Capital Investment Analysis: Roman Manufacturing Company Case Study

Arthur S. Guarino

Abstract

This case study on capital investment analysis can be applied to introductory courses in finance, financial decision making, and corporate finance. Three alternative capital investment projects are available for evaluation. The investment options must be carefully examined and a decision arrived at based on a financial analysis of the information provided in the case using capital budgeting and capital structure techniques.

Keywords: Capital asset pricing model (cost of equity), Internal Rate of Return, Net Present Value, Payback Period, Yield to Maturity (cost of debt), Weighted Average Cost of Capital

Introduction

Stefano Romano is the Chief Executive Officer of Roman Manufacturing Company, a shoe manufacturing firm located in New York City, and he is looking to expand the company's product line. The company has manufactured shoes for working class and middle class families and a luxury brand footwear that has been highly profitable. Stefano wishes to diversify the company's product line into casual footwear or athletic shoes. Based upon marketing studies commissioned by Roman Manufacturing, the company's profits, based on the product diversification, could increase 15 to 20% in the next ten years. However, Stefano has been introduced to another business venture that could expand the luxury brand footwear line through an acquisition of a well-known Italian designer house known as House of Napoli Shoes that would give Roman Manufacturing a larger share of the global market in high end shoes. Stefano needs to decide which of the three areas Roman Manufacturing should focus on and make an investment.

Company Background

Roman Manufacturing Company is a shoe manufacturing company located in New York City and has been in business since 1900. Giuseppe Romano came to the United States as a young boy and was immediately apprenticed as a shoe maker in New York City. Giuseppe not only had a knack for making and repairing shoes but a sense of style and business that allowed him to open his first shoe repair store at age twenty. His schooling was quite limited, but he was a whiz at numbers, and recognizing a good business deal when he saw one. He was also a people person and got along well with his customers allowing him plenty of repeat business. Many of his customers were financial people, who were involved in commercial banking, investments, finance, and stock brokerage. Giuseppe repaired and shined their shoes but also asked questions that lead him to read the Wall Street Journal and invest in the stock market.

As his business grew so did his shoe repair stores in New York City and his interest in manufacturing shoes. He started his first shoe manufacturing plant in Brooklyn by buying up a bankrupt business during the height of the Great Depression and expanding when many others were closing down. Giuseppe renamed the business, Roman Manufacturing Company, which at first made shoes for the middle class consumer. This involved shoes that people wore every day and would last. If the consumer needed to have the shoe repaired, it could be brought to any of Giuseppe's shoe repair stores, at a low or no cost. Eventually, Giuseppe expanded the company's product line to highly fashionable shoes which meant hiring designers and craftsman from Italy. Helped by favorable reviews from fashion magazines and endorsements from movie, television, and Broadway celebrities, this line of the business eventually brought in over 50% of the company's revenue. The profits for the fashionable shoes line were phenomenal and 100% were reinvested into Roman Manufacturing.

His five children became interested in different facets of the business and eventually Roman Manufacturing Company was able to expand to the entire East Coast of the United States and across to the Mississippi River. The next generation (Giuseppe's grandchildren) became involved in the business and was looking to expand into different types of footwear, possibly athletic shoes or casual footwear. The factor that would set them apart from other manufacturers was that Roman Manufacturing would make their product in the United States, in New York City, while others companies were going overseas due to lower costs and bigger profits.

Current Situation

Stefano, Giuseppe's third grandchild, was now running Roman Manufacturing, while his cousin, Guido, was director of manufacturing operations. Guido presented to Stefano and the other managers his research into the costs of acquiring new machinery for the athletic footwear and casual shoes lines. However, Lorenzo brought forth the possibility of setting up a subsidiary in Southern Italy making a new line of men's and women's luxury shoes.

Establishing a new manufacturing branch in Southern Italy caught Stefano totally off-guard, but when Lorenzo, another cousin and the company's chief financial officer, heard that a long-established Italian family was looking to sell their company, House of Napoli Shoes, at a fairly reasonable price, the opportunity presented Stefano with an intriguing possibility he could not ignore.

Stefano and Guido had come to the conclusion that Roman's manufacturing plant needed ten new machines to make athletic shoes. The cost would be $1.25 million dollars just for the new machinery imported from abroad. Materials and supplies as well as worker's salaries and benefits would come to be $1 million. The total cost would be $2.25 million. Roman Manufacturing had the floor-space for the machines and could transition to the new product line in approximately six months.

Guido also did research into the machinery needed for the casual footwear line. Roman would need ten new machines, imported from overseas, at a cost of $2 million. The cost of materials and supplies and worker's wages would be $1.25 million for a total cost of $3.25 million. These machines would need less floor space than the machines for the athletic footwear and would take approximately four months to start manufacturing operations.

The situation with the purchase of the Italian shoe manufacturing company, House of Napoli Shoes, was more complicated. First, the sale would have to be approved by the Italian government and the anti-trust division of the European Union (EU). Once that hurdle was cleared then the unions involved with the company would have to be assured that no jobs would be lost after the sale took place. Stefano knew that the situation regarding the relationship with the unions could hurt Roman's reputation in Italy and the United States if it was not handled correctly. Stefano always felt that bad publicity will hurt a good company every time. Guido and Lorenzo had been in negotiations with the Italian firm as well as with the anti-trust division of the EU and the unions. Guido and Lorenzo were able to work out a deal in which Roman would purchase the Italian firm for $500 million. The deal would be all cash and financed by the sale of corporate bonds and common and preferred stock to new and existing shareholders.

Financial Information

Stefano, after consulting with Guido and Lorenzo as well as with Roman's accounting firm, investment bankers, and financial advisors came up with three different methods to finance each possible venture.

For the casual footwear line, the commercial bank Roman Manufacturing has been working with since the business was purchased by Giuseppe in 1933 could make a loan for $3.25 million at a fixed rate of 5% for a term of 10 years with monthly loan payments of $17,447.90. However, there was a prepayment penalty of 2% of the remaining balance of the loan if it were paid off in the first five years.

For financing the athletic shoes line, Stefano, based upon Lorenzo's recommendation, was considering using a finance company from Chicago. The loan would be for $2.25 million for 10 years at a rate of 6.5% without any prepayment penalties and at a monthly payment of $14,222.43.

The financing for the purchase of the Italian footwear company would be the costliest, more complicated, and, Stefano felt, have the highest amount of risk. The financing would be done using a split of corporate bonds, preferred stock, and issuing a new class of common stock specifically designated for the purchase.

Fifty percent of the $500 million purchase would be using callable bonds with a coupon interest rate of 5% at a par value of $1,000 per bond and a term of 30 years. The 250,000 issued bonds would pay interest semi-annually and, with Roman's corporate tax rate at 34%, the after-tax interest rate on the issue would be 3.3%. The would have a market price of 103 as a percentage of par.

Twenty-five percent of the purchase price would be financed using non-cumulative preferred stock issued with a par value of $100 per share and paying dividends quarterly at a rate of 10%. The cost of capital for the preferred stock issue would be 7%.

The other 25% of the cash to be raised would come from the sale of a new class of common stock at a projected price of $25.00 per share, not paying dividends for the first five years of the issue, no voting rights, and 5 million shares authorized to be issued.

The investment bankers hired by Roman Manufacturing have projected that its β would be 1.25, higher than Stefano and Lorenzo wanted it to be. Also, T-bills are currently at a rate of 3%, while the market return rate is 9%.

Another piece of the puzzle, and perhaps the most important, are the cash flows each venture could potentially bring to Roman Manufacturing, assuming a 10% discount rate. Lorenzo's staff has come up with the following projected cash flows:

Year	Casual Shoes	Athletic Shoes	House of Napoli Shoes
1	–$500,000	$850,000	$1,000,000
2	–$400,000	$850,000	$1,500,000
3	$300,000	$850,000	$2,000,000
4	$500,000	$850,000	$2,500,000
5	$800,000	$850,000	$3,500,000
6	$900,000	$850,000	$4,500,000
7	$1,250,000	$850,000	$5,000,000
8	$1,500,000	$850,000	$5,500,000
9	$1,750,000	$850,000	$6,000,000
10	$2,000,000	$850,000	$6,500,000

While Roman Manufacturing is largely a family-owned company, with the Romano family controlling 51% of the firm's voting stock, Stefano knew he would have to present management's final decision to the board of directors. For Stefano, there were still questions and concerns that needed to be addressed which he listed in a memo to Lorenzo and requested an answer in one week.

Roman Manufacturing Company
Making Great Shoes since 1933

To: Lorenzo Romano – CFO
From: Stefano Romano – CEO
Date: July 2, 2016
Re: Questions regarding ventures under consideration

I have been thinking about the proposed acquisition of House of Napoli Shoes and the manufacturing equipment and ancillary items regarding the athletic shoes and casual footwear ventures. I have certain questions regarding financial matters of each project. I have listed the questions below and would like a detailed reply in one week in a memo and a follow-up meeting.

1. What is the net present value (NPV) for each venture? And based on the principle of mutually exclusivity, which venture(s) should be accepted or rejected?
2. What is the internal rate of return (IRR) for each venture? Given that the company's cost of capital is 10%, which venture(s) should be accepted or rejected?
3. What are the Payback Periods for each venture? Which venture(s) should we accept given the company's cutoff period of three (3) years?
4. By using the Capital Asset Pricing Model (CAPM), find the required return on equity for the purchase of House of Napoli Shoes.
5. Examine the proposed bond issue to be used in the acquisition of House of Napoli Shoes and find its cost of debt using the yield to maturity.
6. Given the weights of the equity portion (both preferred and common stock) and debt in the capital structure for the House of Napoli Shoes venture let me know what is Roman's weighted average cost of capital involving the deal.
7. What do you think are the best financial decision rules that should be used in order to make a correct decision for the three possible ventures?
8. Are there any key questions that should be considered?
9. As CFO, which of the three ventures do you think Roman Manufacturing should pursue and why?

Author

Arthur S. Guarino
Assistant Professor, Department of Finance and Economics, Rutgers University, USA, arthur.guarino@hotmail.com