Part 2 of 24

# The Economics of Capital: Understanding What You Are Actually Investing

The cost of capital, opportunity cost, and the economic framework that governs every investment decision a CFO makes

**CONTENTS OF THIS PART**

## WHAT YOU WILL LEARN AND WHY IT MATTERS

Every capital allocation decision is implicitly an answer to the question: is the expected return on this investment worth the cost of the capital required to fund it? Answering that question rigorously requires a precise understanding of what capital actually costs — not just the interest rate on a loan or the dilution from an equity round, but the full economic cost of deploying scarce financial resources in one direction rather than another.

This part covers the economics of capital in the depth required for genuine capital allocation practice: the components of the weighted average cost of capital, how to estimate WACC for a private growth-stage company without the market data that public company WACC calculations depend on, the concept of opportunity cost as the governing framework for all investment decisions, and how the cost of capital changes as a company moves through its financing stages. Understanding these concepts with precision is the prerequisite for applying the investment evaluation frameworks covered in Part Three.

## THE COMPONENTS OF CAPITAL COST

Capital has two primary forms — debt and equity — and each carries a distinct cost that reflects the risk borne by the provider of that capital.

The cost of debt is the interest rate required by lenders to provide financing, adjusted for the tax shield that interest payments provide in a taxable entity. For a company paying eight percent interest on a venture debt facility, with a marginal tax rate of twenty-five percent, the after-tax cost of debt is six percent — the six percent that the company effectively pays after the tax benefit of deducting the interest expense. The cost of debt is relatively straightforward to calculate because it is contractually specified in the loan agreement.

The cost of equity is the return that equity investors require to compensate them for the risk of holding the company's equity. Unlike debt, the cost of equity is not contractually specified and must be estimated. For public companies, the cost of equity is typically estimated using the Capital Asset Pricing Model, which combines the risk-free rate — typically the yield on long-term government bonds — with a premium for the systematic risk of the specific equity, calibrated by the company's beta relative to the market. For private growth-stage companies, the CAPM approach requires significant modification because the market-observable inputs it depends on are not available.

The weighted average cost of capital combines the cost of debt and the cost of equity, weighted by their respective proportions in the company's capital structure. A company financed with thirty percent debt at an after-tax cost of six percent and seventy percent equity at a cost of twenty percent has a WACC of approximately sixteen percent — the blended cost of all the capital the company has deployed. This WACC is the minimum acceptable return the company must earn on its investments to create rather than destroy value: investments that return more than sixteen percent create value for all capital providers;

investments that return less destroy it.

For most growth-stage companies, the WACC is dominated by the cost of equity because equity represents the large majority of the capital structure. Venture-backed companies typically have minimal debt in their early stages, and when debt is added through venture debt facilities, it typically represents a small fraction of total capitalization. The practical implication is that the cost of capital for most growth-stage investment decisions is essentially the cost of equity — the return that venture investors require to compensate them for the risk they are bearing.

### ESTIMATING THE COST OF EQUITY FOR PRIVATE COMPANIES

Estimating the cost of equity for a private growth-stage company requires a combination of analytical framework and informed judgment that goes beyond the mechanical application of the CAPM. The three most useful approaches are the venture capital method, the comparable public company approach, and the build-up method.

The venture capital method works backward from the target return that venture investors require. A typical early-stage venture investor expects a return of thirty to forty percent annually on their portfolio, reflecting the high probability of loss on individual investments combined with the requirement for substantial gains on winners to compensate for those losses. This required return — thirty to forty percent for early-stage investments, declining toward twenty to twenty-five percent for later-stage investments where risk is lower — is the cost of equity for the capital provided by those investors. It is the hurdle rate that investments funded by that equity capital must clear to create value for shareholders.

The comparable public company approach uses the observed cost of equity for publicly traded companies in the same industry and of similar risk profile as a reference point, then adjusts for the additional risk factors of private company status: the illiquidity premium that private equity requires to compensate for the absence of a liquid market for the shares, and the company-specific risk premium that reflects the concentration risk of investing in a single private company rather than a diversified portfolio. These adjustments typically add five to fifteen percentage points to the public company cost of equity, producing private company cost of equity estimates in the twenty to thirty-five percent range for growth-stage software companies.

The build-up method constructs the cost of equity from its component premia: the risk-free rate, a general equity risk premium reflecting the expected return of equities above the risk-free rate, an industry-specific risk premium reflecting the systematic risk of the specific industry, a size premium reflecting the additional risk of smaller companies, and a company-specific risk premium reflecting the idiosyncratic risks of the specific business. This approach is the most analytically transparent but also the most sensitive to the judgment embedded in each component premium.

For practical capital allocation purposes, most growth-stage CFOs use a required return threshold of twenty to thirty percent as the hurdle rate for significant investment decisions — a range that is consistent with the cost of equity implied by all three estimation approaches and that provides a meaningful discipline against low-return investments without being so demanding that all growth investments fail to clear it. The specific threshold should be calibrated to the stage of the company: earlier-stage companies with higher risk should use higher thresholds, later-stage companies approaching profitability can use lower thresholds that reflect their reduced risk profile.

### OPPORTUNITY COST: THE GOVERNING CONCEPT

The most important concept in capital allocation is not the weighted average cost of capital — it is opportunity cost. Opportunity cost is the value of the best alternative use of the resources being considered for a specific investment. When a company decides to invest three million dollars in expanding its sales team, the opportunity cost of that decision is the return that the three million dollars would have generated if deployed in its next-best alternative use — product development, geographic expansion, a strategic acquisition, or simply held as cash to extend the runway.

Opportunity cost is the concept that makes capital allocation genuinely difficult and genuinely important. If resources were unlimited — if every investment could be funded without foregoing another — capital allocation would be simple: invest in everything with a positive expected return. But resources are finite, and the decision to deploy capital in one direction is simultaneously the decision not to deploy it in another. The quality of the capital allocation decision depends not only on the absolute expected return of the chosen investment but on its return relative to the best available alternative.

The practical implication for capital allocation practice is that investment decisions should never be evaluated in isolation. Every significant investment proposal should be considered in the context of what else the same resources could do — what other investment opportunities exist, what the expected returns of those alternatives are, and whether the proposed investment is genuinely the highest-return available deployment of the capital being committed.

This portfolio perspective is what most investment evaluation processes lack. A company that evaluates each investment proposal on its standalone merits — approving every proposal that exceeds the hurdle rate — without considering how the approved investments collectively consume the available resource pool will systematically over-commit resources to a portfolio of acceptable investments while missing the opportunity to concentrate resources in the most exceptional ones. The discipline of explicitly comparing competing investments and making explicit prioritization choices is what elevates capital allocation from investment evaluation to genuine portfolio management.

### HOW THE COST OF CAPITAL CHANGES ACROSS COMPANY STAGES

The cost of capital is not static. It changes as the company grows, as its risk profile evolves, as its capital structure becomes more complex, and as the available financing instruments change. Understanding how the cost of capital evolves across company stages is important for calibrating the hurdle rates used in investment evaluation at each stage and for anticipating how the economics of investment decisions will change as the company develops.

At Series A and B, the company is typically pre-revenue or in early revenue generation, with significant uncertainty about the viability of the business model, the size of the addressable market, and the organization's ability to execute. The cost of equity at this stage is highest — thirty-five to fifty percent for the most sophisticated venture investors pricing in the risk of complete loss — and the weighted average cost of capital is essentially equal to the cost of equity because debt is rarely available in meaningful amounts at this stage. Investment decisions at Series A and B should be evaluated against high hurdle rates that reflect this elevated cost of capital, which means that the investments that clear the hurdle are those with the potential for very large returns — not modest, reliable improvements but step-change capability developments or market positions.

At Series C and D, the company has demonstrated some degree of business model viability, revenue growth, and organizational execution capability. The cost of equity declines as risk declines — typically to the twenty to thirty percent range for companies showing strong metrics — and venture debt becomes available as a complementary financing instrument. The blended cost of capital may decline modestly as the debt component grows, but equity still dominates and the hurdle rate for investment decisions remains meaningfully above the hurdle rates that mature businesses apply.

At Series E and pre-IPO stages, the company is approaching the risk profile of a small public company. Revenue is substantial, the business model is validated, and the path to profitability is credible. The cost of equity declines further — into the fifteen to twenty-five percent range for companies with strong metrics and credible public market comparables — and the capital structure may include more substantial debt instruments. As the company approaches a public offering, the cost of capital begins to converge toward the public market cost of capital for comparable companies, which is typically the most significant reduction in capital cost the company will experience outside of a fundamental change in its risk profile.

### COMMUNICATING CAPITAL COST AND CAPITAL DISCIPLINE

One of the most important and most neglected aspects of capital allocation leadership is the communication of capital cost and capital discipline to non-finance audiences. Business leaders who do not understand what capital costs — who treat the company's financial resources as free goods to be competed for rather than as scarce inputs to be allocated based on expected returns — will consistently propose investments that do not meet the returns required by capital providers, and will be confused and frustrated when those proposals are rejected.

The communication of capital cost to business leaders should be direct and concrete rather than abstract and theoretical. Saying that the company's cost of equity is twenty-five percent means little to most non-finance executives. Saying that every dollar of capital the company invests needs to return at least a dollar and a quarter within four years, or the company is destroying the value that investors provided, is concrete and actionable. Translating the abstract cost of capital into specific investment hurdles — the minimum revenue return required per dollar of sales team investment, the minimum customer lifetime value required per dollar of customer acquisition cost — gives business leaders the language they need to apply capital discipline in their own operational decision-making.

The communication of capital discipline — the organizational expectation that resource commitments will be analyzed, justified against alternatives, and tracked against projected outcomes — requires equal clarity and consistency. Business leaders who have never been asked to produce an investment case, who have never seen a post-investment review of a prior commitment, and who have never experienced a formal reallocation of resources away from an underperforming initiative will not understand or respect the discipline until they have experienced it operating with genuine organizational consequences. The CFO who introduces capital discipline as a concept without backing it with process and accountability will find that the discipline exists on paper but not in practice.

### ACTIONS TO TAKE IN THE NEXT THIRTY DAYS

The following actions translate the conceptual framework of this part into practical near-term steps that will immediately improve capital allocation discipline in your organization.

The first action is to establish a formal investment hurdle rate for your organization, calibrated to your current stage and financing structure. Document the rationale for the chosen rate, share it with the senior leadership team, and make it the explicit standard against which all significant investment proposals will be evaluated. The act of establishing and communicating a formal hurdle rate creates the organizational expectation that capital is not free and that investment returns matter.

The second action is to review your three most recent significant investment approvals against the hurdle rate. Did each investment project a return above the hurdle? If the investments were not evaluated against an explicit hurdle rate when they were approved, estimate the projected return now using the financial information available and assess whether each clears the threshold. The exercise will reveal whether prior investment decisions were consistent with the capital discipline the hurdle rate implies.

The third action is to identify your organization's top three competing investment opportunities for the next six months — the significant resource commitments under active consideration — and explicitly compare their expected returns using a consistent analytical framework. Rather than evaluating each in isolation, lay them side by side and ask: if we can only fund two of the three, which two produce the highest combined expected value? This portfolio comparison exercise, even if informal at this stage, begins building the opportunity cost thinking that characterizes excellent capital allocation.

The fourth action is to schedule a conversation with your lead investors about their return expectations for capital deployed by the company. Understanding explicitly what return your equity investors require — and how their expectations differ from the hurdle rates currently applied in the organization's investment decisions — will reveal whether the current allocation discipline is aligned with the expectations of the people whose capital is being deployed.

**CLOSING PERSPECTIVE**

The economics of capital are the foundation on which every investment decision in this series is built. A CFO who understands precisely what capital costs, why opportunity cost is the governing concept in allocation decisions, and how the cost of capital evolves across company stages will approach every investment evaluation with the analytical rigor that the decision deserves.

The investment evaluation frameworks covered in Part Three — NPV, IRR, payback period, and their respective strengths and limitations — are the tools that translate this economic understanding into specific, quantitative assessments of investment quality. They are powerful tools. Their power depends entirely on the rigor of the capital cost assumptions that anchor them.

COMING NEXT IN THE SERIES

## Part 3 — Investment Evaluation Frameworks: NPV, IRR, and Payback in Full Depth

With the cost of capital established, Part Three covers the three primary investment evaluation frameworks in full analytical depth — what each measures, where each misleads, and how to use them together to produce investment assessments that are rigorous, credible, and decision-relevant.