The Enterprise Value Bridge

Welcome to the next lesson in Module 6 of this course. We're going to be discussing the Enterprise Value Bridge here, which is one of the most important concepts in valuation of any type of company.

So once again, each lesson here will be about 10 to 15 minutes. We'll start with the video explanation and then go into the Excel exercise at the end. If you want, you can watch and complete the exercise, or you can read the written guide, or you can just go to the end and take the end-of-module quiz to test yourself.

This lesson is mostly an exercise because you're going to have to go into Goodyear's filings, or the excerpts from their filings, and then enter the relevant items for their Enterprise Value Bridge. There is some explanation in the beginning and at the end. But in this case, we felt that getting practice yourself, going through the filings, looking at the numbers, looking at the financial statements is the most important point here.

So the outline for this lesson is as follows. I'm going to start with some of the logic behind the Enterprise Value Bridge and why we set it up the way we do. Then you will get an exercise where you have to go through the excerpts and go to Goodyear's Balance Sheet and enter the relevant items so you can calculate Enterprise Value or an estimate of Enterprise Value for them.

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Then I will explain what makes this a little bit more complicated and why you cannot necessarily just rely on a company's Balance Sheet in real life.

Let's go to the Enterprise Value Bridge logic first. So as we mentioned in Lesson 1 of this module, Equity Value represents the Market Value of everything a company has, its Net Assets, but only to the equity investors, the common shareholders in the company. And it's also known as Market Cap or Market Capitalization. Enterprise Value represents the Market Value of the company's core business operations or Net Operating Assets, but to all the investors in the company, Equity, Debt, Preferred, and so on.

So if you think about these definitions, you can use some simple algebra to rewrite them and to show the relationship between Equity Value and Enterprise Value. In other words, how you go across the bridge from Equity Value to Enterprise Value when you make these calculations.

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So let's start by writing Equity Value like this. It's the Market Value of the Net Assets. Net Assets are just Total Assets minus Total Liabilities. So we can say that Equity Value equals the Market Value of Assets minus the Market Value of the Liabilities. And then with Enterprise Value, the idea is that we have to remove the Non-Operating or Non-Core Assets, and then we have to add the Liabilities and potentially Equity line items, such as Preferred Stock, that represent other investor groups beyond the common shareholders.

So if you put these two definitions together and you think about it, this first part, the Market Value of Assets minus the Market Value of Liabilities, that's just the definition of Equity Value. So we can take this whole part of the formula and replace it with Equity Value and say that Enterprise Value equals Equity Value minus the Non-Operating Assets, plus the Liability and Equity line items that represent other investor groups.

So that's the basic idea and why we set this up the way we do. Normally you start with the company's Balance Sheet to find these Non-Operating Assets and then Liability and Equity lines for the other investor groups. But you often have to expand beyond the Balance Sheet and also go through the footnotes and the rest of the filing.

[03:10]

Now the most common Non-Operating or Non-Core Assets are Cash, Financial Investments, Assets Held for Sale, and Equity Investments, which represent minority investments in other companies, such as a 20% stake or a 30% stake in another company. Since it's a minority investment, it's considered not core to this company's business. There are some more complicated items, like Net Operating Losses, but we'll cover those in a separate lesson later on.

With the Liability and Equity lines, Debt and Preferred Stock are the most common ones that represent other investor groups. But Noncontrolling Interests, or Minority Interests as they were formerly known, also factor in. This refers to cases where the company owns over 50% of another company, such as 70%. The Noncontrolling Interest represents the 30% that they do not own in this case, and this counts as another investor group. Unfunded Pensions can also factor in.

[04:03]

Leases get more complicated, and the exact treatment here depends on how you're using the Enterprise Value metric. But we'll cover that in a separate lesson later on. Don't worry too much about Leases for now because it does get somewhat complicated and confusing and is not that important for interviews.

So let's go to your exercise now. What I want you to do is to pull up the Excel file below this video. You will see the GT tab, and you'll see what we completed last time for the Basic and Diluted Equity Value. And then you'll see all these lines for the Enterprise Value and then a variation, Enterprise Value Including All Leases.

So what I want you to do is to go to the company's excerpts. So it's a 14-page excerpt file. The Income Statement is on page 2, and then the Balance Sheet is on page 3. I want you to go to page 3 and then enter all the relevant information here so that you calculate the company's Enterprise Value and the variation, Enterprise Value Including All Leases.

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Use only this Balance Sheet. Do not read anything else or use the rest of the filing. And if something doesn't appear on the Balance Sheet, just leave it blank for now. If the company groups together items like Debt and Finance Leases, that's fine. It's better to have these separated if you can. But if they don't do that on the Balance Sheet, just enter them both together.

So pause the video right now. Try to go through the Balance Sheet and enter all these line items on your own. And then when you're done, unpause the video, and we will go through this exercise together.

Okay, so let's pull up the Balance Sheet and start entering this. We see that there's Cash under Current Assets. And it doesn't look like there's anything for Financial Investments, although there might be some within Other Assets. We need to go into the footnotes to assess that, and I told you in the beginning to not bother with that, to just focus on the Balance Sheet for now. So I'm just going to start by entering the Cash from right here. I'll just do a copy and paste into Excel and change the sign to a negative because we always subtract Cash in this calculation. I'll say 0 for Financial Investments.

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Equity Investments, Other Non-Core Assets, Net Operating Losses are a little bit difficult to evaluate without going into the footnotes. Certainly, within Other Assets right here, there might be some of these items, but we need to look at that separately to really tell. Just based on what's on the Balance Sheet, I would probably only list the Assets Held for Sale here as a

Non-Core Asset. The company is about to sell these. So they can't possibly be core to the business or that important to the business. So I will list those right here. And then I'll just leave the others blank for now, and we'll return to these in later lessons as we go through more of this.

Let's go to the other side of the Balance Sheet now. So on this side, a couple things stand out immediately. So first off, we have a couple different forms of Debt here, Notes Payable and Overdrafts. Long-Term Debt and Finance Leases combined, the current portion of them, and then the long-term portion of them down here. And then there are some other line items, Compensation and Benefits, Deferred Income Taxes. But these are not going to factor into Enterprise Value as a whole. Parts of them might factor in. And the same with the Deferred Income Taxes up here. Part of this might correspond to a Net Operating Loss, but we need to go into the footnotes to evaluate that.

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So the bottom line here is that for the Debt, we want the Notes Payable and Overdrafts, so the 506 right there. And then we want to get the Long-Term Debt and Finance Leases, the 364. And then the whole portion down here, the 5,328. The names here can be a little bit confusing. Notes Payable and Overdrafts might not immediately sound like Debt, but typically if it has the word "notes" in it, and especially something like Notes Payable, it is Debt. And if you are curious about it, you can always go down to Note 16 and look at it for yourself.

This company combines Long-Term Debt and Finance Leases. So in our ideal case, it would be best to list them separately. But unfortunately, that's just not possible here without going into the footnotes. So we'll leave it as is.

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Now Preferred Stock, it doesn't appear that the company actually has any if you look at their Equity section. They do have these Minority Shareholders' Equity lines, or this one line, which is a Noncontrolling Interest. This just means the company owns over 50% of another company, and this is the portion of the other company they do not own. So let's enter 0 for Preferred Stock and 170 for Noncontrolling Interests.

Finance Lease Liabilities, as we mentioned, are grouped together with Debt. So we're not going to separate them for now.

And then Unfunded Pensions, this company most likely does have some type of defined benefit pension plan because they do list Compensation and Benefits here. But we're not going to add this entire thing because only a portion of this is unfunded and only a portion of this corresponds to the pension. We need to look at the footnotes in more detail to evaluate this. So there's nothing to do there for now.

One other thing you can do, after you enter all these and add them up and calculate Enterprise Value, is you could also factor in the Operating Lease Liabilities down here. This is not part of the standard Enterprise Value calculation for companies under U.S. GAAP, but in some variations of the metric, it is useful to have this. So I'll enter the 196. And then we will go down here and take the 862.

[09:08]

And this is just a variation that will come up in a few different contexts. So I'll enter it for now. And so we have it for our future reference.

That's the exercise. So what makes this more complicated? Well, as I've been saying, the footnotes and the rest of the filing often contain important information and other items that could be in the bridge. And it does take some time to read that and figure it out.

Pensions and Net Operating Losses take some more time to explain, and I don't want to get into them quite yet. They also make a pretty small difference for Goodyear. Even though they do exist, they're pretty small overall next to everything else here.

Leases can get very complicated. But the short version is that, under U.S. GAAP, you generally want to add Finance Lease Liabilities but not Operating Lease Liabilities to Enterprise Value. And under IFRS, you generally want to add both to Enterprise Value because of how the accounting works a little bit differently on the financial statements.

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Finally, this is just the beginning of any valuation. To really make it useful, we need financial metrics, like Revenue, EBIT, EBITDA, Net Income, metrics like that so that we can turn them into valuation multiples. We also need sets of comparable companies or deals so we can see what Goodyear is currently valued at compared to its peer companies.

That's about it. So let's do a recap and summary. I started out by explaining the Enterprise Value Bridge logic and why you subtract Non-Core or Non-Operating Assets and then add Liability and Equity lines that represent investor groups beyond the common shareholders.

Then we went through this exercise for Goodyear, and I showed you how to enter the information. Don't stress out too much if the Balance Sheet is vague or not ideal. Many companies combine Debt and Finance Leases. And for U.S.-based companies, there isn't really too much you can do unless you want to look further in the filing and try to separate these out, which you can certainly try. But for a first-pass estimate of Enterprise Value, it's not necessary to do anything like that.

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What makes it more complicated? You often have to go into the footnotes in real life. Items like Net Operating Losses and Pensions and Leases can be complicated as well. And you also need a lot more than this, such as other comparable companies and deals and financial metrics to make use of Equity Value and Enterprise Value.

That's it for this lesson. Coming up next, we will get into the calculation of some of those financial metrics, and you'll see how to combine them and use them to create valuation multiples.