Managerial finance wacc

Finance

The paper " Managerial Finance and Weighted Average Cost of Capital" is an excellent example of an assignment on finance and accounting. The aim of this paper is to compute the weighted average cost of capital of any publicly-traded company. For the purpose of this research, this paper conveniently and purposely selected the General Motors Company. According to Yahoo Finance, (2015), this company designs, builds and sells vehicles. It also offers connected safety, security as well as mobility solutions and information technology services. The weighted average cost of capital (WACC)

This is the overall or the composite cost of capital that a firm is currently using (ALMEIDA, 2010). It is calculated by determining the weighted average cost of each source of capital in the firm’s capital structure. It is represented by the following function: rWACC = rE (E/V) + D/ (V) rD (1-TC); where rE and rD are the percentage cost of equity and debt capital respectively and E and D are the market value of equity and debt capital respectively. To establish the total market value of the firm, this formula was used (V) = E + D. The results of this study established that the value of the General Motors Company’s equity was $51, 150 million, while its debt was $22, 915 million and the yield to maturity is 4. 375%. Added together, the total value of General Motors Company is $74, 065 million ($22, 915 million + $51, 150 million).

Capital Asset Pricing Model

To establish the cost of equity capital, the Capital Pricing Model was used. According to this model, the total business risk is made up of systematic and unsystematic risks. The model concentrates with systematic risk to establish the project's rate of return which is influenced by each investments beta

factor. The cost equity= Rf + (Rm-Rf)βE where Rf is the rate of return on riskless investment such treasury bills, Rm is the entire stock's average rate of return from firms' constituting the stock index average percentage return, βE is the investment in ordinary shares beta factor. As indicated in figure 1 below, this paper established that the beta of General Motors Company was 1. 08. This article searched the internet for the yield to maturity on 10 year US Treasury securities. This rate served as the risk-free returns and was found to be 1. 91% (Bankrate, Inc., 2015). The Market Risk Premium assumed and used by this paper was 4%. Substituting these values into the equation, the cost of equity = 1. 91 %+ (4%) 1. 08 = 6. 23%.

Assuming a tax rate of 40%, the weighted average cost of capital of General Motors Company was determined as follows. rWACC = rE (E/V) + D/ (V) rD (1-TC)

rWACC = 6. 23% (51, 150/74, 065) + (22, 915/74, 065)*4. 375%*(1-0. 4)

rWACC = 4. 3 + 0. 812%

rWACC = 5. 112%

Reliability of the Established Weighted Average Cost of Capital

The computed value of the weighted average cost of capital could not be wholly relied upon as the models used (WACC and CAPM) are based on various assumptions for them to hold. For this weighted average cost of capital, a value can work well only if: there is no change in capital structure, and there is no change in the risk level.

On the same note, the CAPM model is founded on several assumptions for it to hold. However, these assumptions are the cause of its failure and invalidity and thereby affecting the computed weighted average cost of capital. First, it assumes that returns' variance is an adequate risk

measurement. This is assumed by the proposition that returns are usually distributed, but for general distributions of returns, other risk considerations like coherent risk measures can reflect the active as well as potential shareholders preferences more adequately (Bon & Sinusi, 2011). Indeed, the risk in financial investments is asymmetric in nature, implying that it is not a variance itself but rather a probability of losing.

Secondly, the model is based on a homogeneous expectations assumption such that all active, as well as potential shareholders, have access to similar information and agree to the expected return of all assets and risk (Brigham & F., 2009). Thirdly, the model assumes that the active and potential shareholders probability beliefs match t true distribution of returns. However, the expectations of active and potential shareholders are biased, thereby causing market prices to become informationally inefficient. Fourth, the model fails to explicate the variation in stock returns adequately. Empirical studies indicate that low beta stocks offer higher returns than the model predicts. Fifth, it assumes that all active and potential shareholders consider all of their assets in order to optimize in one portfolio. This sharply contradicts portfolios that are owned by individual shareholders: investors tend to have multiple portfolios or, rather, fragmented portfolios: for each goal one portfolio (Bon & Sinusi, 2011).