Hello and welcome to our next tutorial video here. In this lesson we're going to move into the next part of our case study on Vivendi, where we go through equity value, enterprise value, and valuation metrics and multiples. So far in this course we've been through the first two parts here on what these items mean and how to calculate equity value. Now we're going to move into Part 3 – How to Calculate Enterprise Value, and look at why you add and subtract different items in this calculation.

Now this lesson and this topic, was actually motivated by a very common interview question, which is, "What does enterprise value mean? Or, "What is enterprise value?" Now, this question seems very simple but I can tell you right now that 99% of people, at least people who haven't watched this tutorial, answered this incorrectly. The most common incorrect answer is that "Enterprise Value means "Equity Value + Net Debt" Or, "Enterprise Value is Equity Value + Net Debt."

[01:07]

Now this answer isn't exactly 100% wrong, but the problem is that it doesn't really answer the specific question that the interviewer asked. That response, "Equity Value + Net Debt" (Equity Value plus debt minus cash) is how you calculate enterprise value, but it's not the actual meaning of the term. The actual meaning is that "Enterprise value represents the value of a company's core business operations to all the investors in the company."

The two key parts here are core business operations and then all the investors in the company, because if you think about something like equity value, it's really the opposite because it represents the value of everything, regardless of whether something is related to the company's core business or not; and it is not to all the investors in the company, but only to the equity investors in the company.

[02:05]

So, you're leaving out debt investors. You're leaving out preferred stock investors. You're leaving out other funding sources. You're only looking at the company's common equity with equity value. Now, if you think about the implications of this meaning, that you're looking at only the core business operations and all the investors in the company, you can use this definition to figure out what you should add and subtract when going from equity value to enterprise value. Here's an example of what I mean by this. Normally when you calculate a

http://breakingintowallstreet.com
company's enterprise value, you start with its equity value. So, you take its shares outstanding times its current share price for public companies. Or some variant, like the diluted shares outstanding, you may have to perform some additional calculations, but you start with that.

And then you add items when they represent other investors. Debt investors, preferred stock investors, any other debt-like securities such as mezzanine or convertible debt for example. Or when these items represent other long term funding sources for the company, like capital leases and unfunded pensions, for example. Then you subtract items when they're not related to the company's core business operations.

Side activities, cash or excess cash, investments, real estate, because if you think about it if you have a consumer retail company for example, they need to buy inventory and they need to sell products in the form of that inventory to the customers. They need to have a certain number of stores to operate. They need to collect cash and they need to pay suppliers. But they don't need to buy bonds to invest in. They don't need to spend their cash on something specific, like a certain type of asset. They don't need to buy stocks in the stock market to run their core business. That's just something else they do on the side.

So, when you have items like those on the assets side of the balance sheet, you tend to subtract them in the calculation. Now to better illustrate all this, we're going to go through an example with Vivendi now, and I'm going to lay out a few more key rules and then explain how you actually apply them as we go through the enterprise value calculation for Vivendi. So, let's go into Excel now.

I have some written notes in this Excel file on what we just went over on those PowerPoint slides, but to sum up the points, you want to add items when they're long term funding sources for the company. So, you raise funds from a certain item and it's going to help fund your business for years to come. We mentioned a couple of examples: debt, preferred stock, capital leases, and unfunded pensions. If something is going to be paid out very quickly such as accounts payable or accrued expenses, it's not a long-term funding source, so you're not going to be adding it.
It's really a core part of your business because that's just what you do. You have operating expenses. You accrue them and then you pay them out in cash. Another way to think about this is that items that you add will tend to cost the acquirer of the company something extra, if someone comes along and wants to buy the company.

So, debt and preferred stock are probably the two best examples because these typically have to be repaid or refinanced in an acquisition, not always, but typically the terms of these state that they have to be paid off or refinanced and replaced with a new form of debt when someone buys the company. And then on the point about subtracting non-operating assets, there are a couple ways to think about it, but one way to think about is, "Could the company continue to operate even without a particular asset and still be fine?"

[05:59]

So, going back to the example of the retail company, let's say the company has excess cash that they use to put into stock market investments or fixed income investments, bonds for example, you could remove those completely from the company's balance sheet, and they could still continue buying inventory, selling it to customers, they could continue running their stores. That has no bearing on their core business at all.

Another way to think about it is, did the company get this item, not as a result of its core business, but rather from side activities, such as investing in real estate assets? Let's say they have some type of real estate income stream because they own a certain number of buildings, they're not using them to actually sell products, they just have them, and they're renting them out to other people. Those are the types of assets that you would almost always subtract in this calculation because they have nothing to do with the company's core business. So, those are a few rules and a few ways to think about this.

[07:01]

Now, in terms of finding these items, as I mentioned, we're going to go through an example here for Vivendi and we're going to look at their interim report and also look at their annual report here. I have a lot of written notes on what to do and how to find these items mechanically, but long story short is that you should be looking at the most recent balance sheet in most cases to figure out what should be added and subtracted. And on the assets side you are generally subtracting items or leaving them alone. On the liabilities & equities side, you are generally adding items or leaving them out of the calculation all together.

http://breakingintowallstreet.com
If you can, it is better to get market values for these items, but in most cases you're only going to be able to do that for the company's equity value. Because if it's a public company you can easily look up its share price, find that and use that, instead of taking its equity on the balance sheet, its shareholders’ equity.

[08:00]

In most cases for many of the other items it is impossible to find the market value, or the market value is extremely close to the book value anyway. So, as a simplification you just take the book value from the balance sheet.

In some cases you will have items that are embedded within other items. Pensions, capital leases, restructuring legal liabilities are often embedded within other items in the balance sheet so, you have to do a bit of a search to find these. Depending on how much time you have you may skip this or you may put in the time if it's required and actually do a search for these items.

We've already been through the process for calculating equity value in previous lessons, so I'm not going to repeat that here. But the bottom line is you need equity value first and then you have to look at the company's most recent balance sheet and decide what should be added and subtracted. Then when you're done, time permitting, you can check the notes to the financial statements and see if there's anything else that should be factored in.

[09:01]

So, let's go through this actual example for Vivendi now. Now, notice how we have their annual financial statements, and you can down here and look at their balance sheet. Or their "Statement of Financial Position," as most companies that use IFRS call it. We have this here, but in this case we prefer to use their interim report, which represents Q1 here, the first quarter of their fiscal year. Simply because it is more up to date and the balance sheet is more recent. So, we're going to be relying more on their Q1 balance sheet, as opposed to their annual balance sheet. Simply because the information is more up to date.

Let's go through this and start with the assets side first and then move to the liabilities and equities side. And I'm going to explain why you should add an item when you have equity value and you're trying to calculate enterprise value. Why you should subtract items. And then why you should leave other items alone. On the current assets side we have a couple different categories.

http://breakingintowallstreet.com
We have cash, current financial assets, accounts receivable, current content assets, current tax receivables, Inventory. And then assets held for sale and assets of discontinued businesses. Now remember on the assets side of the balance sheet you’re never really going to add an item when calculating an enterprise value. The only choices are to leave it alone or to subtract it. With cash we're always going to subtract it because it is a non-operating asset.

Another way to think about it is that when someone goes to buy this company, they get this cash on the company's balance sheet. So, effectively it reduces the purchase price of the company. That's not a formal definition of why you do this. It's really because it's a non-operating asset, but that's some intuition behind it. Now, technically all companies have a minimum cash balance. So, if you go to Vivendi’s balance sheet and you take a look at what they have here. They probably need some amount of cash to continue operating.

Maybe it's a 100 million Euros. Or 200 million Euros. Or 50 million Euros. We don't know what it is, so technically it is more correct to only subtract the excess cash above that amount because that is what they do not need to operate their business. That's what they have because they haven't decided what else to do with it yet. The problem is that in most cases it's very difficult to determine what that is and the company doesn't tell you. So typically you just subtract the entire cash balance, which is exactly what we've done over here.

Now for some of these other items, current financial assets, this one is a “maybe” because we don't know what's in it. It really depends on how liquid they are and really if they have anything to do with the company's core business operations. So, we need to come back and look at this one later. Now, for accounts receivable, content assets, tax receivables these are all operating assets. If you think about it, if we got rid of accounts receivable, if we subtracted this the company would be in a lot of trouble because then they wouldn't get this cash from customers ever.

So, it doesn't really make sense to subtract this. Same with inventory. Same with content assets. If it relates to how the company is going to make money in the future from customers you should not be subtracting these items from enterprise value. Assets Held for Sale and Assets of Discontinued Businesses, these are both also non-operating assets because they're about to be sold off. By definition if they're about to be sold off they're not related to the

http://breakingintowallstreet.com
company's core business anymore because they're selling off these assets. So, we subtract these types of items.

The only tricky part here, you can see what I've done, I just linked to both of these and we're subtracting them, we're also netting these against liabilities of discontinued businesses, because all of these the company is about to get rid of – assets and liabilities of discontinued businesses. So, we are subtracting the net amount right here.

[12:59]

The only tricky part, as I just mentioned, is you have to remember to take out the liabilities that are going to be disposed of and sold off as well as the assets.

Now, moving down, we have a few other items here. Some which are easy to explain and some of which require further explanation. Property, plant, and equipment or PP&E, you are never going to subtract because you need it to continue operating. A company would be in a lot of trouble if it suddenly lost all its buildings, all its equipment, all its factories.

So, you need to keep this in. The same with content assets, it's a media company, so you need content assets to continue producing content and making money from it. Goodwill and other intangibles you do not subtract or factor into the enterprise value calculation because these are really operating assets if you think about it. These represent the premium over the book value of acquired companies that Vivendi has paid in the past.

[13:59]

Now, these companies are still a part of the company's business and so the Goodwill associated with them, the intangibles associated with them, still stay on the balance sheet. So for that reason do not adjust for these items at all. We really consider them to be operating assets that are a part of the company's core business operations. Investment in equity affiliates is also considered a non-operating asset, and so we subtract it. But this one it's also really done for comparability purposes. We'll get into this in the next two lessons coming up in more detail.

For now though the way to think about it, and the reason why we subtracted it here, is simply because these represent cases where we owned less than 50% of another company or other companies. And if we own less than 50% it's not really a part of our core business because we're not majority shareholders in that company. It's sort of a side project or a side investment that we have. That's how you think about it for now. As I said, we'll go through some of the math behind this and look at this in more detail in the next two lessons.

http://breakingintowallstreet.com
Non-Current Financial Assets, again we need to see how liquid these are and what these actually represent. And then Deferred Tax Assets, typically you do not subtract this entire amount, but you may subtract certain items within this such as net operating losses because again, those are not related to the company's core business, and you can take those out and they would still be completely fine operating.

So, let’s do some digging and some detective work here on these financial assets and also deferred tax assets, and see if any of these should be subtracted or adjusted for in any way. Now, typically for these items, you will have to go back to the annual financial statements and look at the notes here because often in the interim statements, or the quarterly reports, the 10Q, for US based companies, they're not going to give you a whole lot of detail on what goes into these. So in some cases you will get lucky and find it. But in a lot of other cases, most cases we would say, you're not going to find much in the interim reports.

So, if you look in the annual reports here and you go to note 16, which is on page 54 of The Annual Financial Statements and Notes PDF that I've created. You can see that they've broken out the different categories for financial assets here, and looking at most of these, none of these are really related to the company's core business. We're talking about things like available for sale securities, which we went over in the accounting module earlier.

Cash deposits, backings, borrowings, other loans, and receivables. This is not really what Vivendi as a company does. They produce media and make money from the media. They’re a media and telecom company. They're not a bank. So, we would say in this case that these assets should be subtracted. They're deducting current financial assets, but the bottom line is that we really want to subtract both, because it doesn't appear these are related to the company's core business and it also appears that these are highly liquid and could easily be sold off and the company would get cash from them.

Now for the Deferred Tax Asset, this is another one where you have to do a bit of digging, if you do a search, though, and you find where they discuss what's actually in the deferred tax assets and liabilities, they're not really saying that much. They do give breakouts for deferred tax assets, but they're not saying how much, if any, corresponds to net operating losses. And typically only the amount that corresponds to net operating losses is what you're going to
subtract here. So, in this case you could say that it's probably better not to include anything since we don't see any clear or direct references to net operating losses.

So, that's the assets side of the balance sheet. Again, to recap, you either leave items alone here or if they are non-core operating assets you subtract them. And sometimes you have to do some additional work and look in the company's filings to find notes on these items.

Let's move to the liabilities and equities side now. Short-Term Debt and Borrowings you're always going to add and the same for Long-Term Debt and Borrowings because debt investors should be included within enterprise value because you want to include all the investors in the company. And these are long term funding sources. Even something like short-term debt is typically viewed as more of a long-term funding source because it usually is outstanding for about a year, and it usually gets refinanced repeatedly.

So, you count this as a long-term funding source, even though it's a short-term. Now items like accounts payable, current tax payables, deferred tax liabilities you don't add any of these because these are all more related to the company's core business operations than anything else. With accounts payable it simply refers to the fact that companies are listing expenses on the income statement, but haven't paid them out in cash yet, but will do so in the future.

So, this is not really a long term way to finance your company. You can't exactly keep an item outstanding for five years and never pay the person. You have to pay it relatively quickly. So, you're not going to factor in these types of items. Current Provisions, we may include but we don't know exactly what's in this yet. So, we need to do some detective work there. And then Non-Current Provisions and Other Non-Current Liabilities, these are very vague names so we need to look these up in the filings and see what is actually included in these first.

Liabilities of Discontinued Businesses, we went over this previously with the assets side, but with this we would say, "Yes, we need to factor these in." And these need to be netted against assets for these discontinued businesses. So, the liabilities and equities side is actually easier in a sense because debt you're clearly always going to add, and provisions, other types of liabilities, you need to look these up and figure out what's in them first. If we had convertibles or mezzanine here we'd also be adding those because they're similar to debt.

http://breakingintowallstreet.com
Now if you move down to equity, this is easy because you never add anything in shareholder's equity. Because remember, in the enterprise value calculation we're already using the market value of equity, the diluted equity value here. Since we have the market value there's no reason to add the book value. It doesn't make any sense. We have a more accurate measure of how much the company's really worth by using the market value of equity instead.

One item that we will add in the equity section is the Noncontrolling Interest one. Again, we're going to go into this in more detail in the next two lessons, but this does represent a funding source for the company, and you also do it for comparability purposes because items like operating income already include 100% of the contribution from these partially owned companies. However, equity value itself represents only the percentage that the company owns.

So, if you own 70% of a company you're going to reflect a 100% of its operating income on your own statements. But equity value is only going to reflect that 70% you own. To get that remaining 30% you have to add Noncontrolling Interests. Again, we'll get to that in more detail in the next few lessons, but that's the basic idea for now.

So, let's go into this and do some detective work on these provisions and see what else if anything should be included here. Also we're going to look at a few other items and see if there's anything to include in terms of restructuring, other liabilities, and then unfunded pensions, and items like that. So, if you go to note 20 in the Annual Report, which is on page 57 of the PDF that I created, or page 96 if you're going by the companies own numbers. They break out everything that is in provisions here. And we have employee benefits, restructuring costs, litigations, contingent liabilities, cost of dismantling and restoring sites, and other.

There's a lot that's here, and to be honest these items can really go either way in a lot of cases. Different people will have different ways of treating them. In our view these really should be added to enterprise value because these are, in effect, long-term funding sources. Something like restructuring really means that the company can continue to operate now but in the future it's going to have to payout some type of cash expense. And it's not going to come from their normal business operations. They'll need to set aside special funds to pay for this, or raise debt, or equity, or otherwise raise funds in some way to pay for this.

http://breakingintowallstreet.com
So, in our view, without knowing the full context, these items should be added, but again you will find people that treat these differently. So, there is some ambiguity in the definition. For that reason, since these are going to cost the company something extra and it's not going to come out of their ordinary cash from their business operations, it's going to have to be something special they've set aside.

I've added all these items here under Restructuring & Legal Liabilities. The only one that I haven't added exactly is the employee benefits up here. The reason is that I'm sort of treating this as a different item. If you keep scrolling down in this section they give some detail on what actually goes into this. And they have employee defined benefit plans here. We went through pension accounting in earlier modules, but the key thing to note here is that this is definitely an unfunded pension because they're saying right here that their obligation exceeds the fair value of plan assets.

So, they have EUR 610 in this first section, and then if you keep going down, they give some more detail on exactly what's in the benefit obligations and the planned assets. But the bottom line is that we're dealing with an unfunded pension here. And in pretty much all cases we would say that the unfunded pension should be added here. Simply because, again it represents another funding source for the long term for the company.

The way to think about it is that their promising employees some amount of payment in the future. And since their not paying them right now, they can continue operating and they'll have this huge future liability that will have to be paid off. Since it's so big it's probably not going to come from the companies ordinary business operations. Again, they're probably going to have to raise funding or coming up with some other plans, such as raising equity, debt, or selling off assets to pay for this in the future. Because of that we would say that this should be added and I'm actually counting it as a separate item here for Unfunded Pension Obligations.

So, with that we've actually been through all these items that go into enterprise value now. Let's do a quick recap and summary of everything here and go through some of the key points. You want to add an item when it is a long-term funding source for the company or when it is going to cost the acquirer something extra when it buys the company. For the long-term funding source, remember it goes back to the definition of enterprise value. You want all the investors in the company, not just the equity investors.

http://breakingintowallstreet.com
You subtract items when you're on the assets side and it is a non-operating asset. Examples would be cash, investments, financial assets, real estate for non-real estate companies, and so on.

I have some notes here on how each item we went through meets the criteria above so you can take a look at these yourself, but the bottom line here is that the enterprise value calculation is always somewhat subjective. You'll see it done different ways, but if you remember the basic definition that it represents the value of the company's core business operations to all the investors in the company, you will be able to get this right.

You're always going to factor in certain items, like cash, debt, and preferred stock. But other items can vary widely by group, firm, and industry. We recommend going back to the definition of enterprise value and the three key rules of thumb above if you want to get this correct.

That's it for this lesson. Coming up next we're going to be going into more detail on those two items I've been mentioning, Equity Investments and Noncontrolling Interests. And then we'll look at some more advanced items like unfunded pensions, and restructuring, and other liabilities, and capital leases in the next few lessons after this.

If you're wondering, by the way, why I skipped over capital leases here, it's actually already included in the company's debt. We just didn't go over it but you could do a search for that on your own and try to find more on it in the company's filings, if you want to do that.