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Capital Budgeting Necessary for Large and Small Firms

The allocation of capital in small firms is as important as it is large ones. In fact, given their lack of access to capital markets, it is often more important in the small firm, because the funds necessary to correct a mistake may not be available. Also, large firms allocate capital to numerous projects, so a mistake on one can be offset by success with others. Small firms do not have this luxury. Even though capital budgeting is vitally important to small firms, 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 for 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 has the best chance of generating returns that exceed its opportunity cost 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 value” using discount rates equal to the opportunity cost of capital. If a proposed project has a net positive net present value (NPV), then this indicates that the expected cash flows from the project earn more for the company than the cost of capital to finance it. If there are multiple projects with positive NPV, then management should select those projects with the highest NPV.

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 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 NPV, which focuses on the net present value in dollars.

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 firm’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. There are financial formulas to compute the cost of debt, preferred stock and common stock. Retained earnings also has a cost to the company. 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.

This is where it gets more complicated. At this point you will need 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 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, utilize beta that is published for a publicly traded stock in a similar industry. With this information you will compute the expected return for a publicly traded stock. As an investment in a privately held company is inherently more risky as it is in most cases illiquid, you will then add additional risk premiums to your calculated cost of equity.

For example, your firm is an IT Services firm exploring investments to grow market share. A similar publicly traded company may be iGate. Data for iGate shows a current beta (volatility) of 2.5. Risk free intermediate term U.S. debt returns currently return 3.375%. Assume the public equity market is averaging returns of 5%. As such, iGate's cost of equity capital (before additional risk premiums specific to iGate) is computed as .03375 + (2.5 x (.05-.03375)) = 7.5%. As a privately held firm, you would add additional risk premiums to this calculated cost of equity that may increase the expected return another 10%. As such, your firm's cost of equity is 18%. This means shareholders of your company expect an 18% return on the money being reinvested for them

Capital budgeting is a powerful tool that can increase the firm's probability for successful returns on their use of capital. Capital budgeting will also help a company from making a mistake of allocating funds to the wrong projects. Such as investing in developing a new service or product offering that has very little entry barriers, is susceptible to obsolescence, and there is increasing price pressures on current providers. Had firms in the telecom industry, and many internet start-ups, performed proper, realistic capital budgeting, then there may not have been such dramatic collapses in these overspent markets.

The lesson learned is 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, it is best to develop a "decision tree" in which you analyze what you consider to be potential future results. Assign probabilities to these different scenarios, and through this process management should come to agreement on the projection they feel is most likely.

If you need assistance with your capital budgeting needs, please contact Harvest CFO Consulting by telephone 724-934-4752, or e-mail dhillier@harvestcfo.com. Also, please visit our website at www.harvestcfo.com.

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