#### **BUSINESS VALUE ACCELERATION**

The Magic Formula for Business Valuation: Why Weighted Average Cost of Capital (WACC) is Crucial for Success

BY DR CRAIG WEST, OCTOBER 28, 2024

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In the world of finance, the Weighted Average Cost of Capital (WACC) stands as a cornerstone concept, especially when it comes to **business** valuations. But what exactly is WACC, and why is it so crucial for business success?

This blog aims to unravel the magic formula behind WACC and explore its importance in the realm of business valuation. We'll cover:

Considering the Company's Capital Structure

Detailed steps and components involved in calculating WACC

Practical examples of WACC calculation, plus limitations and considerations

### Why should business owners care about WACC?

Do you know what drives the value of your business? Perhaps more importantly, do you know what factors within your control can increase that value? Understanding how to calculate WACC is an important factor for owners to better understand both of these questions.

Your WACC provides insights into the company's financial health, helping owners (buyers or investors) make more informed decisions about the business's future.

## Understanding the Weighted Average Cost of Capital

The Weighted Average Cost of Capital represents the average rate of return a company is expected to pay to all its security holders, including equity investors and debt holders, to finance its assets. In simpler terms, WACC is the company's cost of capital, where each category of capital is proportionately weighted. This metric is vital for businesses as it provides a benchmark for evaluating investment opportunities and making strategic financial decisions.

The Role of Capital Structure in WACC

The capital structure of a company plays a crucial role in determining its weighted average cost of capital. A company's capital structure refers to the mix of debt and equity financing used to fund its operations. The WACC is a weighted average of the costs of these different sources of capital, with the weights determined by the proportion of each component in the company's capital structure.

A company's capital structure can have a significant impact on its WACC and business valuation. For example, a company with a high proportion of debt in its capital structure may have a higher WACC due to the higher cost of debt financing. On the other hand, a company with a high proportion of equity in its capital structure may have a lower WACC due to the lower cost of equity financing.

#### How WACC is Used in Valuations

WACC plays a pivotal role in business valuations. A company's WACC is crucial in discounted cash flow (DCF) analysis, serving as the discount rate for projecting future cash flows.

Weighted average cost serves as the discount rate used in discounted cash flow (DCF) analysis, which is a method for valuing a company based on its projected future cash flows. By discounting these cash flows back to their present value using WACC, businesses can determine the intrinsic value of their operations. This valuation method is widely used by investors, analysts, and financial professionals to assess the attractiveness of investment opportunities.

Moreover, WACC is instrumental in capital budgeting decisions. Private companies use WACC to evaluate the feasibility of new projects and investments. If the expected return on a project exceeds the WACC, it indicates that the project is likely to generate value for the company. Conversely, if the return is below the WACC, the project may not be worth pursuing.

### Why WACC is Important

The importance of WACC extends beyond its use in valuations. Here are four reasons why WACC is crucial for business success:

#### 1. Benchmark for Investment Decisions

WACC serves as a benchmark for evaluating investment opportunities. By comparing the expected return on an investment to the WACC, businesses can determine whether the investment is likely to generate value. A good weighted average cost of capital is often compared to industry averages to assess a company's risk and investment viability.

### 2. Cost of Financing

WACC represents the cost of financing a company's operations. A lower WACC indicates that the company can finance its operations at a lower cost, which can enhance profitability and competitiveness.

## 3. Risk Assessment

WACC incorporates the risk associated with a company's capital structure. A higher WACC reflects higher risk, while a lower WACC indicates lower risk. This helps businesses assess the risk-return tradeoff of their investment decisions.

### 4. Performance Measurement

WACC is used as a performance measurement tool. By comparing the company's actual return on invested capital (ROIC) to the WACC, businesses can evaluate their financial performance and identify areas for improvement.

## How to calculate WACC (simplified WACC formula calculation)

WACC is found by determining the proportions of debt and equity financing that a company uses to determine the total cost of capital. To calculate WACC, finance professionals use the following formula:

 $WACC = (E/V \times Re) + (D/V \times Rd \times (1 - T))$ 

Where:

E = market value of the firm's equity

D = market value of the firm's debt

V = total market value of the company (E + D)

Re = cost of equity

Rd = cost of debt

T = corporate tax rate

The cost of equity (Re) is typically estimated using the capital asset pricing model (CAPM), which takes into account the company's beta, the market risk premium, and the risk-free rate. The cost of debt (Rd) is typically estimated using the yield to maturity on the company's outstanding debt.

The corporate tax rate (T) is also an important component of the WACC formula, as it affects the after-tax cost of debt financing. Companies can deduct interest payments on their debt from their taxable income, which reduces their tax liability and increases their after-tax cash flows.

A company's capital structure plays a critical role in determining its WACC, and finance professionals must carefully consider the costs of different sources of capital when calculating WACC.

Exploring how different capital structures impact WACC and business valuation.

Calculating WACC involves several components, each of which plays a crucial role in determining the overall cost of capital. The weighted cost of equity and debt are key components — and many misunderstand the cost of debt vs equity in the WACC formula.

Understanding each component of the equation:

- 1. Market Value of Equity (E): This represents the total value of a company's equity, which is calculated by multiplying the current stock price by the number of outstanding shares.
- 2. Total Market Value of Equity and Debt (V): This is the sum of the market value of equity and the market value of debt. It represents the total value of the company's capital.
- 3. Cost of Equity (Re): The cost of equity is the return that equity investors expect to receive on their investment. It is usually estimated using models like the Capital Asset Pricing Model (CAPM), which considers the risk-free rate, market risk premium, and the stock's beta.
- 4. Market Value of Debt (D): This represents the total value of a company's debt, including both short-term and long-term debt. The company's debt is a crucial factor in financial analysis as it impacts metrics like the weighted average cost of capital (WACC).
- 5. Cost of Debt (Rd): The cost of debt is the interest rate the company pays on its debt. It is adjusted for tax savings since interest payments are tax-deductible.
- 6. Corporate Tax Rate (Tc): This is the tax rate that the company pays on its taxable income. The tax shield provided by interest payments reduces the overall cost of debt.

## Practical Example of WACC Calculation

To illustrate the calculation of WACC, let's consider a hypothetical company, XYZ Corp. Suppose XYZ Corp has the following financial data:

Market value of equity (E): \$500 million Market value of debt (D): \$200 million

Cost of equity (Re): 10% Cost of debt (Rd): 5%

Corporate tax rate (Tc): 30%

The company's capital structure, which includes the mix of debt and equity, plays a crucial role in determining these proportions.

First, we calculate the total market value of equity and debt (V):

[V = E + D = \$500 million + \$200 million = \$700 million]

Next, we calculate the weight of equity (E/V) and the weight of debt (D/V):

 $\{E\}\{V\} = $500 \text{ million}$700 \text{ million}\} = 0.714$ 

 $\{D\}\{V\} = \$200 \text{ million}\$700 \text{ million}\} = 0.286$ 

Now, we can calculate the WACC:

WACC =  $(0.714 \times 10\%) + (0.286 \times 5\% \times (1 - 0.30))$ 

WACC = 7.14% + 1.00% = 8.14%

Therefore, the WACC for XYZ Corp is 8.14%. This means that XYZ Corp needs to generate a return of at least 8.14% on its investments to satisfy its equity and debt holders.

#### Limitations and Considerations

While WACC is a widely used metric in corporate finance, it has several limitations and considerations that finance professionals should be aware of.

One of the main limitations of WACC is that it assumes that the company's capital structure is constant over time. However, companies often change their capital structure in response to changes in their business or market conditions. For example, a company may issue more debt to finance a new project or repurchase shares to reduce its equity base.

Another limitation of WACC is that it does not take into account the impact of inflation on the cost of capital. Inflation can increase the cost of debt financing and reduce the value of the company's assets, which can affect its WACC.

Finally, WACC does not account for the impact of risk on the cost of capital. Companies with higher levels of risk may require a higher return on investment to compensate for the increased risk, which can affect their WACC.

To address these limitations, finance professionals may use alternative metrics, such as the adjusted present value (APV) or the flow-to-equity (FTE) method, which take into account the impact of inflation and risk on the cost of capital.

Potential pitfalls and considerations when using WACC in business valuation.

In conclusion, the Weighted Average Cost of Capital (WACC) is a fundamental concept in finance that plays a crucial role in business valuations and investment decisions. For a publicly traded company, financial reporting requirements provide more accurate data for these calculations compared to privately owned companies.

While WACC is a useful metric for estimating a company's cost of capital, it has several limitations and considerations that finance professionals should be aware of. By understanding these limitations, finance professionals can use WACC more effectively in their analysis.

Using WACC, business owners can make informed financial decisions, evaluate investment opportunities, and enhance their company's profitability and competitiveness. Whether you are a seasoned business owner or a budding entrepreneur, mastering the concept of WACC can provide you with valuable insights and a competitive edge in the world of business.



# Dr Craig West

Founder & Chairman | Succession Plus

Dr Craig West is a strategic accountant who has over 20 years of experience advising business owners.

With a background as an accountant in practice and two master's degrees, Craig formed a strong view that the majority of business owners (and often their advisers) were unprepared and unaware of the steps required to prepare for exit. He then designed and documented a unique 21-Step Business Succession and Exit Planning process to assist owners and their advisers in navigating this process.

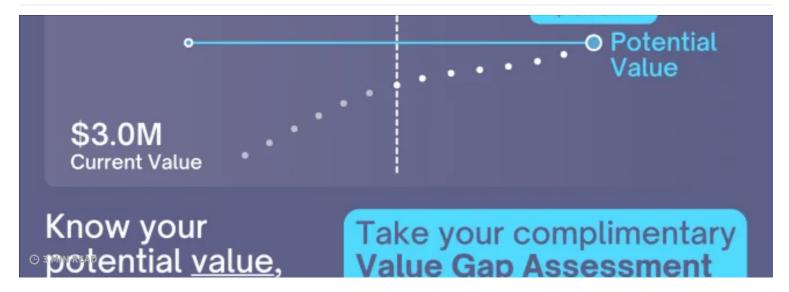
Craig now acts as a strategic business and financial mentor for mid-market business owners. Craig has written four critically acclaimed books educating business owners on employee incentives, succession planning, asset protection, and exit strategies. Additionally, he has completed doctoral research on Employee Share Ownership Plans (ESOPs) for succession.

Craig is a Member of the Forbes Business Council where he leverages his extensive experience to contribute valuable insights on helping business leaders navigate the complexities of growing and exiting their businesses.

In April 2024, the Exit Planning Institute admitted Craig to the International Exit Planning Circle of Excellence.

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