Lesson # 21

INDIRECT INVESTING Contd…

Exchange-Traded Funds (ETFs):

A new investing trend of increasing importance is the exchange-traded funds (ETFs). These new financial assets have some characteristics of index mutual funds, closed-end funds, and even individual stocks.

An ETF is a basket of stocks that tracks a particular sector, investment style, geographical area, or the market as a whole. As of August 2002, there were approximately 125 ETFs, with perhaps $100 billion in assets. Although this, is tiny compared to the assets in mutual funds, the growth rate in assets for ETFs has been impressive, as more and more investors discover them.

Like an index mutual fund, ETFs to date are passive portfolios (although actively managed ETFs are under consideration) that simply hold a basket of stocks. Unlike a mutual fund, however, and like a stock or a closed-end fund, an ETF trades on an exchange throughout the day, and can be bought on margin and sold short. And like a closed-end fund, ETFs can trade at discounts and premiums, but to date, the differences between NAV and price have been tiny, and this will almost certainly continue to be the case because of the unique mechanisms that were developed to create and liquidate ETF shares.

Let's consider some ETFs. Probably the best-known ETF is the "Spider" (Standard & Poor's Depositary Receipts, SPDRs), which was introduced in 1993 to reflect the S&P 500 Index. SPDRs are traded on the Amex, and priced continuously during the day Other ETFs include "Diamonds" (the DJIA), "Cubes" (Nasdaq-100 Index Tracking Stock), and "Shares" (S&P 500 as well as other S&P indexes for small cap, mid-cap, and growth and value indexes, various Russell Indexes, various Dow Jones Sector funds, and various country funds), there are 77 different Share ETFs. Vanguard, the investment company, created VIPERs to track the entire stock market.

The Required Rate of Return:

The required rate of return was the discount rate for valuing common stocks. The required rate of return for a common stock, or any security, is defined as the minimum expected rate of return needed to induce an investor to purchase it, is, given its risk, a security must offer some minimum expected return before par investor can be persuaded to buy it.

The CAPM provides investors with a method of actually calculating a required (expected) rate of return for a stock, an industry, or the market as a Our interest, here is to think of the required rate of return on an overall basis as it after the strategies that investors employ and the management of their portfolios.

What do Investors require (expect) when they invest? First of all, investor’s can earn a riskless rate of return by investing in riskless assets such as Treasury bills. This nominal risk-free rate of return is designated RF throughout this text. It consists of a real risk-free rate of interest and an expected inflation premium. In summary, as an approximation:

Risk-free rate of .return =Real risk = free value f Expected Inflation

In addition to the risk-free rate of return available from riskless assets, rational risk-averse investors purchasing a risky asset expect to be compensated for this additional risk. Therefore, risky assets must offer risk premiums above and beyond the riskless rate of return and the greater, the risk of the asset, the greater the promised risk premium must be.

The risk premium should reflect all the uncertainty involved in the asset. Thinking risk in terms of its traditional sources, such components as the business risk and the financial risk of a corporation would certainly contribute to the risk premium demanded by investor for purchasing the common stock of the corporation. After all, the risk to the investor is the expected income (return) will not be realized because of unforeseen events.

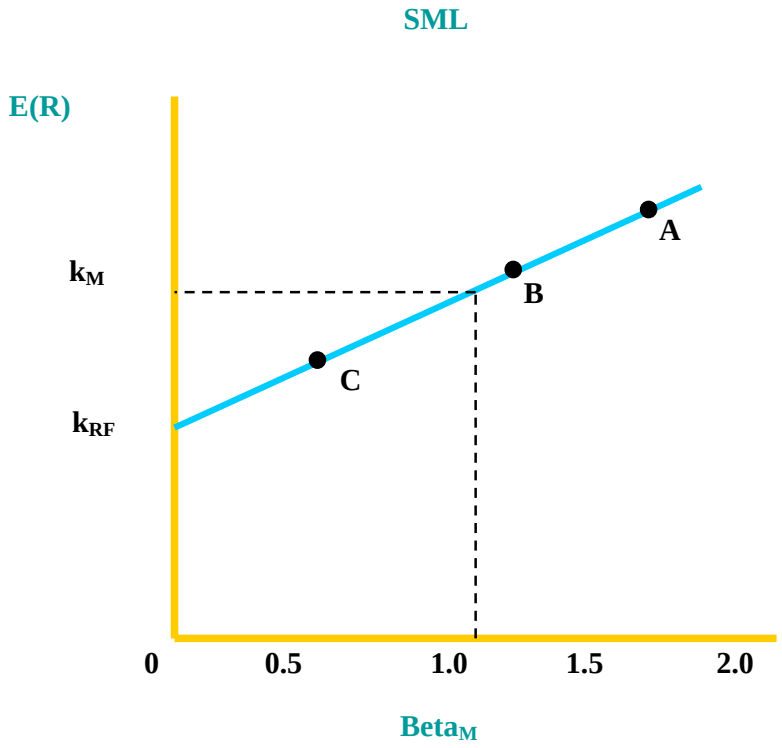
The particular business that a company is in will significantly affect the risk to the investor. One has only to look at the textile and steel industries in the last few years to appreciate business risk which leads to an understanding of why industry analysis is important. And the financial decisions that a firm makes (or fails to make) also affect the riskiness of the stock.

Understanding the Required Rate of Return:

The required rate of return any investment opportunity can be expressed as Equation. This is, in effect, CAPM model.

Required rate of return = Risk- free rate + Risk premium

It is important to note that there are many financial assets and therefore many different required rates of return. The average required rate of return on bonds is different from average required rate of return on preferred stocks, and both are different from the typical required rates of return for common stocks, warrants, or puts and calls. Furthermore within a particular asset category such as common stocks, there are many required rates of return. Common stocks cover a relatively wide range of risk from conservative utility stocks to small, risky high-technology stocks.



The trade-off between the required rate of return and risk is linear arid upward sloping that is, the required rate of return increases as the risk, measured by beta, increases; the stock market taken as a whole has a beta of 1.0, indicated by point M. The required rate of return for, all stocks is therefore k_M. A stock with a beta lower than 1.0 has a required rate of return below k_M, because its risk (beta) is less than that of the market. On the other hand, a stock with a beta greater than 1.0 has a required rate of return greater than that of the market.

It is also important to be aware that the level of required rates of return changes over time. For example, required rates t of return change as inflationary expectations change, because the inflation premium is a component of the risk-free rate of return, which in turn is a component of the requited rate of return. The level also changes as the risk premiums change. Investor pessimism will increase the risk premium and the required rate investor optimism lowers both.

