j. Answer choices A, B, C, and E.

3. Netflix is also considering refinancing one of its existing Senior Note issuances that matures in ~8 years, as it believes it can lock in a lower coupon rate if it refinances right now.

   The problem is that this issuance has a Make-Whole Premium with a spread of T + 50 bps; effectively, Netflix will have to pay a sizable penalty fee if it refinances so far in advance.

   Nevertheless, the company has run the numbers and determined that it might be able to refinance and get a 2.875% coupon rate for a new Senior Note issuance, down from the 4.875% it is currently paying, and it has proposed terms that would let investors earn a similar YTM with a similar Duration and Convexity, as shown below:

Netflix - Refinancing Recommendation
($ USD in Millions Except Per Share Amounts in USD as Stated)

Bond Yield and Pricing Assumptions:

Profile of Current Bond Issuance (Oct 2019 Issue Date):

Prevailing Yields on Similar Bonds (Discount Rate):	3.885%
Settlement Date:	2022-05-18
Bond Coupon Rate (Fixed):	4.875%
Bond Maturity:	2030-06-15
Coupon Frequency:	2
Annual	1
Semiannual	2
Bond Par Value or Face Value:	$ 1,000.0
Bond Redemption Value % Par Value:	100.0
Market Price as of Most Recent 10-Q:	1,068.0
Macaulay Duration:	6.84
Macaulay Duration via Excel:	6.69
Modified Duration:	6.71
Modified Duration via Excel:	6.56
Convexity:	54.34

(+) PV of Future Interest Payments:	$ 335.6
(+) PV of Principal:	734.9
Calculated Bond Price:	**1,070.4**
Bond Price via Excel Function:	1,068.0
Current Yield:	4.565%
Yield to Maturity (YTM):	3.885%
Internal Rate of Return (IRR):	3.920%
Approximate Yield to Maturity:	3.893%
Make-Whole Spread:	T + 50
Units:	10,000
Estimated Make-Whole Price:	109.82
(+) Accrued Interest % Par:	2.07
Make-Whole Price + Accrued Interest:	**111.90**

Profile of Prospective New Issuance:

Premium / (Discount) to Current Coupon Rate:	(2.000%)
Bond Coupon Rate:	2.875%
Bond Maturity:	2029-12-15
Coupon Frequency:	2
Yield to Maturity (YTM):	3.953%
Bond Par Value or Face Value:	$ 1,000.0
Bond Redemption Value % Par Value:	100.0
Initial Market Price:	930.0
Macaulay Duration:	6.85
Macaulay Duration via Excel:	6.74
Modified Duration:	6.71
Modified Duration via Excel:	6.61
Convexity:	52.54

What is the MAIN reason why it is unlikely that the company will refinance, despite these numbers?

a. The company must offer a ~7% Original Issue Discount (OID) to make the YTM match the YTM of the current issuance, and it is highly unlikely that the Present Value of the interest savings from the lower coupon rate would exceed this $70 million OID AND the Make-Whole Premium.

b. Because the maturity is so far away, it's highly unlikely that the PV of the Interest Savings would exceed the Make-Whole Premium.

c. Although investors might accept the lower coupon rate because of the $70 million OID attached to this new issuance, they would not approve of a bond maturity that's 6 months earlier.

d. In an environment of rising interest rates, very few investors would be interested in this new issuance because of its far-below-market coupon rate.