Financial theories - capital asset pricing model, borrowing at risk-free rates, a...

Finance

The paper " Capital Asset Pricing Model Approach" is an excellent example of a term paper on finance and accounting. Most financial theories experience some difficulties in their practical applications. The capital asset pricing model, being one of them is no exception. This theory is founded on a number of assumptions that fail to represent real-world situations. The following are the assumptions that have the CAPM to fail in empirical tests thereby rendering most of its applications invalid. Zero taxes.

The model assumes a tax-free investment trading and again that the returns on investment are not affected by the taxes (Pratt and Roger, 2010). This is however not true because capital gains tax is charged on any investment transaction. This, in essence, is an additional transaction cost. Further, expected returns to investors are reduced by taxes implying an impact in the way they price their investments. In addition, different returns can be taxed differently facilitating investors to select those portfolios consisting of assets that have favorable tax levels. Finally, the same assets can be priced differently because of different tax levied on different investors. It is therefore evident that the assumption of zero tax is not reasonable (Kürschner, 2008).

Borrowing at risk-free rates

The assumption that investors can freely borrow or lend money at the same rate that is risk-free is not applicable in the real capital market especially for smaller and non-institutional investors (Pratt and Roger, 2010). Because of the added premiums, individual investors are not able to borrow at this risk-free rate like others do by buying government bonds. The difference in the borrowing rate and lending rate, therefore, predicts that the capital market

line should be downwardly kinked for riskier portfolio (Kürschner, 2008). The fact that it is downwardly kinked shows that the risk-free borrowing cost is higher than the risk-free lending coast.

Availability of risk-free assets

To allow for adjustment in the portfolio risk, the model assumes that zero risk securities with different maturities are available in sufficient quantities (Kürschner, 2008). This is not practical because even the most secure securities like treasury bills are faced with numerous risks such as inflation risk, currency risk, and reinvestment risk (Pratt and Roger, 2010).

Zero transaction costs

In real market conditions trading cannot be costless as assumed by the CAPM. These transactions discourage obvious swaps, therefore, assets prices lie above or below the capital market line but not fall on the line as proposed by the model (Kürschner, 2008). It is well known that almost all investments even the acquisition of a small business involve a significant cost (Pratt and Roger, 2010). This renders the assumption of zero transaction cost invalid.

Homogeneous investor expectations

The CAPM assumes that investors have the same beliefs and expectations about the level of risks and the expected returns of any given investment (Kürschner, 2008). This is unreasonable because we were well aware that different investors have a different expectation about the investments they undertake. Further, investors have different preferences for risks. There are risk-takers, risk-averse and risk indifferent investors. This, therefore, renders this assumption unrealistic (Pratt and Roger, 2010).

Beta instability

The assumption that beta is a full measure of risk is not valid because of the following reasons. Firs, investors face other additional risks that cannot be reflected in the standard deviation such as inflation and liquidity risks (Kürschner, 2008). In addition risks for non-bell curved returns cannot be measured by the standard deviation. Moreover, betas are computed from historical data thus rendering it a poor predictor of the future. Finally, betas are unstable over time because of the continuous economic development (Pratt and Roger, 2010).

From the foregoing, it is evident that the CAPM has failed in its practical application because of the unrealistic and invalid assumptions that it is based.