### Enterprise / Equity Value Questions and Answers – Basic (15 Questions)

### 50. Why do we look at both Enterprise Value and Equity Value?

Enterprise Value represents the value of the company that is attributable to all investors. Equity Value only represents the portion available to shareholders (equity investors). You look at both bc Equity Value is the number the public-at-large sees, while Enterprise Value represents its true value

EV = Equity Value + Debt + Preferred Stock + Noncontrolling Interest - Cash

## 51. When looking at an acquisition of a company, do you pay more attention to Enterprise or Equity Value?

Enterprise Value, because that's how much an acquirer really pays and includes the often mandatory debt repayment

No the debt payment doesn't go to the target's owners so it's not double counted. It goes to the debtors of the target company

#### 52. What's the formula for Enterprise Value?

EV = Equity Value + Debt + Preferred Stock + Noncontrolling Interest - Cash

This formula doesn't tell the whole story and can get more complex. Most of the time for an interview this works

"Noncontrolling Interest" was formerly known as Minority Interest and some bankers still call it that

### 53. Why do you need to add the noncontrolling interest to enterprise value?

Whenever a company owns over 50% of another company, it's required to report the financial performance of the other company as part of its own performance

It doesn't own 100% but reports 100% of the majority owned subsidiary's financial performance. So add NCI to reflect 100% of value

In keeping with the "apples-to-apples" theme, you must add the Noncontrolling Interest to get to Enterprise Value so that your numerator (EV) and denominator (EBITDA) both reflect 100% of the majority-owned subsidiary. You want to keep multiples (like P/E or EV/EBITDA) accurate

### 54. How do you calculate fully diluted shares?

Take the basic share count and add in the dilutive effect of stock options and any other dilutive securities, such as warrants, convertible debt or convertible preferred stock

Basically convert all potential shares to real shares so that shareholders' stock is fully diluted

To calculate the dilutive effect of options, you use the Treasury Stock Method

# 55. Let's say a company has 100 shares outstanding, at a share price of \$10 each. It also has 10 options outstanding at an exercise price of \$5 each – what is its fully diluted equity value?

Its basic equity value is \$1,000 = 100 \* \$10. To calculate the dilutive effect of the options, first you not that the options are all "in-the-money" – their exercise price is less than the current share price

When these options are exercised, there will be 10 new shares created – so the share count is now 110 instead of 100

However that's not all. In order to exercise the options, we had to "pay" the company \$5 for each option (the exercise price)

As a result, the company now has an additional \$50 in cash, which it now used to buy back 5 of the new shares we created

So the fully diluted share count is 105, and the fully diluted equity value is \$1,050

56. Let's say a company has 100 shares outstanding, at a share price of \$10 each. It also has 10 options outstanding at an exercise price of \$15 each – what is its fully diluted equity value?

\$1,000 because the exercise price is above the current share price. So they have no dilutive effect

### 57. Why do you subtract cash in the formula for Enterprise Value? Is that always accurate?

The "official" reason: Cash is subtracted bc it's considered a non-operating asset and bc Equity Value implicitly accounts for it

In an acquisition, the buyer would get the cash of the seller, so it effectively pays less for the company based on how large its cash balance is. Rem EV tells us how much you'd really have to pay to acquire another company.

Not always accurate though be technically you should be subtracting only excess cash, the amount of cash a company has above the minimum cash it requires to operate

You subtract out cash because Enterprise Value measures what you're effectively paying for the core operations of a target company and cash is implicitly included in equity value. If the core business value changes then EV will change and if the core business value doesn't change then EV stays the same. If there was abunch of cash on hand, the acquirer's upfront price would increase but EV stays the same

Just think of it like cash offsets debt

Like if you buy a home, home equity value = market value of the home – outstanding mortgage debt. The home equity value is the portion of the home that the owner actually owns at that time. If you buy it, you'd have to pay off the debt. If there is a mound of cash inside the house, you could subtract this from the debt to get the amount of debt you'd have to pay off with your own money.

### 58. Is it always accurate to add debt to equity value when calculating Enterprise Value?

In most cases, yes be the terms of a debt agreement usually say that the debt must be refinanced in an acquisition. And in most cases a buyer will pay off a seller's debt, so it is accurate to say that any debt "adds" to the purchase price

However, there could technically always be exceptions where the buyer doesn't pay off the debt. These are very rare but just good to mention

### 59. Could a company have a negative EV? What would that mean?

Yes. It means that the company has an extremely large cash balance, or an extremely low market capitalization (or both). You see it with:

- 1. Companies on the brink of bankruptcy
- 2. Financial institutions, such as banks, that have large cash balances but EV is not even used for commercial banks in the first place so this doesn't matter as much

### 60. Could a company have a negative equity value? What would that mean?

No. This is not possible because you cannot have a negative share count and you cannot have a negative share price

### 61. Why do we add preferred stock to get to EV?

Preferred stock pays out a fixed dividend, and preferred stock holders also have a higher claim to a company's assets than equity investors do. As a result, it is seen as more similar to debt than common stock

### 62. How do you account for convertible bonds in the EV formula?

If the convertible bonds are in-the-money (conversion price of the bonds is below the current share price), then you count them as additional dilution to the equity value. If they're out-of-the money (price of bonds is above the current share price) then you count them as additional dilution to the equity value

# 63. A company has 1 million shares outstanding at a value of \$100 per share. It also has \$10 million of convertible bonds, with par value of \$1,000 and a conversion price of \$50. How do I calculate diluted shares outstanding?

This gets confusing bc of the different units involved. First note that these convertible bonds are in the money (conversion price < actual price) so we count them as additional shares rather than debt

Next find how many individual bonds there are. \$10 million / \$1,000 = 10,000 convertible bonds

Then figure out how many shares this number represents. The number of shares per bond is par value divided by the conversion price. \$1,000 / \$50 = 20 shares per bond

So we have 200,000 = 20 \* 10,000 new shares created by the convertibles which gives us 1.2 million diluted shares outstanding

We don't use the Treasury Stock Method with convertibles bc the company is not receiving any cash from us

### 64. What's the difference between Equity Value and shareholders' equity?

Equity Value is the market value and shareholders' equity is the book value. Equity value can never be negative bc shares outstanding and share prices can never be negative, whereas shareholders' equity could be any value. For healthy companies, equity value usually far exceeds shareholders' equity

What the market thinks a company is worth (even with an inflated or underinflated market) vs what a company is "actually" worth. Equity Value = share price \* FDSO