Merrill finch inc. case study

The economic forecasting staff for Merrill Finch developed probability estimates for the state of the economy, and the security analysts have developed software to estimate the rate of return on each of these alternatives under each state of the economy. A chart showing the results of the analysis Is in Appendix A of this report. Section 1 of this report begins with a discussion on the concept of Return. The calculations of each of the alternatives expected rate of return are also calculated and discussed.

Section 1 then continues with the concept of Risk.

Three different measurements of risk are discussed and calculated for each of the Investment alternatives. The risk measurements discussed are the Standard Deviation, Coefficient of Variance, and Beta Coefficient. Section 2 discusses some scenarios of different investment options. The first is of a 2-stock portfolio consisting of the investment of $50, 000 into both High Tech and Collections.

The expected return, standard deviation, and coefficient of variance are then calculated and discussed for this option.

The second scenario Is of a portfolio consisting of randomly selected stocks. The section concludes with a discussion of the risk involved with this random portfolio and how the addition of more random stocks to the portfolio would affect the risk. Section 3 discusses the Security Market Line (SMS) Equation and how the SMS would e affected If Inflation expectations were to rise by 3 percentage points. Appendix B shows this equation and Its use to calculate the required returns of each of the Investment alternatives.

The section is then concluded with a discussion of these calculations and how they compare to the expected returns calculated in section 1 .

Due to time constraints, probability distribution graphs for High Tech, U. S. Rubber, T- bills, and a portfolio of randomly selected stocks has been omitted from this report. TABLE OF Counterespionage's I : Risk and Return IA. Return 1 B. Rills 21.

Standard Deviation (o) iii. Coefficient of Variance (C. V.) iii. Beta Coefficient section 2: Investment Alternatives AAA.

2-Stock Portfolio B.

Random Stock Selection section 3: Security Market Line (SMS) appendicitis's A: Estimated Rates of Return appendix B: Security Market Line Equation appendix C: Security Market Line Equation bibliography sectors 1: Risk and Returnee of the fundamental decisions of business management Is Investment. An Investment Is an asset that Is held to have some recurring or capital gains. It Is an asset Tanat Is expected to give a return walkout any effort or work forced upon it. Investments, however, do not always result in positive gains.

There are various types of risk that an investor might be susceptible to.

The following sections will discuss returns and the various types of risks involved with investing in marketable securities. Returnees is defined as the income that an investment provides in a year. When deciding on what type of market to invest in, it is wise to first look at each markets expected rate of return. The expected rate of return of an investment is the weighted average

of the probability of all possible results. The expected rate of return of arioso investment options are shown in Appendix A of this report on page 6.

For each option, the expected rate of return is calculated by multiplying the probability of the state of the economy by the corresponding estimated rate of return for that market, then taking the sum of these values. One of the invested alternatives for Merrill Finch's client is Treasury Bills, or T-bills. These are a form of treasury securities issued by the United States Treasury. T-bills are said to be a risk-free investment, but in realty, there are no true risk-free securities. In regards to default risk, T-bills are risk-free because the Treasury must deem them.

Being that they must be redeemed, also shows that they are independent of the state of the economy. They are, however, susceptible to other forms of risk. If the rates were to increase or decrease, T-bills would then be susceptible to reinvestment rate risk, the risk that they might not be able to be reinvested at the same rate. For this investment, the expected rate of return on T- bills is calculated to be 5. 5% . High Tech and Collections are two other investment alternatives for the client.

The expected rate of return is 12. 4% for investing in High Tech and 1. 0% for Collections.

Investors might choose to invest in one of these two depending on how well they predict the economy will do. High Tech has a direct relationship with the movement of the economy.

If the market is expected to increase, then this would be a good investment. Collections, however, moves in the opposite direction of the economy. If a decline is expected, then investors would use this as a hedge against the negative movement of the economy. The remaining alternatives for this client are to invest in U. S.

Rubber, a market portfolio, and a 2-stock portfolio of High Tech and Collections.

The expected rates of turn are 9. 8% in U. S. Rubber, 10.

5% in a market portfolio, and 6. 7% in the 2-stock portfolio. Risks we have already discussed above, no securities are truly risk-free. Depending on the nature of the investment, the type of investment risk will vary. The following sections discuss some of the different types of measurements that can be used to determine the amount of risk in an investment.

Near Deviation. I en standard volatile (o) Is talent as a statistical measure AT the variability of a set of observations. The smaller the standard deviation, the lower the risk of the investment.

It is calculated by taking the weighted average of the deviations from the expected value. This provides an idea of how far above or below the expected return the actual return is likely to be. The type of risk measured by the standard deviation is Stand-Alone Risk, which measures the understudied risk of holding an individual asset.

For this investment analysis, the standard deviation for T-bills , for High Tech, 13. 2% for collections, 18. 8% for U. S. Rubber, 15.

2% for a market portfolio, and 3. 4% for the 2-stock portfolio. Coefficient of Variance.

The Coefficient of Variance (C. V.

) is a standardized measure of he amount of risk per unit of return. It is calculated by dividing the standard deviation by the expected return. The larger the C. V., the riskier the investment.

It is a better measurement of Stand-Alone risk than the standard deviation. This is because it includes the effects of both risk and return and allows for a closer evaluation of situations where investments have substantially different expected returns. This investment analysis shows the Cover T-bills too, 1. 6 for High Tech, 13. 2 for Collections, 1. 9 for U.

S. Rubber, 1. 4 for a market portfolio, and 0. For the 2-stock Beta Coefficient. The Beta Coefficient a measurement of Market Risk.

It shows the extent to which a given stock's returns move up and down with the stock market. The Beta of an average stock is 1. 0, but most have betas in the range of 0. 5 to 1. 5.

Beta coefficients are calculated as the slope of a " regression line", which represents the difference between a given stock and the stock market in general. The expected returns of a market are directly related to each alternatives market risk. In other words, the higher the rate of return of the alternative, the higher its beta coefficient.

The estimated betas for each of the clients investment alternatives are shown in the chart in Appendix A. Considering the beta coefficients provided in this chart along with the other information that we have calculated, we do not yet have enough information to choose among the various alternativeness considering whether or not to invest in a particular alternative, one thing to consider is portfolio diversification. An investors view of risk in an investment can be greatly affected by the diversification of their portfolio.

The risks that can affect an understudied portfolio ay not be the same as those of a diversified portfolio.

An understudied investor may need to be more aware of the stand-alone risk and, therefore, closely monitor the alternatives Coefficient of Variance or standard deviation. These, however, may not be as relevant to a diversified investor because they are more concerned with the impact that a stock may have on the rockiness of their entire portfolio rather than on its stand-alone risk. Aside from having higher risk, another drawback to having a portfolio containing only an individual stock is that you would not be compensated for your higher degree of risk.

SECTION 2: Investment Alternatives-Stock Portfolio of the investment alternatives for the client is a 2-stock portfolio.

An option with this alternative would De to Invest S onto Do Hall Lech Ana collections. I en can't In Penal A contains the calculations of the various measurements of risk. The expected return on the 2-stock portfolio is 6. 7%, the standard deviation is 3. 4%, and the C. V.

is 0. 5. The rockiness of this alternative is different than that of the individual stocks if they were apart from one another. A major difference is in the measurement of the stand-alone risk.

The stand-alone risk of the individual stocks is greater than that of a stock portfolio.

This is because the two stocks have opposite reactions to the market. As the risk of one alternative increases, the risk of the other decreases, reducing the overall risk of the portfolio. Random Stock Cholinesterase investment alternative to consider might be to start a portfolio with one randomly selected stock, then randomly adding more and more stocks to this portfolio. Initially, the portfolio would have significant risk because it only contains one individual stock.