Ability to Pay Valuation

Ability to Pay Valuation

- This is an approach often used by financial investors when considering an investment
- The key question is how much can they afford to pay for a deal while still hitting a target return on investment
- What is their ability to pay?

Ability to Pay Valuation

- This is most often part of an LBO model and many of the inputs come straight from the model
- The analysis also incorporates the deal leverage so that this becomes an important variable in the calculation
- To understand ability to pay you have to work backwards from a starting point of the equity invested

Ability to Pay Valuation

- We are going to work through a simple hypothetical example to show how this works.

Ability to Pay Valuation

- Most financial investors will be targeting a 20% to 25% IRR
- We have 3 inputs for our model (in green) and can change any of them to identify the “ability to pay” valuation

Exit Multiple	8x		
EBITDA	US$120.00		
Transaction Value	US$960.00		
Net Debt	-US$400.00		
Equity Value	US$560.00		
Required IRR	20%	22.5%	25%

Ability to Pay Valuation

- Lets say we have a 5 year investment period and our model tells us that the EBITDA will be $120m on exit
- Lets say we expect an 8x exit multiple = $960m
- Deduct net debt of $400m = Equity Value of $560m

Exit Multiple	8x		
EBITDA	US$120.00		
Transaction Value	US$960.00		
Net Debt	-US$400.00		
Equity Value	US$560.00		

Ability to Pay Valuation

- We can calculate the multiple of invested capital using the formula MoIC = (1+IRR)^5
- For each IRR this gives us a multiple and from the Exit Equity value we can derive the invested equity for each return threshold

Required IRR	20%	22.5%	25%
Holding Period	5	5	5
Implied Multiple of Invested Capital	2.49x	2.76x	3.05x
Invested Equity	US$225.05	US$203.01	US$183.50
(+) Debt Raised	600	600	600
(+) Cash on Hand	0	0	0
Total Implied Deal Financing Sources	US$825.05	US$803.01	US$783.50

Ability to Pay Valuation

- From our LBO model we can identify the debt raised and the cash on hand
- In this case cash on hand is assumed to be zero on the basis of a debt free cash free deal
- So the Total Sources for our deal are Max Equity Investment + Debt Raised

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Ability to Pay Valuation

- Next we have to deduct our expenses and any cash balance or refinanced debt (both assumed to be zero to simplify)
- This gives us an implied Equity Purchase Price

Total Implied Deal Financing Sources	US$825.05	US$803.01	US$783.50
(-) Refinanced Debt			
(-) Cash Balance			
(-) Expenses	-US$25.00	-US$25.00	-US$25.00
Implied Equity Purchase Price	US$800.05	US$778.01	US$758.50
Net Debt	0	0	0
Implied Transaction Value	US$800.05	US$778.01	US$758.50
EBITDA on Entry	US$90.00	US$90.00	US$90.00
Implied Transaction Multiple	8.89x	8.64x	8.43x

Ability to Pay Valuation

- The final step is to adjust for any net debt in the deal - this would add to the transaction value
- We are assuming debt free, cash free so this too is zero
- This gives us a transaction value

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Ability to Pay Valuation

- This then tells us how much we can afford to pay and at what EBITDA multiple if we want to achieve our hurdle rate IRR

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Ability to Pay Valuation

- This simple financial model is available to download with this lecture so that you can calculate your own ability to pay for a transaction

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