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FINANCIAL MANAGEMENT | BASIC

# Video Transcription: WACC – What, Why and How?



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Good day, my name is Jason. An important concept dealt with in financial management is to calculate the Weighted Average Cost of Capital – more commonly referred to as WACC. Do you understand what this number means and shows us? This video aims to shed more light on this mysterious number.

The assets of a business are funded either by equity, such as share issues, or retained profits or through debts, such as loans or debentures.

You may have heard the saying; “there’s no such thing as a free lunch”. This is very true in business. Financing assets comes at a cost. What are the costs of financing? In terms of equity, these costs are either providing dividends or returns through capital appreciation of shares. The cost of debt is interest charged.

Investors – whether creditors or equity holders – will only provide finance if they are confident of getting a return. A company that fails to provide this return to its finances will fail to obtain future financing, and will struggle to grow and be sustainable.

If the return a company generates from assets is higher than the cost of financing those assets, then the company creates additional value for its shareholders. However, if the return generated from its assets is less than the cost of financing those assets, the company is destroying value, and undermining its ability to obtain future financing.

So how does this relate back to the WACC?

The WACC is a measure of the cost of financing the assets, I’ve described, expressed as a percentage. It is the average rate of return required by all finances of the business and it is determined according to the weighting of each source of finance within the total capital structure of the company.

Expressing the cost of finance as a percentage, allows management to seamlessly incorporate it into the analysis of strategic decisions, as well as other areas of the business. It also allows for easy comparison between companies or divisions.

Let us look at how WACC is calculated. This here represents the weighted cost of debt. Here we have the weighted cost of equity. And finally, we have the weighted cost of preference shares. Let us look at the individual costs.

The cost of debt is calculated as the interest rate, a percentage. The interest rate is the rates of the cost at which the company can borrow funds. Notice that the cost of debt is after considering the tax deduction a company will get from using debts. The tax deduction, results in a lower tax cash flow to the company, which effectively decreases the cost of debt.

It might be that you need to calculate this interest rate. In order to do this one must look at the specific terms of the debt instruments. The cost of equity can be calculated using two different methods.



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The first method, Gordon's dividend growth model, considers the cash flows the company expects to pay its shareholders in the form of dividends while taking into consideration the growth of those dividends in the future.

The second method, the Capital Asset Pricing Model, this tries to establish the risk associated with the share – represented by beta – and determines the required rates of return based on this risk.

The Capital Asset Pricing Model also acknowledges that shareholders would like to obtain a return from the company that is in line with what can be generally expected from the shares as an asset class.

Lastly, the cost of preference shares are the dividends that are paid and is determined according to the terms of the preference shares.

Now, let us see how WACC is incorporated into the decision-making analysis. Take for instance the decision to invest in machinery. This is a long-term strategic decision and we'll analyse it by looking at NPV techniques. Here is a basic example.

The net cash flows represent the additional cash flows or returns we can expect to generate from having this machine, the asset. By using a WACC of 15% as the discount factor we are effectively comparing these returns to the cost of financing the company's assets. In this case the returns generated by the assets are higher than the costs of financing. As such, we have a positive value.

WACC is also used in the discounted cash flow method for valuing the shares of a company. Here is an illustration. Remember that the free cash flow represents the return from a company's operating assets, which are available to pay the finances of the company. By using a WACC of 11.65% as the discount factor we are effectively comparing these returns to the cost of financing. Once again, the returns generated by the company are higher than the cost of financing as we have a positive value.

Looking at it in this way helps make sense of why we do not include financing in cash flows, within the cash flow analysis. If we were to do this we would effectively include the cost of financing twice in the analysis. This is incorrect, and we will understate the benefits of the project. But did you notice how easily the cost of financing the assets was incorporated into the analysis?

Another important observation from both illustrations is that the WACC is compared to future cash flows. This explains why WACC is calculated using the future cost of financing. WACC also plays an important role in determining the performance of a company or a division. Residual income, as well as EVA (Economic Value Added), incorporate WACC when determining their performance, recognising that a division has only performed well if the returns generated by the division is higher than the cost of financing the assets generating those returns. Furthermore, the performance measure return on investments can have some very dysfunctional consequences if it is not compared to WACC.



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This video aimed to explain the concept of WACC; we see that WACC is an essential tool, which a company uses in its decision-making process as well as determining the performance of a division or the company.