

# Vanguard etfs final project



**ASSIGN  
BUSTER**

## **Final Project**

Final Project Investing in the total stock market allows an investor to capture the return of the stock market while at the same time diversifying an investment portfolio. The easiest way to build a total stock market portfolio is with a mutual fund or an exchange-traded fund. This particular portfolio is diversified with Vanguard ETFs that were carefully chosen to seek the highest return with a moderately aggressive to aggressive risk strategy. The investment strategy associated with this portfolio is short-term with an aggressive attitude of “ more risk more reward”.

Exchange-Traded Funds, also known as ETFs, are mini-portfolios of securities and derivatives that track an asset like an index and/or commodity. When creating a portfolio, it is important to note that there is a difference between diversifiable risk and market risk. According to Elton (1977), the diversifiable risk may be caused by random events that are particular to an individual firm. Since these events are random, the influence of events, such as a lawsuit or strike can be almost eliminated via diversification. However, diversification cannot entirely eliminate market risk. Market risk affects most firms. Examples of market risk include war, recessions, and high-interest rates. By researching the portfolio funds, the investor can gain an understanding of risk and how it fits into diversification. A single stock has more risk of not creating a positive return than a stock portfolio. In a market dominated by risk-averse investors, riskier securities must have higher expected returns Ross, Westerfield & Jordan (1993) indicate, the principle of diversification tells us that the spreading of investment across a number of assets will eliminate some but not all the risk.

Unsystematic risk is essentially eliminated by diversification, so a relatively large portfolio has almost no unsystematic risk. Ong (1982) mentions that diversification can reduce overall portfolio risk. However, the possibility of the risk reduction depends on the correlation coefficient and the proportion of the total funds invested in each. According to Jordan, et al (2012), the benchmark for a well-diversified portfolio would be a portfolio of all stocks in the market. Relevant market risk of the stocks within the portfolio is calculated using a beta coefficient. Accordingly, a stock with a high beta will bring a lot of risk to the portfolio. The authors further explain as you calculate the beta for various stocks, you may begin to see groupings of low, average, and high beta risk. Beta measures the stock's risk relative to the stock market average. Calculate the weighted average of these groupings, and you will discover the market risk for the entire portfolio. " low" beta is generally 1. 0 or below. The average beta is 1. 00 and assets with a beta greater than 1. 00 have more than average systematic risk.

Rosenberg and Guy (1995) further explain the importance of beta as the value of beta measures the expected response to market returns and because the vast majority of returns in diversified portfolios can be explained by their response to the market, an accurate prediction of beta is the most important single element in predicting the future behavior of a portfolio. To the degree that one believes that one can forecast the future direction of market movement, a forecast of beta, by predicting the degree of response to that movement, provides a prediction of the resultant portfolio return. To the degree that one is uncertain about the future movement of the market, the forecast of beta, by determining one's exposure to that uncertainty,

provides a prediction of portfolio risk. We begin with the first description of the portfolio. Unlike mutual funds or index baskets, the investor does not have to make multiple transactions in order to achieve a market price. With ETFs, it's one trade, one price. The Vanguard Consumer Discretionary ETF is generating 0.16% of daily returns assuming volatility of 0.71% on return distribution over 30 days investment horizon. EMERGENT online indicates the one month beta on this investment is 1.03. This EFT includes stocks of companies that manufacture products and provide services that consumers purchase on a discretionary basis.

The following risks are associated with this type of ETF: Stock market risk, Sector risk, Non-diversification, and Investment style risk. Vanguard Consumer Discretionary ETF fund's manufacturing segment includes the following industries: automotive, household durable goods, textiles and apparel, and leisure equipment. The services segment includes hotels, restaurants, and other leisure facilities, media production and services, and consumer retailing. The next fund in this portfolio is Vanguard Financials ETF, which includes stocks of companies that provide financial services. The investment has a one month beta of 0.73 which indicates that the investment is 73% less risky than the average. This ETF fund is classified as aggressive is subject to extremely wide fluctuations in share prices.

The unusually high volatility associated with these funds may stem from one or more of the following strategies: a concentration of fund holdings in a relatively low number of individual stocks, or in a particular sector of the stock market, or in a particular geographical region of the world; a heavy emphasis on small-capitalization stocks or growth stocks with relatively high

market valuations; holdings of international stocks or bonds, which are subject to price declines caused by changes in the value of the U. S. dollar against foreign currencies; or investments in bonds that have exceptionally long average durations, whose prices are highly sensitive to changes in interest rates. Index, a benchmark of large-, mid-, and small-cap U. S. stocks in the financials sector, as classified under the Global Industry Classification Standard (GICS). This GICS sector is made up of companies involved in activities such as banking, mortgagefinance, consumer finance, specialized finance, investment banking, and brokerage, asset management and custody, corporate lending, insurance, financial investment, and real estate (including REITs).

An investment in this the fund could lose money over short or even long periods. The investor should expect the fund's share price and total return to fluctuate within a wide range, like the fluctuations of the overall stock market. Vanguard funds classified as moderate to aggressive are broadly diversified but are subject to wide fluctuations in share price because they hold virtually all of their assets in common stocks. In general, such funds are appropriate for investors who have a long-term investment horizon (ten years or longer), who are seeking growth in the capital as a primary objective, and who are prepared to endure the sharp and sometimes prolonged declines in share prices that occur from time to time in the stock market. This price volatility is the trade-off for the potentially high returns that common stocks can provide. The level of current income produced by funds in this category ranges from moderate to very low.

The type of risks associated with this investment is: stock market risk and investment style risk. The chance that stock prices overall will decline. Stock markets tend to move in cycles, with periods of rising stock prices and periods of falling stock prices. The fund's target index may, at times, become focused in stocks of a particular sector, category, or group of companies. Because the fund seeks to track its target index, the fund may underperform the overall stock market. The chance that returns from large-capitalization growth stocks will trail returns from the overall stock market. Large-cap stocks tend to go through cycles of doing better—or worse—than other segments of the stock market or the stock market in general. These periods have, in the past, lasted for as long as several years. The next investment in the portfolio is Vanguard informationtechnologyETF. This ETF seeks to track the performance of a benchmark index that measures the investment return of stocks in the information technology sector. With a one month beta of 1.1, this fund is passively managed, using a full-replication strategy when possible and a sampling strategy if regulatory constraints dictate. Includes stocks of companies that serve the electronics and computer industries or that manufacture product based on the latest appliedscience. The risk potential for this fund is aggressive, more risk more reward.

Vanguard Information Technology ETF is made up of companies in the following three general areas: technology software and services, including companies that primarily develop software in various fields (such as the Internet, applications, systems, databases, management, and/or home entertainment), and companies that provide information technology consulting and services, data processing, and outsourced services;

technology hardware and equipment, including manufacturers and distributors of communications equipment, computers and peripherals, electronic equipment, and related instruments; and semiconductors and semiconductor equipment manufacturers.

Vanguard Intermediate-Term Corporate Bond ETF seeks to provide a moderate and sustainable level of current income. Invests primarily in high-quality (investment-grade) corporate bonds. Moderate interest rate risk, with a dollar-weighted average maturity of 5 to 10 years. Vanguard Intermediate-Term Corporate Bond ETF seeks to track the performance of a market-weighted corporate bond index with an intermediate-term dollar-weighted average maturity. The fund invests by sampling the index, meaning that it holds a range of securities that, in the aggregate, approximates the full Index in terms of key risk factors and other characteristics.

Interest rate risk should be moderate for the fund because it invests primarily in intermediate-term bonds, whose prices are less sensitive to interest rate changes than are the prices of long-term bonds. Income risk: The chance that the fund's income will decline because of falling interest rates. Credit risk: The chance that a bond issuer will fail to pay interest and principal in a timely manner, or that negative perceptions of the issuer's ability to make such payments will cause the price of that bond to decline. Index sampling risk: The chance that the securities selected for the fund, in the aggregate, will not provide investment performance matching that of the index. Index sampling risk for the fund should be below.

## Reference

1. Elton, E, & Gruber, M. (1977), Risk, reduction, and portfolio size: an analytical solution. *Journal of Business*. Vol. 50, 415-437. Hope-Bell, E. (2008).
2. Focus on: Index investing - exchange-traded funds - an innovative investment solution. *Professional Wealth Management*, 1-n/a. <http://search.proquest.com/docview/205081570?accountid=32521> Jordan, B., Miller, T., & Dolvin, S. (2012).
3. <http://www.mergentonline.com/companydetail.php?pagetype=highlights&compnumber=116548> Ong, Poh Wah (1982).
4. Measuring the expected return and risk of combining several shares in an investment portfolio. *Securities Industry Review*. Vol. 8, No 1, 6-16. Rosenberg, B., & Guy, J. (1995).
5. <http://search.proquest.com/docview/219118485?accountid=32521> Ross, S., Westerfield, W., & Jordan, B. (1993).
6. <https://personal.vanguard.com/us/home> Vanguard (2012).
7. <https://personal.vanguard.com/us/home> Wall Street Journal online. (2012).
8. <http://online.wsj.com/home-page>.