

Course work on financial analysis

[Business](#), [Marketing](#)



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1. Bevan Industries' current cost of capital

Discussed hereunder is the step by step calculation of Bevan Industries' current cost of capital (Barber, 2004).

Cost of Debt (Cd)

$$Cd = I (1 - TR)$$

Where I is the Interest Rate on Debt

TR is the Tax Rate

$$Cd = \{(30,000,000 \times 0.06) / 25,000,000\} \times (1 - 0.28)$$

$$= 0.072 \times 0.72 = 0.05184$$

$$= 5.184\%$$

Cost of Common Stock (Ccs)

Based on the given information, the cost of common stock is calculated using the formula

$$Ccs = Cd + \text{risk premium}$$

$$rf = (20 \times 8) / 160 = 1 \text{ (rf is the risk free rate)}$$

$$Ccs = 5.184 + 0.75(1)$$

$$= 5.934\%.$$

Cost of Preferred Stock (Cps)

$$Cps = \{ \text{preferred stock dividend} / \text{market price of preferred stock} (1 - \text{flotation cost}) \}$$

In this case, there is no flotation cost, thus

$$Cps = \text{preferred stock dividend} / \text{market price of preferred stock}$$

$$= (0.04 \times 100) / 20$$

$$= 20\%$$

Weighted Average Cost of Capital (WACC) is given by the sum of the above components.

$$WACC = Cd + Ccs + Cps$$

$$= 5.184\% + 5.934\% + 20\%$$

$$= 31.118\%.$$

2. The new financial requirement

The working capital falls by about £15m, while the additional investment costs £75m.

Total additional cost = £75m - £15m = £60m.

Total investment = £290m - £60m = £230m.

3. The three proposed financing options

Weighted Average Cost of Capital (WACC) can be found using the formula below (Barber, 2004).

$$WACC = (M_d/V) \times k(1-T) + (M_p/V) \times \{D_p/P_p(1-F_p)\} + (M_c/V) \times \{g + D_c(1+g)/P_c(1-F_c)\}$$

Where

V is the firm's total value given by the sum of the debt, the preferred stock and the Common stock.

M_d is the market value of the debt; M_p is the market value of the preferred stock; and M_c is the market value of the Common stock.

k is the current market interest rate; and T is the tax rate.

D_p is the annual dividends for the preferred shares; P_p is the market price of the preferred shares; and F_p the flotation costs of preferred shares.

D_c, P_c, and F_c are the dividend, market price, and flotation costs of common stock respectively.

First option (debt)

$$\text{Cost of debt} = \{(100m \times 0.06)/230m\} = 2.6\%$$

Second option (common stock)

Cost of Common stock = $100\text{m}/230\text{m} = 43.48\%$

Third option (Preferred stock)

Cost of preferred stock = $100\text{m}/230 = 43.48\%$

Weighted Average Cost of Capital is therefore given by the sum of the above three components

$\text{WACC} = 2.6\% + 43.48\% + 43.48\% = 89.56\%$.

The advantages and disadvantage of each of the proposals made by the bankers

Debt Issue

Issuing corporate debt is one method of financing different business activities. These activities encompass business expansion or need to carry out research and development. An organization's debt is signified by bonds. Bonds are future instruments sold to the willing investors. Phil Bevan is likely benefit from accepting Hiram J. Pipesucker's proposal of debt financing in the following ways.

i. Interest payments are tax deductible

The interest charged on debt issued is tax allowable. This implies that its cost is likely to be cheaper as compared to other sources. Often, when an organization issues stock, it pays taxes on the income generated. This leads to a higher liability in form of tax to be paid (Harris and Raviv, 1991). When debt is issued, however, interest is paid to debt holders. Interest has to be paid to the bondholders annually. Debt issue thus has an advantage of due to the fact that the interest paid is tax-deductible. This generally translates

to a larger savings in form of tax to be paid by the business to the bondholders. The allowable tax reduces interests to be paid hence increasing profitability.

ii. Debt issue avoids dilution of earnings per share or control within the business

Debt issue does not interfere with the control of the business, i. e. it at all times avoids the dilution of earnings per share. If Phil Bevan adopts the proposal of issuing debts to raise its capital, he shall have avoided a likelihood of change of control or ownership. It therefore presents the owner with an opportunity to maintain its control as the earnings per share is maintained and not diluted.

iii. Long term financing approach

Debts issue is a long term approach to raising finances. If Phil Bevan is for the opinion that he invests in a project with duration more than 20 years from beginning to the end, issue bond or debt is the best option to for the business to obtain long funding. On this premise, if he gets a loan from the financial institution, say a bank, the repayment terms and the duration of the loan will be optimally determined by the bank. Besides, Phil Bevan is privileged to choose the terms and the time period of bond maturity. The maturity date is such a time he is to pay back bondholders the principal amount. The date to maturity is always a long term period.

iv. Debt issue cost is fixed and the amount of principal repaid does not change overtime

Debt issue is also advantageous due to the fact that the principal amount does not change overtime but remain fixed until the date of maturity (Heinkel and Zechner, 1990). This is beneficial as the owners can plan optimally to repay the principal before the maturity date reaches. The repayment terms are usually better on new debt issues than when compared business loans.

v. Lower level of returns to the investors

Usually, debts issue presents a lower rate of return to the investors as opposed to the common stock. This implies that if Phil Bevan considers this proposal, it shall have reduced to the amount to be paid to the investors hence profitability.

However, debts issue has the following demerits to a business when used as a source of financing.

i. Adds more risk to the business

If Phil Bevan considers the proposal of debts issue, he may place the business in a risky position. This is due the fact that debt issue has restrictions on the limit of how much debt to be used. Basically, it presents a frontier as to how much debt can be used to finance the business. It is worth noting that an excess use of debt may plunge the business into bankruptcy.

ii. Compulsory maturity date

Debts issue as source of finance has as well a disadvantage maturity date. This implies that the capital invested must perform and provide returns faster enough and this return must be passed over to the investors.

iii. It carries fixed charges

Regardless whether a business has profitable cash flows or not, a fixed charge is imposed to the business. This may plunge a business into financial crisis in events that the fixed charged cannot be met due to lack of earnings.

Common stock and retained earnings

The cost of common stock and retained earnings is the rate of return an investor requires to make demands to make a common stock investment in the business. As opposed to debts issue, it does not generate tax benefits due to the fact that dividends are paid after taxes (Heinkel and Zechner, 1990). If Phil Bevan adopts Rollo Strauss proposal to invest in common stock, he is likely to experience the following benefits.

i. Common stock financing is devoted to the business and the intended projects. Those who invest in the business only realize their investment in situation where the business has better earnings or cash flows. This is only in an event of market flotation or a sale to fresh investors.

ii. There is the advantage of skills that come along with equity finance. For instance, angel investors and venture capitalists do come into the business with valuable management skills, acquaintances and knowledge that improve the business performance. This implies that Phil Bevan is likely to benefit from investors strategic decisions and decision making.

iii. Common stock financing does not entail fixed payments

When a business uses common stock as source of finance, the fixed payments demanded by investors cease to exist. In other words, it implies that dividends are only to the investors when earnings are available. As opposed to the debts issue where payments have been made regardless of presence of cash flows or not, common stock financing has an advantage of varying payments. Payment can for example be made when the business makes better earnings.

iv. Lastly, the invested capital is not being repaid.

As opposed to the debts issue where the principal has to be repaid fully after the maturity period, common stock is beneficial to a business due to a reason that it has no maturity date on the securities and thus the invested capital can be necessarily not be refunded. The finance is there to stay in the business.

Common stock financing, however, have the following disadvantages to a business which uses it as a source of finance.

i. Dividend payments to shareholders are not tax deductible

Often, when an organization issues stock, it pays taxes on the income generated. This leads to a higher liability in form of tax to be paid. On the other hand, when debt is issued, interest is paid to debt holders. Interest has to be paid to the bondholders annually. Debt issue thus has an advantage of due to the fact that the interest paid is tax-deductible (Harris and Raviv,

1996). This generally translates to a larger savings in form of tax to be paid by the business to the bondholders. The allowable tax reduces interests to be paid hence increasing profitability. This however is not applicable to the issue of stock. This signifies that it may prove expensive for the business. This makes its issuance cost higher than that of debt.

ii. Dilutes the earnings per share to shareholders

If Phil Bevan adopts the proposal of issuing stocks to raise its capital, he should be prepared for change of control or ownership. It therefore presents the owner with an opportunity of not being able to maintain business control as the earnings per share is diluted.

iii. It is time consuming and costly in the long run

Issue of stock is often characterized with unnecessary procedures that make it appear demanding. It is always demanding, costly and takes a lot of time to fully effect. Venture capitalists for instance would demand to know the background of the business which many businesses are not for as they can always source for funds without the scrutiny.

Preference stock

Barry Nicebloke presents Phil Bevan with the proposal of using preferred stock to finance his business. This is a special equity security, having both properties of an equity and debt instrument. Often, they have no voting rights but do carry dividends. It presents a business with the following advantages when used as source of finance (Myers and Majluf, 1984).

i. Avoids dilution of the earnings per share to shareholders

Some forms of preferred stock issue do not interfere with the control of the business, i. e. it at all times avoids the dilution of earnings per share. If Phil Bevan adopts the proposal of issuing preferred stock to raise its capital, he shall have avoided a likelihood of change of control or ownership. It therefore presents the owner with an opportunity to maintain its control as the earnings per share is maintained and not diluted. He can thus make strategic decisions that affect the business for success.

ii. Preferred stock does not carry fixed charges

A fixed charge is imposed to the business depending as to whether the business makes better earnings or not. Dividends are often marked as a percentage of a par value and preference shares dividend can at times be negotiated as floating.

The major disadvantage of preferred stock is that interest payable is not tax deductible (Myers and Majluf, 1984). The interest charged on preferred stock issued is tax allowable. This implies that its cost is likely to be cheaper as compared to other sources. Often, when an organization issues debt, it pays taxes on the income generated. This leads to a higher liability in form of tax to be paid. This generally translates to a larger savings in form of tax to be paid by the business to the bondholders. The allowable tax reduces interests to be paid hence increasing profitability. This however is not applicable to the preferred stock issuance.

Assessing whether the advice given by each of the bankers is in the best interests of Bevan Industries and why such advice should be treated with caution.

Consideration on whether to accept the proposals given by bankers should be made to the flexibility, timeliness and cost of each proposal. Besides these, the business' economic conditions, market conditions, operating conditions and financial conditions presented by each proposal should be checked and scrutinized.

For the Bevan Industries, Phil Bevan, the CFO, is concerned that his capital structure is not as efficient as it might be. In particular, he is concerned about the amount of the business funded by short term debt and that his overall gearing level is quite low. This scenario presents him with different opportunities.

The proposal of debts issue might be of weight but is disqualified forthright. This is because, as per the business needs, debts issue is applicable for long term financing but Phil Bevan is concerned about the amount of the business funded by short term debt. Debts issue proposal is not appropriate as it results in a more business financial risk. Phil Bevan is not ready to take the risk. Current levels of exceptional debt will impact on the amount of finance raised. Higher levels of debt as well as the preferred stock will result in wider variations to earnings per share. This is because they come forth with higher fixed obligations that must be paid. For instance, he must be ready to pay the interest to debt holders and fixed dividends to preferred stock holders.

He is thus likely to incur more financial risks as opposed to his desired need to improve short term debt and balancing gearing ratio.

On the other hand a proposal to undertake common stock issue may be applied. However, it as well has effect of earnings per share on the business or control influence. Due to the fact that Phil Bevan is concerned with the control level of the business, if he goes for this proposal, he is deemed to diluting the control level which he is not for.

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