Niche Market Pricing and Strategies for Maintaining Price Premiums

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Overview

- Differences between large-scale and niche market producers
  - Strategies of both
- Price behavior & Inelastic demand
- Strategies to work with inelastic demand
- Break-Even analysis
- Scenario analysis

Strategies of Large-Scale Producers

- Developing products that add value and profitability to the operation is the goal of all food and agricultural product producers/manufacturers
- Large-scale producers accomplish this through strategies such as:
  - Using market research to identify large segments of the market to serve as potential customers
  - Establishing brand recognition through advertising and promotion
  - Establishing trademark and product protections
- Typically expensive strategies, require a sizable sales volume to be profitable
  - Large firms are able to do this because they are able to enter markets that are large enough to allow them to sell a high volume of product
    - Which allows them to produce at low cost
      - This is called "economy of scale"

Strategies of Niche Market Producers

- Smaller producers generally have higher per-unit costs of production
- Makes competition with large firms nearly or completely impossible
- Smaller firms often find more success in smaller (niche) markets
  - Large firms ignore these because small markets do not allow them to take advantage of their economies of scale in production, processing, and marketing
- Niche markets usually allow for higher prices than larger markets due to the lack of competition and the specialized (differentiated) product
  - This enables small firms to charge prices that are in line with their costs of production

Goals of Niche Market Producers

- Although firms in niche markets are competing on a smaller scale, their job is the same:
  - Defining a market (customers) for the product
    - Could be based on consumer income, location of production, unique product characteristics, etc.
  - Establishing a recognizable product
  - Using this product to effectively compete in against similar products in the market
- All of this needs to be done profitably

Niche Market Price Behavior

- The prices of niche products behave differently than prices of other products
- Niche markets are small (fewer customers)…
- …but those customers are generally willing to pay above the market price for the differentiated product
- In economics, this is called "inelastic demand"
  - The people buying the product are not "price sensitive" (they are not as influenced by price as other consumers)
  - And/or, they will purchase about the same amount of the product even as the price fluctuates
- These conditions also mean:
  - A tool other than price must be used to expand the market
  - Competition from a new competitor with a similar or the same product may cause prices to drop considerably
  - In order for firms to increase their sales, the price would need to drop dramatically-maybe all the way down to zero-or the market would need to be expanded
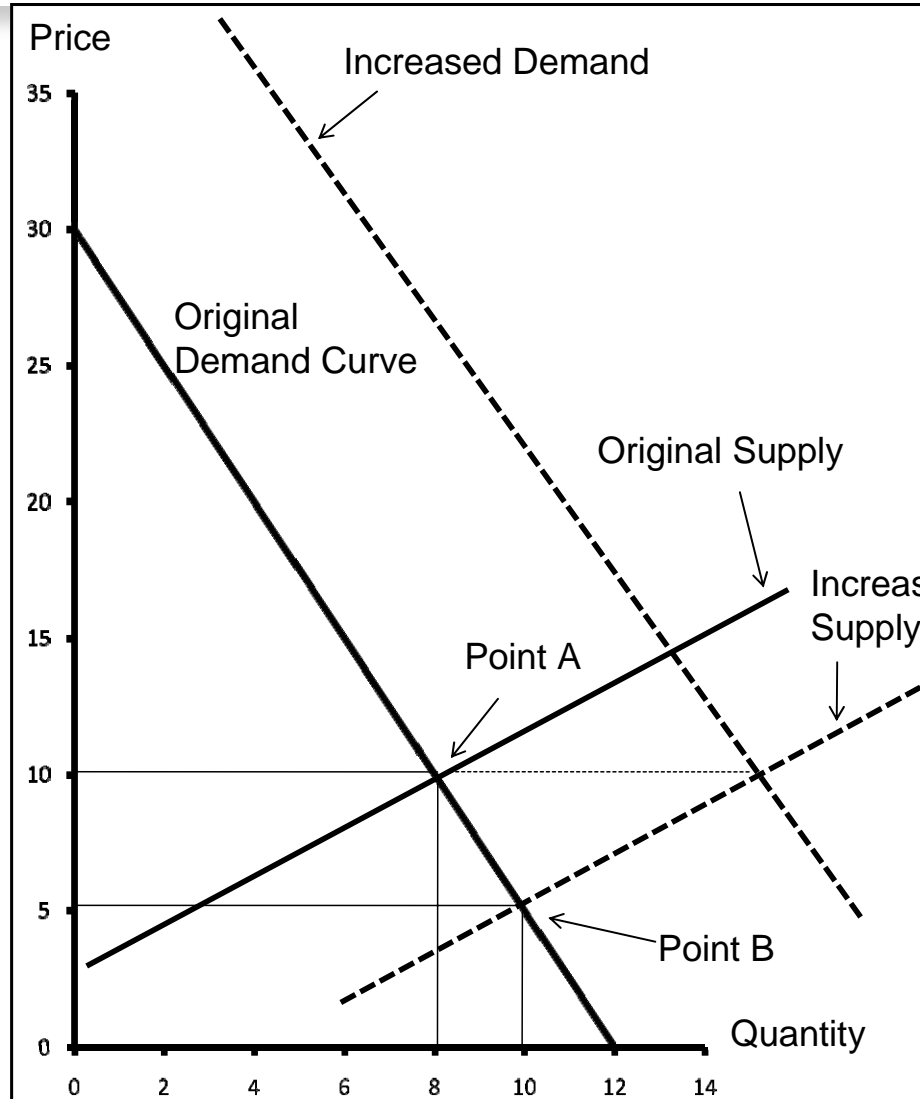
Niche Market Demand

- This figure helps to show the relationship between price and units sold in a niche market
- The demand curve shows how much (quantity) can be sold of the product at each price
- Point A shows that 8 units can be sold at $10/unit
  - Total sales: ($10*8)=$80
- Point B shows that 10 units can be sold at $5/unit
  - Total sales: ($5*10)=$50
- In this example, a 50% price cut increases sales 25%
  - Resulting in lower total sales
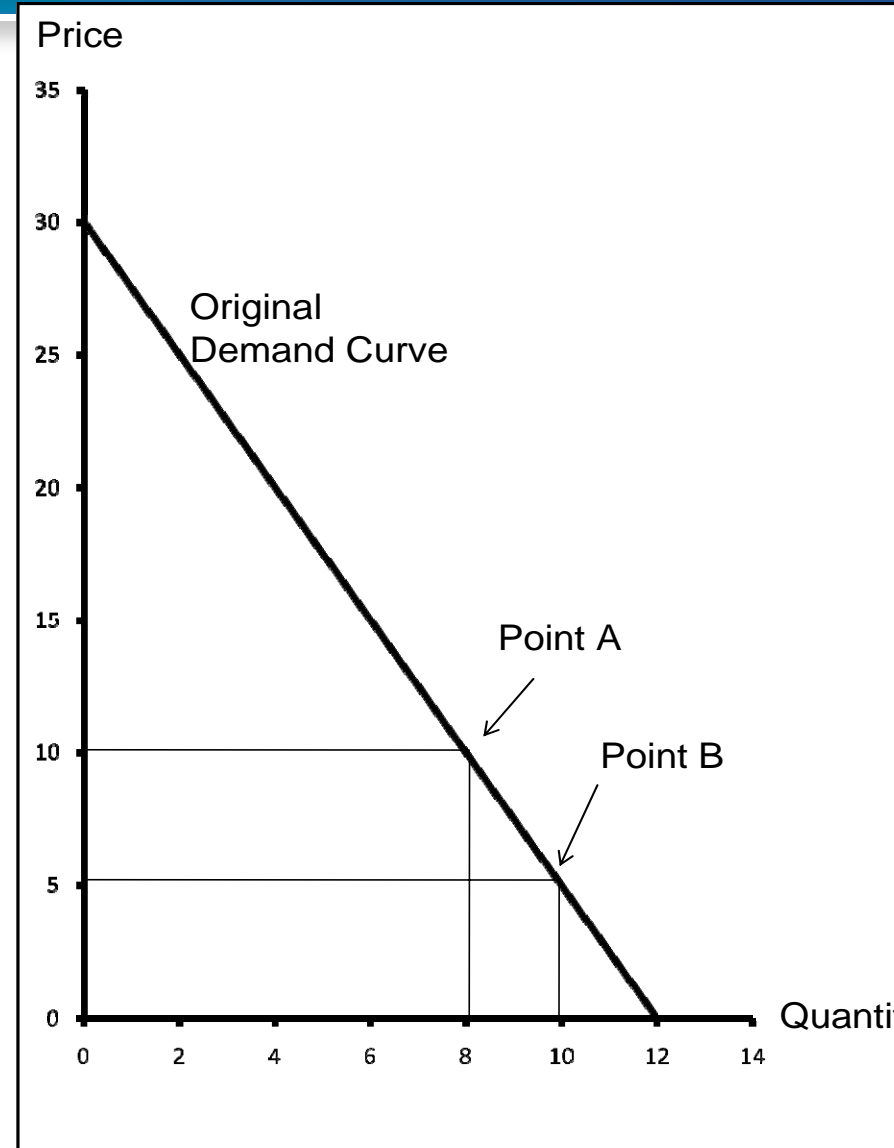
Niche Market Demand & Supply

- This figure builds on the last by adding supply curves
- The supply curve at A represents this market with only one producer
  - Demand would allow firm to sell 8 units at $10/unit
- The supply curve at B shows what would happen if a second supplier entered the market
  - In order for the price to stay at $10/unit, demand would need to increase as well, to the dashed Increased Demand curve
  - With the original demand, in order to sell 8 units, the price would need to be about $4/unit (where the vertical line coming down from Point A intersects the Increased Supply curve)

Strategies to Keep Prices/Sales Stable

- Because of inelastic demand, producers in niche markets must find ways to keep prices and sales stable or growing, through either:
  - Keeping competitors out of the market
  - Continuing to increase demand
- There are numerous examples of niche markets that started small with high price premiums
  - Became more mainstream as other producers entered the market
  - Eventually this drove the price down
- It is important for producers considering niche marketing to understand this price behavior

Strategies to Keep Prices/Sales Stable, cont.

- Keep current customers loyal by getting them to view your product as different from the competition
  - Patents, trademarks, and branding are used by larger firms to accomplish this
    - Costs of this may be infeasible for small producers
  - Less costly options include:
    - Unique production practices (ex. organic, natural, humane, etc.)
    - Location of production (ex. local, regional, state)
    - Story of the producer/product
  - These strategies define the product as unique and communicate to customers that your product is different than similar products
  - Example: Roquefort cheese
    - Can only be Roquefort cheese if aged in the Roquefort caves in France
      - Defined by production and location
      - Cannot be duplicated

Strategies to Keep Prices/Sales Stable, cont.

- Innovate to stay ahead of the curve by finding new products the niche market will value
  - New varieties of produce (ex. Heirloom tomatoes)
  - A new/different production practice applied to an existing product
  - Different packaging/processing (ex. pre-washed produce, packaging individual servings)
- It is easier and less costly to find new products an existing customer base will value than to find a new customer base

- Grow the market at a rate that keeps it ahead of new entrants
  - Find new customers who want the product
  - If awareness of the product spreads and new customers are found at the same rate that new suppliers enter the market, prices will be stable
    - However, even with new customers, their pace of consumption must meet or exceed increasing supplies or prices and/or price premiums will still decrease

Analyzing Profit and Risk

- In order to develop successful strategies, producers need to consider the options and examine potential profit
- As with any type of planning, the future is unknown
- Two common types of profit analysis:
  - Break-even analysis
    - Quick analysis to determine if a strategy has merit
  - Scenario analysis
    - Compares the results of different scenarios and how different assumptions affect the bottom line

Break-Even Analysis

- This type of analysis answers the questions
  - "How much needs to be sold to break even?"
    - If the quantity is a realistic amount, then the idea should be analyzed further
  - "What would the price need to be to break even?".
    - If the price that would need to be charged is unrealistic, then the idea is not feasible
- These same questions can be answered using a set level of profit
- If an idea looks like it has merit after performing this initial analysis, a more detailed analysis should be undertaken

Calculating Profit

$$Revenue - TVC - FC = Profit$$

- TVC=total variable costs
  - Costs that come directly from producing each unit of the product, like seeds
  - Change depending on the quantity produced

- FC=Fixed costs
  - Costs that will be incurred regardless of how many units are produced, like rent for land
  - "Overhead"

- Profit may also be calculated as (where Q is quantity sold):

$$(Price*Q) - (VC*Q) - FC = Profit$$

Implications of Calculated Profit

- Insight on how to increase profit can be found just by looking at the equation:
  - To increase profit, the options are to either increase revenue or decrease costs
- Decreasing costs is pretty straightforward, but how can revenue be increased?
  - Sell more to existing customers: this increases quantity, and therefore profit
  - Find more customers to sell to: this also increases the quantity sold
  - Find a sales outlet that will increase the per-unit price.
    - For example, selling at a farmers' market may allow a producer to charge a higher price than the commercial or retail price
- Without even working with numbers, asking if these options are possible can often provide insight

Profit Example

- The sample production budget at right represents a tomato operation, and will be used in the following example
- Profit for this example is calculated below
  - Where the quantity of 20,000 lbs comes from dividing revenue ($4800) by per unit price ($0.24)
- Profit is $1,635
- Calculation:

Cost/Income	Total	Per unit (pound)
Revenue	$ 4,800	$ 0.24
Expenses		
Inputs	$ 1,400	$ 0.07
Labor	$ 1,200	$ 0.06
Overhead	$ 565	
Total Expenses	$ 3,165	
Net Income before taxes	$ 1,635	
Income taxes	$ 605	
Net Income	$ 1,030	

($0.24*20,000)-($0.06+$0.07)*20,000-$565=$1,635

Break-Even Point

- The break-even point is calculated using the profit formula, rearranged

- First, set profit to zero, because the break-even point assumed zero profit

$$(Price-VC)*Q-FC=0$$

- Next, rearrange to solve for quantity:

$$\frac{FC}{(Price-VC)} = Q$$

- Using the example numbers, we find that the break-even quantity is 5,136 pounds of tomatoes:

$$\frac{\$565}{(\$0.24/lb-\$0.13/lb)} = 5,136 \text{ lbs}$$

Solving for Specified Profit

- This formula can also be adjusted to solve for the quantity that must be sold in order to achieve a specific profit level

- Just add the profit to the fixed costs:

$$\frac{(FC+Profit)}{(Price\text{-}VC)} = Q$$

  - This can give you an idea of how large your enterprise will need to be to earn the profit that you want
  - If the quantity is unreasonable, you need to rethink your plan

- Using the example numbers, we find that 20,000 lbs of tomatoes would need to be grown and sold to achieve the pre-tax profit of $1,635

$$\frac{(\$565+\$1635)}{(\$0.24/lb\text{-}\$0.13/lb)} = 20,000 \text{ lbs}$$

Taxes and Other Payments

- Often an owner cannot withdraw the entire profit amount from a business
  - Must pay taxes, reinvest in the business, make principle payments, and cover withdrawals
- Taxes
  - Most states have around 7-8% income tax rates
  - Self-employment tax is around 15%
  - Federal income tax is usually 10%-15%
  - Considering these taxes with a Federal rate of 15%, gives a total tax rate of 37%

Solving for Profit with Taxes and Other Payments

- Consider again the tomato example-imagine the operator needs:
  - $5,000 for the family
  - $1,000 to buy new machinery for the family
  - $500 to pay a loan
    - A total of $6,500 is needed
- To calculate the pre-tax income needed to meet these financial needs, divide the amount needed ($6,500) by one minus the tax rate (1-0.37)
  - This gives a pre-tax income of $10,317

- The profit equation can be rearranged once more to take pre-tax income into consideration

- Just add the profit and taxes to fixed costs in the previous equation:

$$\frac{(FC+Profit+Taxes)}{(Price-VC)} = Q$$

- Using the numbers from the example, we see that 98,931 pounds of tomatoes would need to be grown and sold to meet these financial goals

$$\frac{(\$565+\$10,317)}{(\$0.24/lb-\$0.13/lb)} = 98,931 \text{ lbs}$$

Solving for Profit with Taxes and Other Payments, cont.

- If this amount is higher than what can be produced, the idea is not feasible
  - In this case, either the idea should not be pursued further, or other ways to increase per-unit profit should be explored
  - Often, even small changes in price can lead to larger changes in net income
- One possibility is to find new markets in which to sell the product (farmers' markets, roadside stands, etc.) that will allow for an increase in the price per unit
- When looking at other alternatives, it is important to make sure that any changes in the cost are included
  - For example, if selling at a farmers' market instead of selling commercially, you must consider:
    - The cost of getting a booth at the market
    - The time involved with setting up for and attending the market
    - The cost of transporting the product to the market

Scenario Analysis

- Before pursuing different options or strategies, it is import to look at various scenarios
  - This usually includes looking at how changes in prices, costs, and quantities of each option affect the overall profit
  - If there are a lot of unknowns, estimates or guesses can be used for some costs, potential customers, etc.
- Seeing how changes in these variables affect profit:
  - Gives an understanding of the risks and potential profit
  - Better decisions can be made
- Since this involves a lot of calculations, it is easier to use a spreadsheet in a computer program
  - For this example, a spreadsheet was created in Excel

Scenario Analysis, cont.

- It is important to look at not just an option, but how different assumptions affect the profitability and risk of the option
- Often, small percentage changes in price will have larger percentage changes in net income
  - Conversely, the effect of potential increases in costs of production can also be examined
- The first step is to create a base scenario
  - Then look at what happens when different assumptions are changed

Base Scenario

	A	B	C	D	E	F
1				% change	New Result	
2	**Revenue**		**$100.00**		$ 100.00	
3						
4	**Expenses**					
5	Inputs		$ 50.00		$ 50.00	
6	Labor		$ 15.00		$ 15.00	
7	Overhead		$ 20.00		$ 20.00	
8	**Total Expenses**		$ 85.00		$ 85.00	
9						
10	**Net Income before taxes**		$ 15.00		$ 15.00	**Percent change**
11	Income taxes	37.3%	$ 5.60		$ 5.60	**in net income**
12	**Net Income**		$ 9.41		$ 9.41	0%

- The first step is to create the base scenario
- For this example, imagine a garden center
  - For every $100 in sales, incur input costs of $50 and $15 in labor, with $20 in overhead (fixed costs)

Base Scenario Cell References

			% change	New Result	
Revenue		$ 100.00		=+C2*(1+D2)	
Expenses					
Inputs		$ 50.00		=+C5*(1+D5)	
Labor		$ 15.00		=+C6*(1+D6)	
Overhead		$ 20.00		=+C7*(1+D7)	
Total Expenses		=SUM(C5:C7)		=SUM(E5:E7)	
Net Income before taxes		=+C2-C8		=+E2-E8	**Percent change**
Income taxes	37.3%	=+C10*B11		=+E10*B11	**in net income**
Net Income		=+C10-C11		=+E10-E11	=+(E12-C12)/C12

- This figure shows the formulas used in Excel to generate the figure on the previous slide
- Can make your own using this as a template

Sales Volume Increases 10%

			% change	New Result	
Revenue		$ 100.00	10%	$ 110.00	
Expenses					
Inputs		$ 50.00	10%	$ 55.00	
Labor		$ 15.00	10%	$ 16.50	
Overhead		$ 20.00		$ 20.00	
Total Expenses		$ 85.00		$ 91.50	
Net Income before taxes		$ 15.00		$ 18.50	**Percent change**
Income taxes	37.3%	$ 5.60		$ 6.90	**in net income**
Net Income		$ 9.41		$ 11.60	23%

- **Volume of sales increase by 10%**

  – In this case both revenue and the cost of labor and inputs would increase by 10%. So 10% would be typed into the yellow cells for those three things, resulting in net income increases from $9.41 to $11.60, a 23% increase.

Prices Increase 10%

			% change	New Result	
Revenue		$100.00	10%	$ 110.00	
Expenses					
Inputs		$ 50.00		$ 50.00	
Labor		$ 15.00		$ 15.00	
Overhead		$ 20.00		$ 20.00	
Total Expenses		$ 85.00		$ 85.00	
Net Income before taxes		$ 15.00		$ 25.00	Percent change
Income taxes	37.3%	$ 5.60		$ 9.33	in net income
Net Income		$ 9.41		$ 15.68	67%

- **Prices increase by 10%, but nothing else changes**
  - This may arise if the owner decides to increase prices under the assumption that the same volume can still be sold.
  - Type 10% in the top yellow box corresponding to revenue and clear all the other boxes. The result is that revenue increases by $10 to $110 and net income increases by 67%.

Cost of Inputs Increases 10%

			% change	New Result	
Revenue		$ 100.00		$ 100.00	
Expenses					
Inputs		$ 50.00	10%	$ 55.00	
Labor		$ 15.00		$ 15.00	
Overhead		$ 20.00		$ 20.00	
Total Expenses		$ 85.00		$ 90.00	
Net Income before taxes		$ 15.00		$ 10.00	Percent change
Income taxes	37.3%	$ 5.60		$ 3.73	in net income
Net Income		$ 9.41		$ 6.27	-33%

- **Costs of inputs rise by 10%**
  - This might be due to higher gas prices, transportation cost increases, etc.
  - Leave all the yellow cells blank except for the one for inputs. In the yellow cell for inputs type 10%. The result is that net income would go down by a third (33%)

Limitations of Scenario Analysis

- The scenario analysis tool is meant to provide a quick overview of the potential risks and profits
  - It is not meant to be the end of the analysis
- If something is really sensitive (results change dramatically with small changes in assumptions), a more detailed analysis may need to be conducted
- It is also important to be realistic and include all costs
  - Ex. if a big increase in volume is considered, it may also increase overhead due to a need for different equipment

Conclusion

- Niche markets have unique characteristics that can affect the price (premiums) of the product over time
- Under good conditions prices can be quite high, but small changes in the supply of the product can cause much larger decreases in price
  - So over time, as more suppliers enter the market, price premiums usually go down
- Strategies that small producers might consider include :
  - Product differentiation
  - Growing the market by continuing to find new customers at an equal or greater rate than the supply expands
  - Continuing to innovate
- Regardless of the strategies or ideas that are pursued, it is important to look at potential profitability and how different assumptions affect the profitability of the product

Thank you!