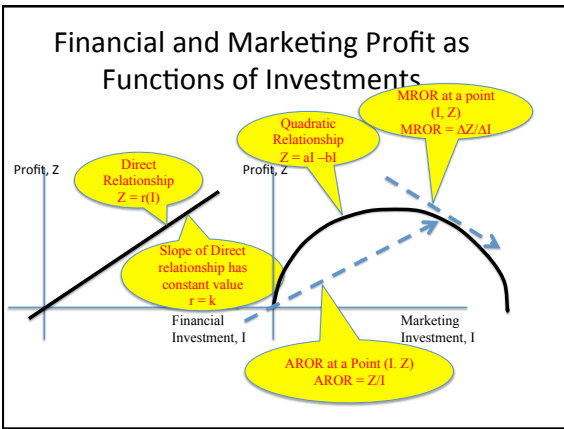


Marketing Investment and Financial Hurdle Rates

Ted Mitchell

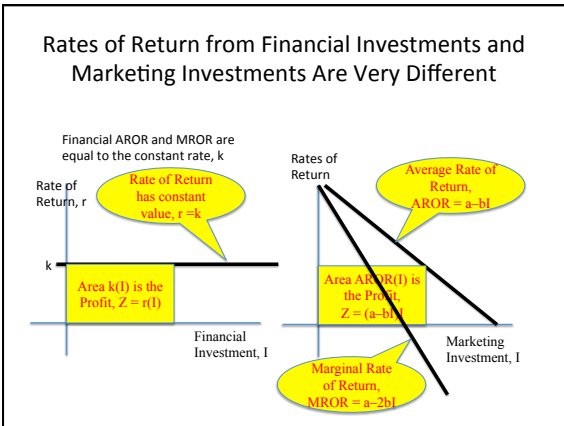
We have learned that

- Profit Functions associated with Financial Investments and Profit Functions associated with Marketing Investments are totally different in character



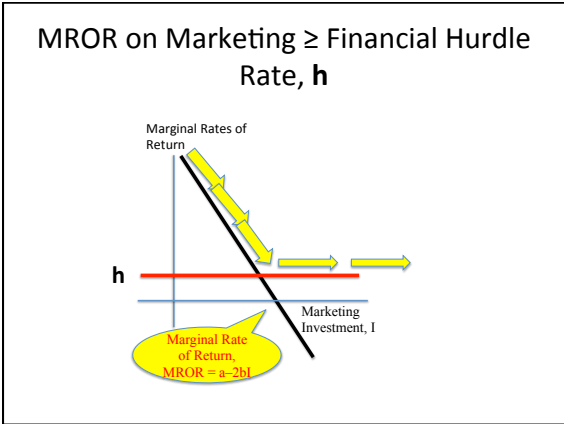
Rates of Return Are Different

- There are Average and Marginal Rates of Return with Financial Investments
- However, with Financial Investment the $AROR = MROR = a$ constant value, k
- $AROR$ and $MROR$ with Marketing Investments are not equal and don't have constant values



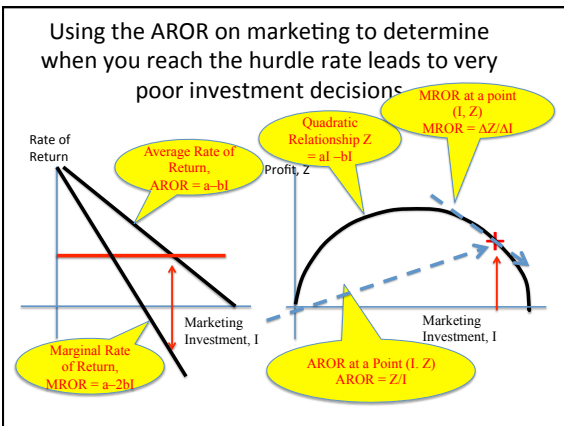
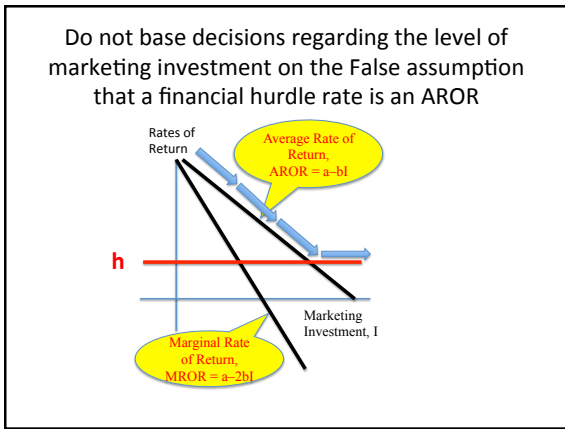
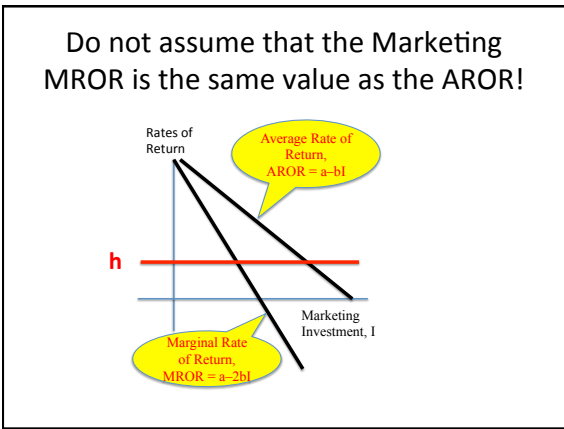
The Financial Marginal Rate of Return

- Which is called the interest rate is often given to marketing managers as a **Hurdle rate**
- A Hurdle rate, h , is an interest rate which the marginal rate of return on marketing, $MROR$, must be larger than
- For a marketing Investment to be approved the $MROR$ on the Marketing Investment must be greater than the hurdle rate, h , $MROR \geq h$



Do NOT get caught in the

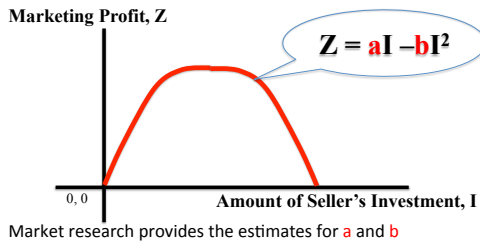
- Conceptual Trap that the MROR on Marketing Investments is equal to the AROR on Marketing Investments
- In Marketing $MROR \neq AROR$



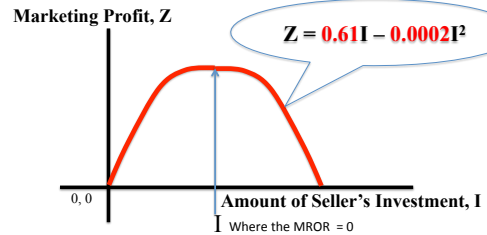
Example of finding the

- Expenditure Level for the Marketing Investment that will have the MROR at that level equal to the hurdle rate, h , provided by the firm

The quadratic equation which describes the relationship between the financial gain, Z, and a Marketing Investment, I



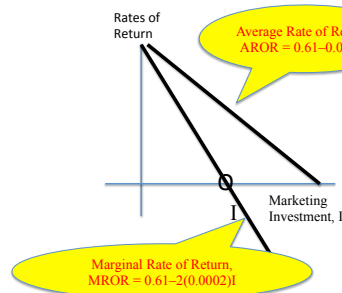
The quadratic equation implies an optimal level of marketing investment, I, will maximize marketing profit, Z



With a Quadratic Profit Function, $Z = aI - bI^2$

- The **M**arginal **R**ate **O**f **R**eturn at any point on the marketing profit function is written as
- $MROR = a - 2bI$
- Remember values 'a' and 'b' have been provided by market research

What is the level of marketing investment, I, that makes the MROR equal to zero, 0?



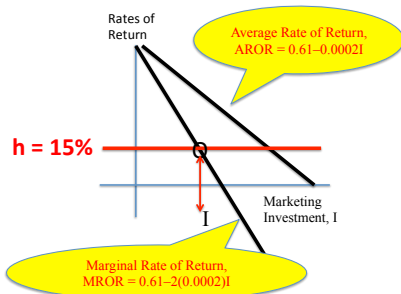
Optimal level of marketing Investment

- Will maximize the profit being returned is where $MROR = 0$
- In general $MROR = a - 2bI$ and set equal to zero
- $a - 2bI = 0$
- $-2bI = -a$
- $I = a/2b$

For our specific example

- Where the $MROR = a - 2bI$ set = 0
- $0.61 - 2(0.0002)I = 0$
- $-(0.0004)I = -0.61$
- $I = 0.61/0.0004$
- $I = \$1,525$ as the optimal level of investment for maximum profit

What is the level of marketing investment, I , that makes the MROR equal to **hurdle rate, h** ?

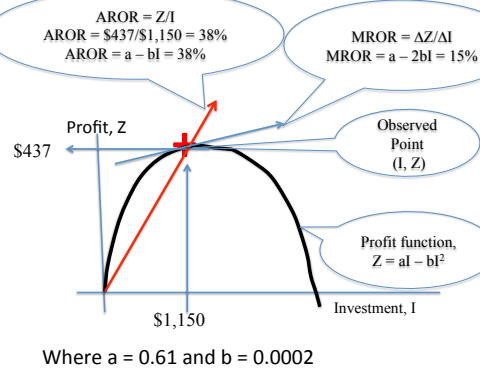


To find the level of marketing investment that makes

- MROR on the marketing investment equal to the financial hurdle rate, h , is
- To set the MROR function equal financial hurdle rate, h
- $MROR = h$
- $a - 2bI = 15\%$
- $0.61 - 2(0.0002)I = 0.15$
- $-2(0.0002)I = 0.15 - 0.61$
- $(0.0004)I = 0.46$
- $I = 0.46/0.0004 = \$1,150$, the hurdle rate investment

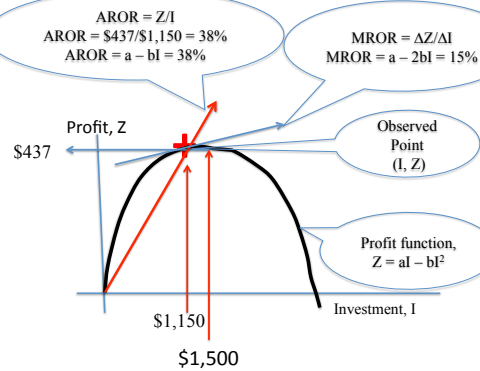
Example of Calculating AROR

- The value of $a = 0.61$ and $b = 0.0002$
- When the firm is spending the amount needed to have $MROR = \text{hurdle rate, } 15\%$
- What is the **average rate of return** on that \$1,150 investment
- **Answer**
- $AROR = a - bI$
- $AROR = 0.61 - 0.0002(1,150)$
- $AROR = 0.61 - 0.23$
- **AROR = 0.38 or 38% average rate of return**
- When the MROR is only 15%



When you have a hurdle rate, h

- You will never reach the optimal level of marketing investment



Any questions on Hurdle Rates

- That Finance may throw at us
- Marketers get frustrated with financial hurdle rates!
- We fail to achieve optimal marketing profits