Free the cost of equity capital and the capm (scf module 3, case) essay example

Business, Company

Part I: Review of background material

The first model is the capital asset pricing model. It describes the relationship which exists between risk and expected returns and it is applied is securities' pricing. In this model, an investor should be compensated for both the risk and the time value of money. The risk free rate is the factor for the time value of money. It compensates all investors for their fund commitment for a certain period. According to CAPM, the expected return on a specific security or a portfolio is equivalent to the risk free rate and the risk premium added together. These are the issues which will be facing Estee Lauder if it adopts this model of valuation.

The second model is the dividend growth model. In this model, the cost of capital is applied in discounting dividends in order to determine the intrinsic value of a company. The first level of this model is the constant dividend growth model. In this case, the assumptions include a constant dividend growth rate and a constant rate of return for investors. The second level is the multistage dividend growth model. It accumulates the differences in the expected future cash flows. Therefore, it incorporates the different dividend growth rates of dividends. Therefore, Estee Lauder will have to estimate its expected growth in dividends to use this model.

The third model is the arbitrage pricing theory. It values assets based on the idea that the value of asset's returns is predicted by use of the relationship between that asset and risk factors in the market. It is applied in describing the expected price of any mispriced asset. The expected return of a risky asset and the risk premium are applied in determining the theoretical value. This is the value that is compared to the market price so as to determine

whether an asset is mispriced. An overvaluation of the stock of Estee Lauder will imply lead to taking of short positions on the stock by investors. However, this stock is undervalued; investors may take long positions which will lead to increase in price.

For Estee Lauder, the best model to be applied is the capital asset pricing model. I would recommend this model to the board of directors of Estee Lauder. As far as its ease of use is concerned, this model provides a simple method of company valuation. This is because it requires data that is available in financial markets and within the company. With regard to the dividend growth model, its ease of use proves a challenge especially when it is multistage in nature. This is due to the different calculations that have to be conducted for each different rate of growth. For the arbitrage pricing model, its use is relatively simple since it incorporates the expected return of a risky asset and also the risk premium.

Based on the accuracy of each of the three models, it is crucial that Estee Lauder uses an accurate model in its valuation. In this case, the CAPM proves to be an accurate valuation tool based on its elements. The first element is the risk free rate. It is based on the expected compensation of investors in the economy. Due to its application in valuation by government and the private sector, this element is very accurate. The other variable in the CAPM is the beta of a security. It compares the asset risk to that observed in the market. For this element, accuracy is high owing to its determination by financial analysts who know the metrics of the company. The market premium is also accurate since it is the difference between the market return and the risk free rate.

The dividend growth model lacks in accuracy since the growth rates in the future are based on estimates. Therefore, the entire formula performs poorly in terms of accuracy since a company may change its dividend policies. Inaccuracy in the arbitrate price model is due to the comparisons of assets. The expected asset return may be inaccurate since the dynamics of Estee Lauder may be different from those of other competitors.

The extent to which the assumptions of these models are realistic will determine the success of valuation for Estee Lauder valuation. The assumption on the determination of risk free rate is realistic for the CAPM since it quantifies risk. Therefore, it provides an objective nature of the costs of equity. The second assumption is that the financial markets have many investors who are rational and risk averse. Rationality concept is a solid assumption since it is the basis for evaluating any financial decisions. For the dividend growth model, there is an assumption of accurate prediction of future dividend growth rates. However, this assumption is unrealistic since the dividends may be altered owing to the performance of a company. The arbitrage pricing model has the assumption that the expected return of a risky asset can be determined and incorporated into the model. The foundation of this assumption is that the expected return is easily and accurately calculated. However, this assumption is quite unrealistic due to the volatile nature of financial markets. The model that has been chosen is the capital asset pricing model.

Part II

Based on the calculation in the excel file, the company with the highest cost of equity is Sony Corporation. The reason as to why it has the highest cost of equity is its risk premium. This value is obtained by RM-RRF. In this formula, RM is the return on market portfolio while RRF is the risk free rate. This risk premium stands at 9. 1% compared to 8. 1% for McDonald and 6. 1% for Nike Incorporation. Therefore, the high premium for Sony Incorporation implies that this stock has high risk. The implication of this high premium is that investors in Sony will demand a higher return than that for McDonald and Nike.

In addition, it has a high value for beta. It is the only security which has a beta value that is higher than one. This contrasts to the 0. 9 beta value for Nike Incorporation and 0. 4 for McDonalds. This beta value which is higher than one implies that the returns of Sony swing with the market at a higher rate than the swing of the market. The returns of Sony Incorporation are more volatile than the volatility of the market.

The beta for any company is influenced by a number of factors. One of the factors is the financial leverage of a company. If a company has a high financial leverage, there is additional variability due to the extensive debt use. There is resultant high interest expenditure from this high financial leverage. With this high financial leverage, a company has fluctuations in its earnings per share. This will result in an increase in the systematic risk and hence the beta of any company.