

Considers buying shares of nikkei, inc.

Business



A portfolio manager at North Point Large cap Fund, KimFord, considers buying shares of Nikkei, Inc. For her mutual fund management firm. In the mid of 2001, Nikkei arranges for an analyst meeting to disclose its Fiscal year results and also to discuss on renewing its strategies to boost its sales growth, profits and market share which were all declining. To cope from the situation It decides to develop athletic shoes In the mild-price segment, enhance revenues from Its apparel line and also commits to control Its expenditure.

When Ford realizes that the market analysis had mixed sections, she generates her own estimates of cash flows from the available data and asks her assistant Joanna Cohen to estimate cost of capital. Joanna considers the following parameters to estimate the value by using WAC, which are, whether to use single or multiple cost of capital, capital structure, cost of debt and cost of equity. To use single cost of capital for estimation of WAC is a correct approach since most products have similar risk factor and they usually complement one another.

We assumed Nikkei Inc. O have a single cost of capital since its multiple business segments (shoes, apparel, sports equipment, etc.) are not very different and would experience similar risks and betas CAPITAL STRUCTURE Cohen has estimated the weights using the book value of equity and debt.

This is an incorrect approach to estimate the equity weight because market values are to be used. The market values can be estimated by taking the number of outstanding shares and multiplying it with price per share.

Usage of book value of debt is accepted as an estimate of market value since they are somewhat similar to book values, but Cohen considers data only pertaining to 2001 to calculate this parameter. To get a better estimate of firm's debt, average values of 2000 and 2001 can be used. COST OF DEBT This was estimated using historical data which is also an incorrect approach.

The cost of debt is simply the interest rate the firm must pay on new borrowings and this can be observed in the financial markets.

Since Nikkei has bonds outstanding, then the yield to maturity on those bonds is the market- required rate on the firm's debt. Cost of debt was calculated by finding the yield to maturity on 20-year Nikkei Inc. Debt with a 6.5% coupon semi-annually.

COST OF EQUITY We have considered two approaches to calculate the cost of equity- The Dividend discount model and the CAMP model. CAMP (Capital Asset Pricing Model): Cohen used the arrear yield on U. S. Treasuries as the risk free rate. Since debt that Nikkei has incurred is long term the usage of the yield on 20 year treasuries is the right thing to do.

The next task is to choose the appropriate risk premium.

There are two historical equity risk premiums given for a time period from 1926 to 1999: Geometric valuation while the arithmetic mean is better for a one-year estimated expected return. Therefore, we chose to use the geometric mean which is 5.9%. Next, we had to decide on a beta to use for Nikkei Inc. For use in the CAMP approach.

There are many approaches to calculate the beta value. We felt that two methods could have been used to calculate the beta values.

One would have been to regress the beta values with the returns to get the current beta. Since this would yield a very high standard error the better method would be to use the industry beta (Nikkei has very good comparable peers as well) . But, sadly as we did not have sufficient data to regress the past betas(since tallest 30 values are required) and neither were the industry beta's available we resorted to using the average value of Beta which Cohen used since it is a fair estimate of the probable Beta value in the future. At this point, we calculated the WAC of Nikkei Inc.

Using the weights and costs of debt and equity. The calculations are on the excel sheet. The WAC comes out to be 9.82% EDM(Dividend Discount Model): The next model that we used to calculate the cost of capital was the dividend discount model. The assumption made with this model is that the company pays a substantial dividend. The value of WAC that we calculated using this model was about 6.

6%. This overvalues the stock to a great extent and proves the fact that the dividends being paid by NIKKEI are insufficient and hence we should stick to the CAMP approach.

This makes Nikkei Inc. Share price overvalued by \$4.81 as Nikkei is currently trading at \$42.

09. Cohen had estimated the discount rate to be around 8.4% making the cost of equity around \$67. We found the WAC by using CAMP, finding a

discount rate of 9.82 percent. This discount rate results in a share price of \$52.

62, meaning that Nikkei Inc. is undervalued by \$10.53 per share. Using this data, we found that Nikkei Inc. would be added to the Northing Large-Cap Fund at this time because the stock is undervalued.

This is justified given the aggressive growth targets that the company has announced coupled with the conservative estimates that we have taken for the revenue growth. She should keep a close eye on the company because Nikkei Inc. has growth potential that would be beneficial to the fund. All of the plans laid out at the executive meeting display that the company is taking steps to move toward the future, making this a stock very attractive.