University of Colorado
Colorado Springs

College of Business

Is it Worth it To Invest in "Green" Companies?

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INTRODUCTION

This case is about mutual fund investment strategies and uses Excel to determine the optimal investment level, based on risk and desire to invest into environmentally friendly stocks or traditional stocks.

A mutual fund is a company that groups investment funds from individuals and then purchases numerous types of investments into a portfolio. By investing into a number of investments, it lowers the risk. The fund is managed by a professional investor, who buys and sells different securities, with the hope of maximizing the return. The mutual fund manager is paid on how week each of the funds performs, which provides an incentive for the manager to invest the money effectively.

CASE INSTRUCTIONS

This is a linear programming case assignment. There is a choice of portfolio selections for investment options. For the ethical component, the students would be picking investments for two funds, each with their own profile. For example, one of the funds might have an environmentally friendly client base, who would want the minimum invested in non-environmentally friendly companies; while the other fund could be a retirement account, which should only have lower risk securities.

Many investors are worried about their returns. Most corporate bonds, municipal bonds, foreign stocks, commodities and U.S. stocks lost money in 2008 and 2009. Lower risk mutual funds tend to have between 30% and 70% of their investments in stocks and the rest are in preferred stocks and corporate bonds, which are considered lower risk.

A green fund is a mutual fund or other type of investment that will only invest money into companies that are considered socially conscious when making business decisions, or that promote efforts to improve the environment. "Socially conscious investing" has become more popular among consumers due to greater environmental awareness and greater federal funding towards alternative energy and other environmental programs.

According to a study published by the University of Washington, "green investing" is having an impact on non-environmental firms as well. Polluting firms are obtaining fewer investors, which then increases their cost of capital. The belief is that if the pressure of the higher cost of capital continues, then polluting firms will invest in methods to reduce emissions, and thus become "greener". The theory holds that if 20% of a firm's investors are "green" then the pressure to pollute less is strong. Current data indicates that only about 10% of funds are invested by "green" investors. If more investors go "green", it is believed that this will put enough pressure on all firms to be more environmentally conscious.

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THE TWO FUNDS

University Finance is selecting securities for the two funds below:

Fund name	Description
The EnviroConscious fund	The perfect investment fund for the environmentally conscious student who is looking to invest their abundance of extra cash. The primary client base for this account is willing to tolerate a moderate amount of risk, wants a minimum amount invested in companies who are considered to be environmentally unfriendly.
The Professor Retirement fund	The choice retirement fund of teachers on campus. More indifferent than the students in terms of environmentally friendly companies, but are less tolerant of risk, since they would like to retire at some point.

AVAILABLE COMPANIES TO INVEST IN (HIGHER RISK SCORE INDICATES MORE RISK)

Name	Description of company	Rate of return	Risk score
BP	NE	10%	5
Walmart	NE	7.5%	2
Whole foods	E	3%	2.5
Rainforest	E	7%	4
Zoo	E	8%	3
Plastic CO	NE	6%	2

FUND REQUIREMENTS

There are several requirements for both individual funds, as well as the combination of both funds, which are as follows:

<u>The combined constraints are as follows:</u>

- There is $200, 000 total to allocate to the combination of funds
- No individual fund may contain more $100,000
- The combination of both funds may not consist of more than five investments
- The average risk score of both funds may not exceed 2.7

QUESTIONS TO ANSWER

1. What will the optimal rate of return be for an entirely environmental fund and in what combination?
2. What will the optimal rate of return be for an entirely non-environmental fund and in what combination?
3. What is the ideal combination of funds if the goal is to maximize the rate of return?

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4. What is the ideal combination of funds if the goal is to minimize risk?
5. List 3 factors that would influence your decision.
6. What impact do environmental funds have on all stocks?

SOURCES

http://money.howstuffworkds.com/personl-finance/financial by Dave Roos, March 2011

http://www.kiplinger.com/columns/value/archive/2009/va0216.htm by Steven Goldberg, February 16, 2009

http://www.investopedia.com/terms/g/green_fund.asp

The Effect of Green Investment on Corporate Behavior, Journal of Financial and Quantitative Analysis (2001), 36:431-449, Robert Heinkel, Alan Kraus and Joseph Zechner

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