



# Capital budgeting and the Small and Medium-sized Enterprise (SME)

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The allocation of capital in small and middle- sized companies is as important as it is in large corporations. However, given their lack of access to capital markets, capital budgeting is often more important to SMEs because the funds necessary to correct investment mistakes may not be available. Also, large corporations allocate capital to numerous projects, so a mistake on one can be offset by success on the others. Smaller companies do not have this luxury and even though capital budgeting is vitally important for them very few do a good job of it.

Capital budgeting deals with the allocation of financial resources by companies to make investments that are expected to generate long-term returns. This encompasses investments in new or replacement of obsolete equipment or technology, expansion of existing products or markets, expansion into new products or markets, or investments in research and development. The goal of preparing a capital budget is to select those investments the company believes have the best chance of generating returns that exceed the opportunity costs of capital.

Capital budgets compile the expected cash outflows and inflows of project alternatives over a period of years. These cash flows are then discounted back to their “present values” using discount rates equal to the opportunity costs of capital. If a proposed project has a positive net present value (NPV), then this indicates that the expected cash flow from the project will earn more for the company than the cost of capital to finance it. If there are multiple projects with positive NPVs, then management should select those projects with the highest NPVs.

Other measures used for capital budgeting include payback period and internal rate of return (IRR). The payback period measures the amount of time until the invested capital is recovered. Projects with shorter payback periods would generally be selected, as estimates of longer-term cash flows will be viewed as being

more risky. However, a drawback with using payback period to select capital projects is that this method does not focus on cash flows beyond the cost recovery period. The IRR, on the other hand, is a measure of the % of financial return on a capital investment. IRR is compared to the company's opportunity cost of capital and projects with the highest IRR are selected. As IRR is a focus on solely the % return, it is not as useful as a measure of NPV, which focuses on the net present value in say Kenya Shillings (KES).

The single most appealing argument for the use of NPV in capital budgeting is that it gives an explicit measure of the effect the investment will have on the company's value. If NPV for a project is positive, this project will increase the company's value. The cost of capital used to discount cash flows to present value is the company's "opportunity cost of capital", or the required rate of return or "hurdle rate". This rate of return is based on what investors could get elsewhere and is typically the weighted average cost of capital (WACC) encompassing proportions of debt and equity financing taken up by the company.

Retaining earnings also have a cost associated with them. To simplify this concept, after a company generates earnings, who theoretically owns that money? The shareholders, right? But when earnings are retained management is investing these funds on behalf of the shareholders back into the company. As such shareholders will expect some return on the money retained in the company. Their return should be at least the same amount as if they had received the retained earnings in the form of dividends and then reinvested these funds to purchase more stock in the company. At this point it therefore becomes necessary to compute the expected return on the company's equity capital.

One common finance formula computes cost of equity capital based on adding a risk premium to a "risk-free" rate of return (such as that on a medium to long-term government bond). The risk premium is computed as the excess expected return for the overall equity market over the "risk-free" return multiplied by the volatility (beta) for that specific investment. As beta is not published for privately held firms, beta values for publicly traded stock in a similar industry are used. With this information the expected return for a publicly-traded stock is computed and as an investment in a privately-held company is inherently more risky (due to among others its illiquidity) an additional risk premium is added to its calculated cost of equity.

### **Illustration**

One of our clients is a middle-sized cement manufacturing company exploring possibilities to grow market share. A similar publicly-traded company such as East Africa Portland Cement Ltd. (PORT) may show a current beta (volatility) of .84. Assuming a risk-free short-term Kenya treasury bill currently returns 5.0% and the public equity market (NSE All-share index) is averaging returns of 10.0%; while additionally East African Portland Cement Ltd. believes that its specific risk factors given size of company, earnings history and, more importantly, industry risks require an additional 8.0% expected return.

As such, PORT's cost of equity capital is computed as:

$$(5.0\% + (.84 \times (10.0\% - 5.0\%)) + 8.0\%) = 17.2\%.$$

As a privately-held firm, we would add an additional risk premium to this calculated cost of equity that may increase the expected return another say 5.0% or more. As such our client's cost of equity becomes 22.2%. This means shareholders of our client expect a 22.2 % return on the money being reinvested for them.

Capital budgeting is thus a powerful tool that can increase the firm's probability for successful returns on its use of capital. Capital budgeting will also help a company prevent making mistakes in allocating funds to the wrong projects, such as investing in a new service or product that has very few entry barriers or is susceptible to obsolescence or has increasing price pressures from current suppliers.

For capital budgeting to be an effective tool, cash flow forecasts have to be realistic, which means conservative. The axiom that it is better to error on the side of conservatism is gospel for forecasting longer-term cash flows. This is especially true in today's business world in which competitors and markets react very quickly. When forecasting cash flows, we develop a "decision tree" in which we analyse what we consider to be potential future results. We then assign probabilities to these different scenarios and through this process come to an agreement with the client management on the projection they feel is most likely. We further employ risk management tools (like the Monte Carlo simulation) to enhance the robustness of the forecasts.

#### **Resources:**

Association of Chartered Certified Accountants (2013) *Advanced Financial Management* Wokingham: Kaplan Publishing

Richard, P., Neale, B. & Linsley, P (2012) *Corporate Finance and Investment: Decisions and Strategies* Harlow: Pearson Education Limited