

Business Plan: How to Best Stock Leased Land

Presented by:
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Introduction

- Zach Steele leases ranch
- Near Sundance, WY
- Single man operation
- Research compare best way to stock
- Compare two different options

Background

- Zach has had lease for a couple years
- Plentiful food and water
- Previous tenants did not graze
- First year did not stock fully
- Second year, numbers up, mixed herd

Ranch Information

- 1500 acres
- Five year loan to buy cattle
- Pay off loan, 7% interest
- Compare two cattle options
- Analyze which one makes more money

Questions to be Addressed

- What is most efficient way to stock
- How many cows to fill ranch
- What is the break even price
- What if interest changes
- What age of cows to purchase

Method of Analysis

- Historical Data
- Enterprise Budget
- Breakeven Analysis
- NPV Analysis
- SWOT Analysis

Base Scenario

- Cow/calf operation
- 200 head of older cows
- Mixed herd
- Buy back to 200 head every year

Alternative Option

- Cow/calf operation
- 200 head of first calf heifers
- All two years old
- Buy back to 200 head every year

SWOT Analysis

Base Scenario

- Strengths – know productivity, less labor
- Weaknesses – salvage value, health
- Opportunities – calf market, big calves
- Threats – calf and slaughter cow market

SWOT Analysis

Alternative Option

- Strengths – health, age
- Weaknesses – labor, mentality
- Opportunities – calf and young cow market
- Threats – new herd, money invested

Break Even Analysis

- Base Scenario
- Enterprise Budget = \$86,786
- Per calf = \$461.63

- Alternative Option
- Enterprise Budget = \$89,225
- Per calf = \$474.60

Enterprise Budget

Base Scenario		Alternative Option	
Enterprise Budget Expense	Amount	Enterprise Budget Expense	Amount
Leased Land	20250.00	Leased Land	20250.00
Cow note	41461.00	Heifer Note	43900.00
Hay (5 months)	16875.00	Hay (5 months)	16875.00
Cake (5 months)	6000.00	Cake (5 months)	6000.00
Vet Bills	2200.00	Vet Bills	2200.00
Total	<u>86786.00</u>	Total	<u>89225.00</u>
Per Cow	461.63	Per Heifer	474.60

NPV

Base Scenario

NPV Analysis

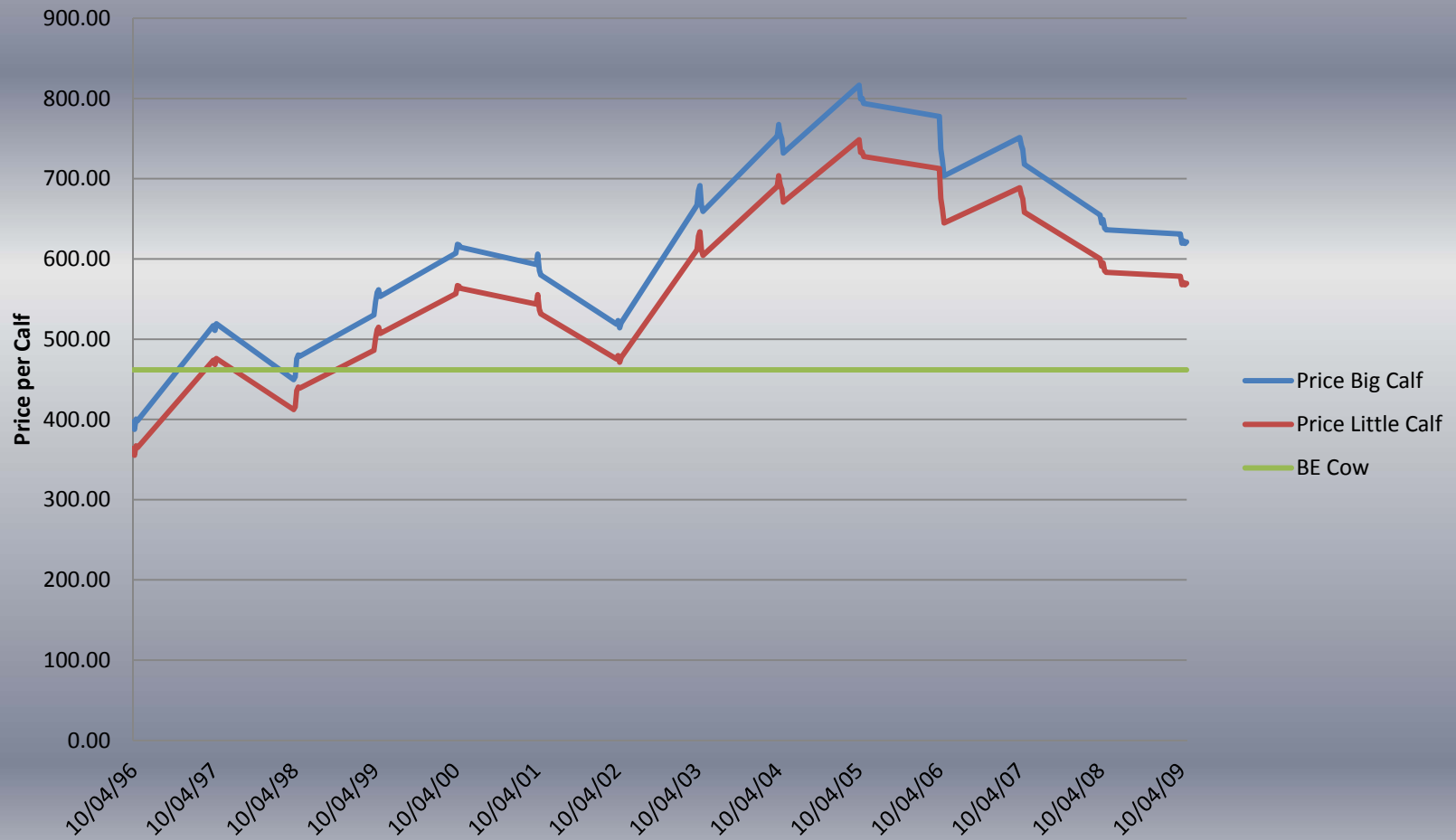
Alternative Option

NPV Analysis

200 cows	Big Calf	Little Calf	200 Heifers	Big Calf	Little Calf
Asset Sheet Value	-850.00	-850.00	Sale Barn Price	-900.00	-900.00
Calf 1	617.70	566.23	Calf 1	582.45	529.50
Calf 2	617.70	566.23	Calf 2	582.45	529.50
Calf 3	617.70	566.23	Calf 3	582.45	529.50
Calf 4	617.70	566.23	Calf 4	582.45	529.50
Calf 5	617.70	566.23	Calf 5	582.45	529.50
Salvage Value	789.00	789.00	Salvage Value	1056.00	1056.00
NPV	2245.24	2034.20	NPV	2241.07	2023.97

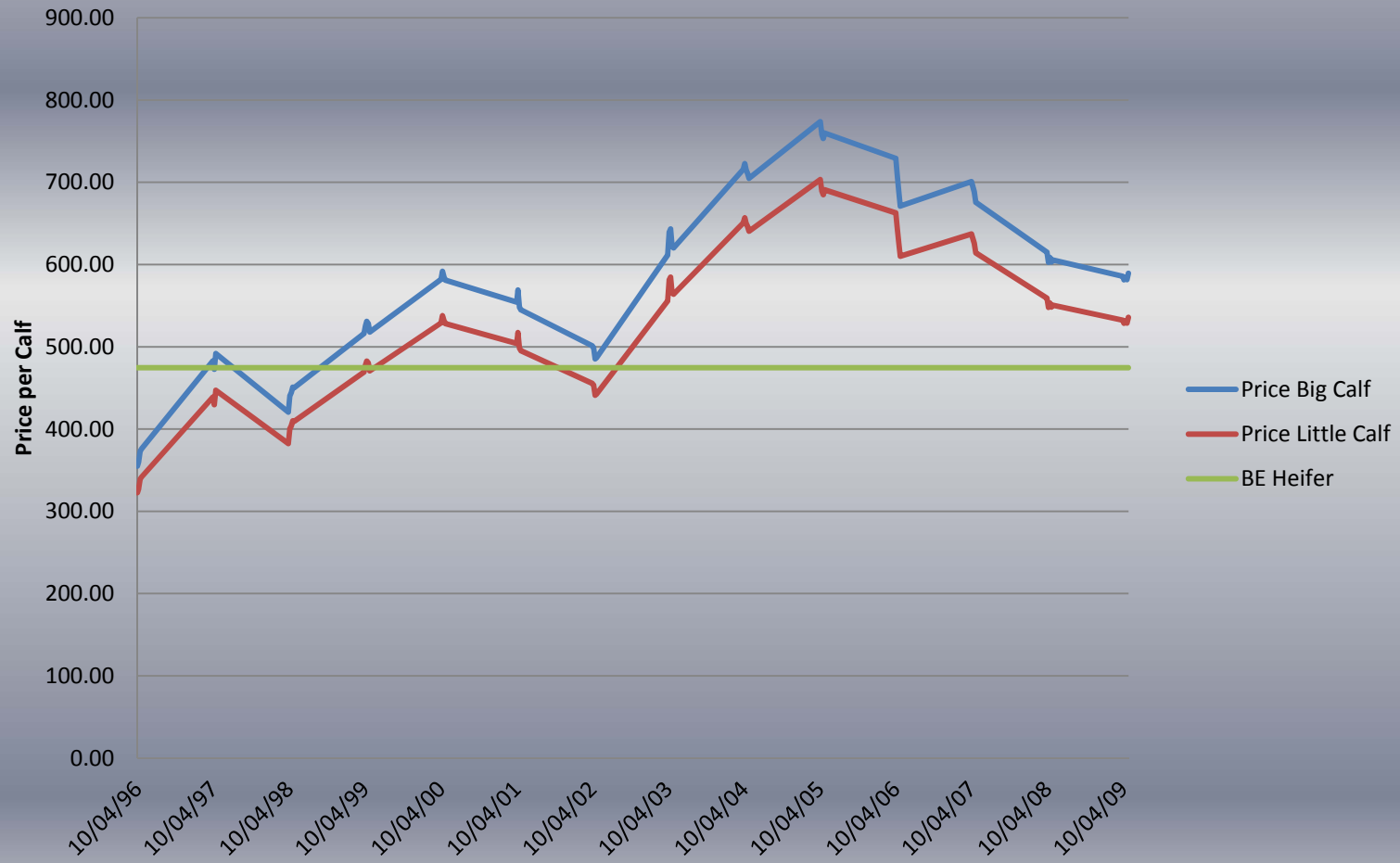
Break Even Graphs

Cows



Graphs Cont'd

Heifers



Risk

- Interest at 7% currently
- What if it increases
- What if it decreases
- How does that affect break even
- How does that affect net present value

Break Even

Interest Decreases	
Base Scenario	
Enterprise Budget	
Expense	Amount
Leased Land	20250.00
Cow note	39266.00
Hay (5 months)	16875.00
Cake (5 months)	6000.00
Vet Bills	2200.00
Total	<u>84591.00</u>
Per Cow	449.95

Alternative Option	
Enterprise Budget	
Expense	Amount
Leased Land	20250.00
Heifer Note	41576.00
Hay (5 months)	16875.00
Cake (5 months)	6000.00
Vet Bills	2200.00
Total	<u>86901.00</u>
Per Heifer	462.24

Base Scenario	
Enterprise Budget	
Expense	Amount
Leased Land	20250.00
Cow note	41461.00
Hay (5 months)	16875.00
Cake (5 months)	6000.00
Vet Bills	2200.00
Total	<u>86786.00</u>
Per Cow	461.63

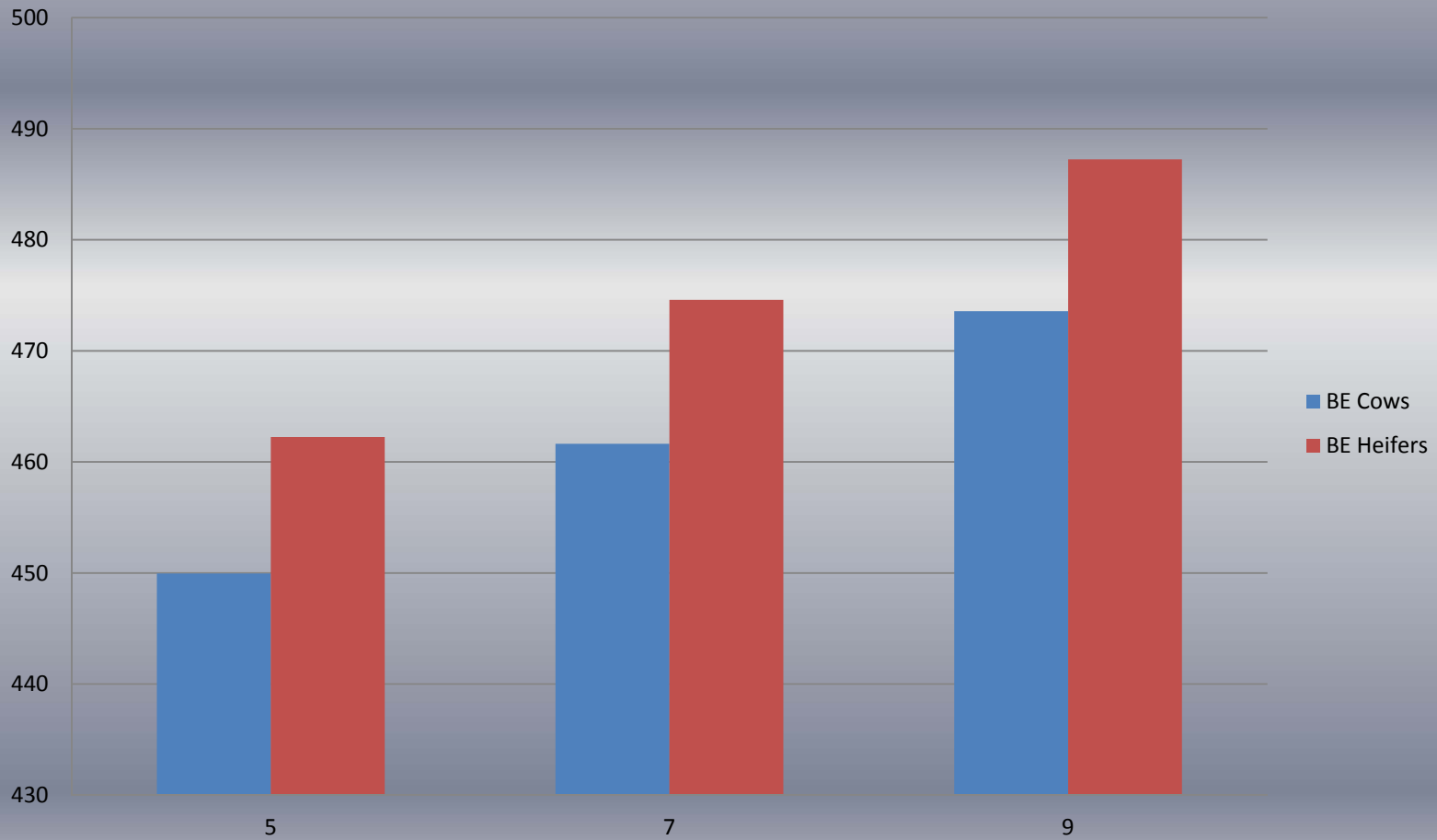
Alternative Option	
Enterprise Budget	
Expense	Amount
Leased Land	20250.00
Heifer Note	43900.00
Hay (5 months)	16875.00
Cake (5 months)	6000.00
Vet Bills	2200.00
Total	<u>89225.00</u>
Per Heifer	474.60

Interest Increases	
Base Scenario	
Enterprise Budget	
Expense	Amount
Leased Land	20250.00
Cow note	43706.00
Hay (5 months)	16875.00
Cake (5 months)	6000.00
Vet Bills	2200.00
Total	<u>89031.00</u>
Per Cow	473.57

Alternative Option	
Enterprise Budget	
Expense	Amount
Leased Land	20250.00
Heifer Note	46277.00
Hay (5 months)	16875.00
Cake (5 months)	6000.00
Vet Bills	2200.00
Total	<u>91602.00</u>
Per Heifer	487.24

Break Even

Interest Rate Risk and BE Price



NPV

Interest Decreases

Base Scenario

NPV Analysis

200 cows	Big Calf	Little Calf
Asset Sheet Value	-850.00	-850.00
Calf 1	617.70	566.23
Calf 2	617.70	566.23
Calf 3	617.70	566.23
Calf 4	617.70	566.23
Calf 5	617.70	566.23
Salvage Value	789.00	789.00
NPV	2442.52	2219.68

Alternative Option

NPV Analysis

200 Heifers	Big Calf	Little Calf
Sale Barn Price	-900.00	-900.00
Calf 1	582.45	529.50
Calf 2	582.45	529.50
Calf 3	582.45	529.50
Calf 4	582.45	529.50
Calf 5	582.45	529.50
Salvage Value	1056.00	1056.00
NPV	2449.11	2219.86

Base Scenario

NPV Analysis

200 cows	Big Calf	Little Calf
Asset Sheet Value	-850.00	-850.00
Calf 1	617.70	566.23
Calf 2	617.70	566.23
Calf 3	617.70	566.23
Calf 4	617.70	566.23
Calf 5	617.70	566.23
Salvage Value	789.00	789.00
NPV	2245.24	2034.20

Alternative Option

NPV Analysis

200 Heifers	Big Calf	Little Calf
Sale Barn Price	-900.00	-900.00
Calf 1	582.45	529.50
Calf 2	582.45	529.50
Calf 3	582.45	529.50
Calf 4	582.45	529.50
Calf 5	582.45	529.50
Salvage Value	1056.00	1056.00
NPV	2241.07	2023.97

Interest Increases

Base Scenario

NPV Analysis

200 cows	Big Calf	Little Calf
Asset Sheet Value	-850.00	-850.00
Calf 1	617.70	566.23
Calf 2	617.70	566.23
Calf 3	617.70	566.23
Calf 4	617.70	566.23
Calf 5	617.70	566.23
Salvage Value	789.00	789.00
NPV	2065.43	1865.23

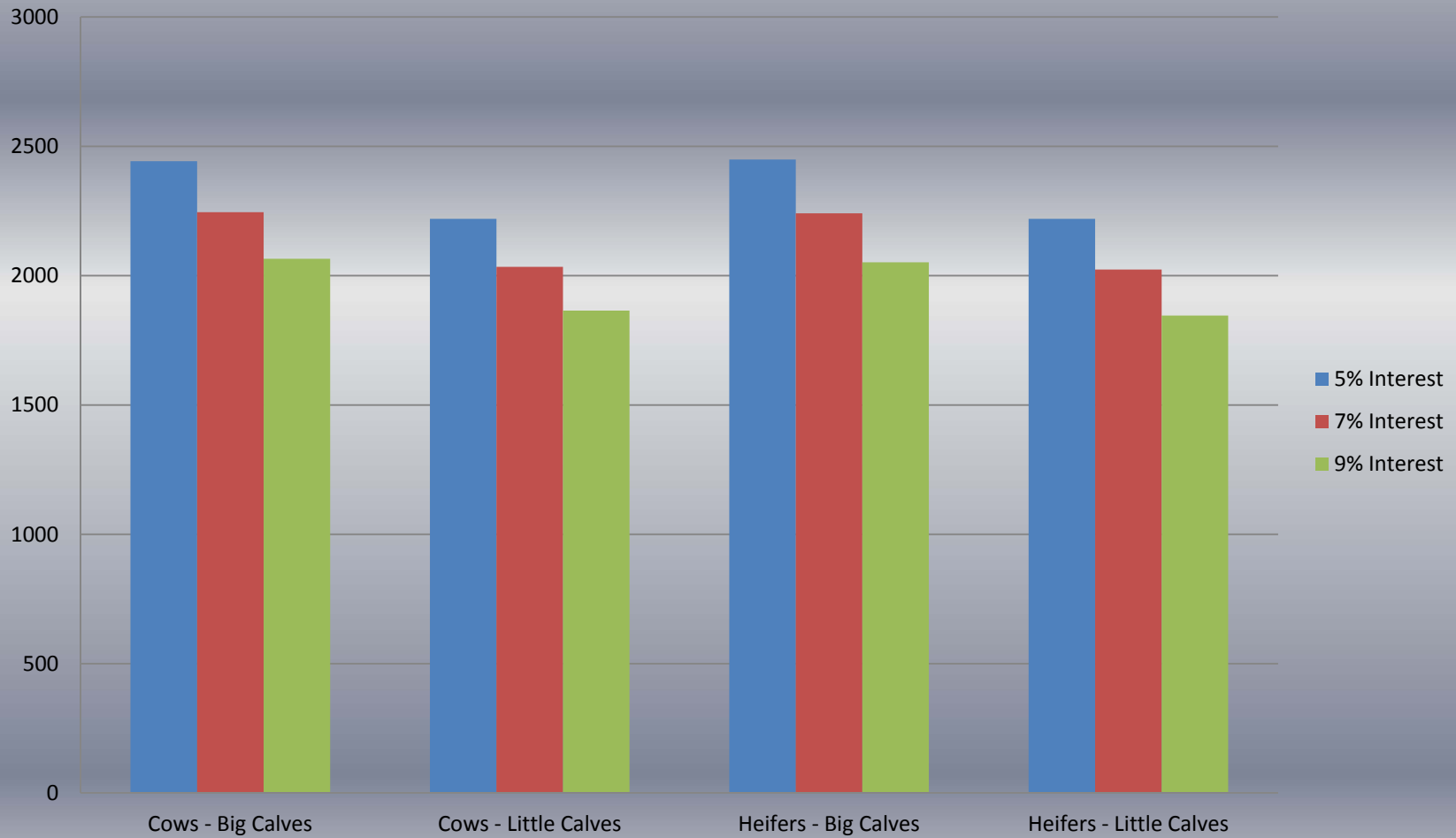
Alternative Option

NPV Analysis

200 Heifers	Big Calf	Little Calf
Sale Barn Price	-900.00	-900.00
Calf 1	582.45	529.50
Calf 2	582.45	529.50
Calf 3	582.45	529.50
Calf 4	582.45	529.50
Calf 5	582.45	529.50
Salvage Value	1056.00	1056.00
NPV	2051.85	1845.90

NPV

Interest Rate Risk and NPV



Cattle Cycles

- Average historical price above break even price
- Prices on downfall
- What if price keeps coming down
- What if price starts going up

Conclusion

- Both options have feasible break even prices
- Both options have positive net present values for each cow
- Base scenario has lower break even costs because of less investment
- Heifers have higher break even but have whole life ahead of them

Recommendation

- Zach should stay with his base scenario
- Even if cows are older, have better break even prices and net present values
- Won't have to change his operation
- Base scenario looks to be prosperous

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Questions...

