Institutional Affiliation

Student's Name

Capital budgeting assignment

Course Number:

Course Name

Professor's Name

Date

**Introduction**

Capital budgeting is the process by which a company decides which proposed fixed asset purchases it should accept and which should be rejected or declined. The process is used to create a quantitative view of each proposed fixed asset investment hence giving a rational basis for making the judgment. Cost of capital is the necessary return to capital budgeting, such as a new factory ( Fabozzi *et al*., 2009). According to the investors and analysts, the cost of capital can also be the weighted average of a company's cost of debt and cost of equity. In this context, I will explain the credit rating, cost of equity, and the weighted average cost of Apple Inc's capital.

**First Question: Credit rating**

A company's credit rating can be defined as an opinion of an independent agency assessment the likelihood that a company will meet its financial obligations as they come due. A company's credit rating indicates its relative ability to pay its creditors. There are three credit rating agencies which are the biggest such as Standard and Poor's, Moody's, and Fitch. Standard and Poor's uses AAA for the highest credit quality with the lowest credit risk, then AA for the b=next best, followed by A, then BBB for satisfactory credit. Anything that is below BBB is considered worse that indicates as junk (Maleki,2020)

Apple Inc's credit rating is by Moody's agency and with a rating of Aa1. Aa1 is the second-highest rating that can be assigned to debt, and it signifies that the issuer is financially sound and has enough revenues and cash reserves to pay its debts. The higher the rating, the lower the cost of debt capital. Therefore, the cost of debt by Apple Inc is low. The reasons for the high credit rating of Apple Inc are consistency. This is where Apple Inc has been resilient in its operating performance even during the COVID-19 epidemic and during a fragile worldwide economic recovery. The current return of a 30-year bond corporation is 4.01%

**Second Question: The cost of equity**

The cost of equity is defined as the return a company requires to decide if an investment meets capital return requirements. In many firms and companies, it is used as a capital budgeting threshold for the required rate of return. Beta is a measurement of the volatility of returns relative to the entire market in terms of stock. Beta is mostly used to measure risk since it's an important part of the Capital Asset Pricing Model ( CAPM). The Beta for Apple Inc is 1.2 currently. A beta of 1.0 explains that the organization rises and falls directly to the movement of the benchmark index ( Reuben, 2018). A less than one shows that the stock is less volatile than the overall market, and a beta that is higher than one shows that the stock is more volatile. The three-month treasury bill yield that is used as the measure of the risk-free rate is 0.07%. The equity risk premium is when an investor earns an excess return after investing in the stock market over a risk-free rate. The estimated percentage of the equity risk premium, according to Gutenberg Research, is 5.55%. (Ziemann,2021)

Cost of Equity= Risk-free rate+ Beta \* (Equity Premium)

= 4.01% + 1.2 \* 5.55%

RE= 0.06882555

**Weighted average cost of capital**

Total value= Total liabilities+ shareholders equity.

= $258549000+ $65339000

= $323888000

Propotion of debt= Total liabilities/ Total value

= 258549000/65339000

= 3.9570394404566

Proportion of equity = Shareholder’s equity/ Total value

= 323888000/ 65339000

= $ 4.9570394404566

Weighted Average Cost of Capital(WACC)

This calculates a firm's cost of capital in which each category of capital is proportionately weighted.

WACC= E/V\*Re + D/V\* Rd\* (1-Tc)

E=Market value of the company’s equity

D=Market value of the company’s debt

V=Total Market Value of the company( E+D)

Re=Cost of Equity

Rd=Cost of Debt

Tc= Tax Rate

Tc = 26.22%

Rd= 2.4%

Re= 6.69%

D=$ 85.810 billion

Stock price= $ 628.66

Oustanding shares= $861.38 million

E= (Stock price\* Outstanding shares) ($628.66\* 861.38million)= $541.515 billion

V= (D+E)=( $541.515+ $85.810) = $627.325 billion.

In April 2014, Apple had an average tax rate of 26.22%(1-tax rate).

Cost of debt after tax =2.4% \* (1-26.22%)

= 1.77%

The higher the cost of debt, the higher the risk.

Calculate the cost of equity or R equity.

Re= Risk free rate+ beta equity(average market return- risk free rate)

= 2.51+ 0.93(7-2.51)

=6.69%

WACC= (1- Tax Rate)\*R debt(D/D+E) + Re( E/D+e)

=(1-26.22%)\*24%\*($85.810/$627.325)+ 6.69%( $541.515/$627.325)

= 6.01%

**Conclusion**

Capital budgeting is an important tool in business, and one of its benefits is that capital budgeting can easily use it in larger investments. The cost of capital can also be the opportunity cost of investing in a business. Apple Inc generates more or higher returns on investment than it costs the company o raise the capital needed for that investment (Leoni, 2021)

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