

Long term financing paper final



Running head: Long-Term Financing Long-Term Financing University of Phoenix Online Introduction to Finance and Accounting MMPBL-503 James R. Sullivan November 3, 2008 Long-Term Financing An established company is considering expanding its operations, and to achieve their business objectives, the company will require additional long-term capital financing. Long-term financing involves debt or equity instruments with greater than one-year maturities, and the cost of this long-term capital can be calculated using either the Capital Asset Pricing (CAPM) or Discounted Cash Flows (DCF) Model.

The organization will have to compare and contrast the Capital Asset Pricing Model with the Discounted Cash Flows Model. The skill of comparing and contrasting financial options will help evaluate and organize the debt/equity mix and dividend policy. The organization must then decide what type of long-term finance alternatives will most likely benefit. Capital Asset Pricing Model and the Discounted Cash Flows Model Capital Asset Pricing Model is a linear relationship between returns on individual stocks and stock market returns over time (Block & Hirt, 2005).

One use of CAPM is to analyze the performance of mutual funds and other portfolios (CAPM, 2008). Although, more than one formula exists for the CAPM, the most common is referred to as the market risk premium model presented below (Block & Hirt, 2005): $r = R_f + \beta (K_m - R_f)$ Where: r is the expected return rate on a security R_f = the risk free rate of return (cash)

B = beta coefficient, or historical volatility of common stock relative to market index K_m = is the return rate of the appropriate asset class The

market risk premium formula assumes that the rate of return or premium demanded by investors is directly proportional to the perceived risk associated with the common stock. Beta measures the volatility of the security relative to the asset class. The equation is saying that investors require higher levels of expected returns to compensate them for higher expected risk.

This formula can be thought as predicting a security's behavior as a function of beta: CAPM says that if a person knows a security's beta then they know the value of (r) that investors expect it to have (see graph below) (CAPM, 2008). [pic] More volatile stocks will have a beta coefficient greater than 1. 0, whereas less volatile stocks will have a beta less than 1. 0. If the risk free rate of return (R_f) and average market return (K_m) are considered fixed, then the required rate of return for company stock can be calculated for the required rate of return.

As an example, if the market risk premium ($K_m - R_f$) is 6% and a risk free rate of return (R_f) is 4%, then the required rate of return would equal 10% for $B = 1$ and 16% for $B = 2$. The Discounted Cash Flow Model (DCF) is another standard way of determining the cost of equity. It assumes that a firm's current stock price is equal to the present (discounted) value of all expected future dividends from the investment (Utility Regulation, 2008). Modern financial theory contends that the price of a firm's stock is the present value of the future cash flows discounted at an appropriate interest rate (Freeman & Gagne, 1992).

To calculate the current stock value, calculate the present value of future dividends and growth in the value of the stock at some future date. The discount rate used for this present value calculation is the weighted average cost of capital for the firm. Both the CAPM and DCF models involve applying data from a single or group of companies, to evaluate the current stock value of a single company. CAPM is more objective and complicated, and requires more calculation and data from the market. DCF is more subjective and simplified.

One such DCF assumption is that future dividends will grow forever at a constant rate. Since this assumption is not always true, the DCF method gives a more qualitative estimate of the cost of capital. Limitations of CAPM includes, model uncertainty, it is difficult to know for sure if the use of the model is theoretically correct. Input uncertainty, is another limitation, it is difficult to estimate the appropriate risk premiums accurately (CAPM limitations, 2008). Limitations of the DCF model include miss growth options, options to expand and options to redirect (DCF, 2008).

Debt/Equity Mix Debt/equity mix is a financing strategy used by companies to help fund the business or other investments. Most companies use a combination of both in order to ensure stability and to keep long-term cost down. Debt is the borrowing of money from other lenders such as finance companies and banks. “ Corporate debt has increased dramatically in the last three decades. ” (Block & Hirt, pg. 468) Other forms of debt include issuing bonds and leasing. Debt has become a common item on balance sheet for many companies, including those just starting out.

Debt financing allows companies to finance without having to sell stock or bring in more partners. The major benefit for debt financing, unlike with equity financing, the owner retains full ownership of their business. Bringing in more partners or stockholders in a company causes the loss of primary ownership and possibly the loss of the reason the company was created. Equity is another form of financing. Equity is also used by large and small companies. Equity is financed by other people. With equity financing the initial owner/borrower has a greater risk of losing their company to the partners that have become involved.

On the other hand the borrower in an equity finance loan has flexibility on repayment terms and the form of repayment (ie. cash, stock, bonds or services). However, most major corporations have a mixture of debt and equity with making sure they do not have too much leverage in either one. The formula for figuring out what a company's debt-equity ratio is: (Block & Hirt) $\text{Debt/Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Shareholders' Equity}}$ Dividend Policy A company's dividend policy is up to the company and the profits that are made. If the company is just starting out they may not want to pay dividends to their stockholders.

A beginning company may want to reinvest any earnings that are made in order to help the company expand. " In choosing either to pay a dividend to stockholders or to reinvest the funds in the company, management's first consideration is whether the firm will be able to earn a higher return for the stockholders" (Block & Hirt, pg. 547). When deciding on a dividend policy the stockholders preference must be considered. The stockholder may or may

not want to receive dividends and may only have concern with the value of their investment at relinquishment time.

If expanding a business the dividends that are normally sent out will possibly be lower to help cover the cost of expanding. The expansion may also cause the dividends to increase. Some investors care about the future earnings and the increase that may occur because of the expansion and earnings increase. Characteristics and Costs of Debt and Equity Instruments The purchasers of equity instruments have the rights to vote on issues, gain ownership and future earnings of the business. Examples of equity instruments are common stock, preferred stock and retained earnings. Ask Dr Econ, (2008) Common stock is a form of equity instruments, advantages are the common stockholders will share in the company's profitability, does not have to repay investment, dividends, and the votes can influence management. The disadvantages of common stock, the vote may dilute the management's interest in the corporation's growth, and the non-management stockholders can increase in the voting power, and the maximum risk falls on the investor. (Raymond, 2002) The cost of common equity is important as "the ultimate ownership of the firm resides in common stock" (Block & Hirt, 2005).

The cost of issuing new common stock is expressed as: $K_n = D_1 / (P_o - F) + g$
 D_1 = First year common dividend, P_o = Price of common stock, F = Flotation selling costs, g = Constant growth rate in earnings (Block & Hirt, 2005)

Preferred stock is another form of equity instruments, advantages are stocks offers stipulated dividend on an annual or semi-annual basis, preference rights over common stock and dividend payments and liquidating

distributions. The dividends can accrue at a certain rate and paid on a cumulative basis.

The disadvantage " includes a subordination of dividends to be paid on common stock and limitations on the use of corporate fund to the extent that pre-established dividend payments. " (Raymond, 2002) The cost of issuing new preferred stock is: $K_p = \frac{D_p}{P_p - F}$ Where D_p = Preferred dividend, P_p = price of preferred stock, and F = Flotation selling costs. (Block & Hirt, 2005) Retained earnings are equivalent to " past and present earnings of the firm minus previously distributed dividends" (Block & Hirt, 2005).

In order to convince shareholders that earnings will equal larger dividends and equity later, it is important to calculate the present value of projected future cash flow. The equation for cost of retained earnings is equivalent to the cost of existing common stock $K_e = \frac{D_1}{P_0} + g$ This can be used to reacquire outstanding treasury stock at market price. The cost of retained earnings does not include the flotation or sales cost associated with new issues of common or preferred stock. (Block & Hirt, 2005) Debt instruments are requires a fixed payment with interest, examples are bonds, government or corporation and mortgages. Ask Dr Econ, 2008) Bondholders do not gain ownership, paid before other expenses, less risky and not entitle to future profits in the business. (Raymond, 2002). Disadvantages include potential restrictions on operations, limitations on the use of working capital" (Raymond, 2002). Bond financing includes the zero-coupon rate bond and the floating rate bond. The cost of debt is measured by the after-tax cost of debt and must be calculated as follows: $K_d = \text{Yield} (1 - t)$ where Yield = yield to maturity and t = tax rate

The yield to maturity of a bond is dependent on a number of variables: annual interest payment, principal payment, bond price and years to maturity. The yield to maturity for a bond can be calculated using a bond table, or using the equation below: $Y' = \frac{\text{annual interest payment} + (\text{principal payment} - \text{bond price}) / \text{years to maturity}}{\text{bond price}}$ (Block & Hirt, 2005) Evaluation of Long-Term Financing Alternatives Organizations have several opportunities for alternative long-term financing to help the organization expand and grow, raise capital depleted by inflation and to supplement insufficient funds generated internally by the organization.

Debts for organizations have risen over the past three decades.

Organizations are faced with the task of continuing to raise capital to cover the organization's debts. Organizations can use bonds, stocks, leasing and other options as options for long-term financing Bonds Most large organizations use corporate bonds for long-term financing. " The bond agreement specifies such basic items as the par value, the coupon rate, and the maturity date" (Block & Hirt, 2005). The initial value of a bond is the bond's par value or face value. The interest rate on the bond is the coupon rate.

The fluctuation of interest rates in the market affect the coupon rate of the bond after the bond has been issued. The ending date in which repayment of the principal of the bond is due is the maturity date. The bond agreement or indenture is the legal document that covers the bond from issuance to repayment. Organizations can put up a secured bond offering such as a mortgage agreement, where specific assets are promised to bondholders should they default on the bond or choose an unsecured, or debenture bond

offering which doesn't specify a specific asset. Stocks Common stock is on way an organization can secure long-term equity financing.

Common stock is issued at a price per share to relatives, friends and investors. The funds are used by the organization to help the organization grow. The organization can issued to stockholders as dividends to show a payback on the capital investment. The remaining funds after the organization pays out dividends become retained earnings for the organization and are reinvested back into the organization. Individuals who have ownership in the organization can hold preferred stock. Preferred stock holders are repaid first should the organization file for bankruptcy.

Leasing Organizations can lease assets instead of financing them. Leasing can give an organization that is short on funds or is not credit worthy enough to borrow funds a way to obtain assets. Leasing an asset is generally more expensive than purchasing the asset. By leasing assets, the organization reduces cash outflow so they can use those funds for other ventures. Organizations can lease assets such as furniture, equipment and land. The organization can choose a Capital Lease agreement where the organization purchases the asset at the end of the lease period.

Organizations in a higher tax bracket can take advantage of a depreciation write-off tax advantage by purchasing an asset and leasing the asset to another organization in a lower tax bracket. Other Alternatives Organizations can use Factoring to borrow capital. The factor generally charges higher interest rates than banks. Factors generally review credit history, but the organization may still be able to borrow due to the quality of the

organization's collateral rather than their project projections. Conclusion
Expanding a company can be a big step and many plans must be laid out and consider before the final decision can be made.

Cost is the biggest factor that must be considered when expanding. The second factor to consider is who or how the cost is going to be covered. Most companies consider their finance options. Financing options that should be considered include taking on more debt, issuing bonds, and selling stock. With these options the interest rate, the selling price of the stock and how much of the company they would like to give up all must be considered when choosing an option. The better option would be to do a mix of all of the financing options to keep the balance sheet leveled, and the company in good financial standing.

References Ask Dr Econ. (2008) " Federal Reserve Bank of San Francisco: What are the differences between debt and equity markets? " Retrieved October 31, 2008 from <http://www.frbsf.org/education/activities/drecon/answerxml.cfm?selectedurl=/2005/0510.html> Block, S. B. , & Hirt, G. A. , (2005). Foundations of Financial Management (11th ed.). New York: McGraw-Hill. Capital Asset Pricing Model, (2008). Retrieved October 31, 2008, from <http://www.moneychimp.com/glossary/capm/htm>. Capital Asset Pricing Model