**Problems – Revenues, Costs and Profit**

Heinrik’s Bratwurst

*(All figures except price are per week.)*

Heinrik sells sausages in a store next to the Autobahn. He has three employees and also works at the stand himself. If he didn’t work at the stand, he could get a job in a local factory. He owns the land and building where the stand is located.

Price / sausage 5

Quantity Sold 1000

Cost of wages 1500

Cost of sausages, bread and mustard 1000

Rent a third party would pay to use the building 1000

Wages Heinrik could make at the local factory 1000

1. Calculate the sausage stand’s:

* Revenue
* Explicit costs
* Implicit costs
* Economic costs
* Accounting profit
* Economic profit

1. Does the sausage stand make a normal profit, abnormal profit or loss?
2. There are around 1 million people in Germany that can make a decent Bratwurst. What does microeconomics predict will happen?
3. How do you expect #3 to affect the calculations above?

**Neato Awesome Yoyos**

*(All figures except price are per year.)*

Neato Awesome Yoyos is a small company that makes only yoyos It manufactures all of its yoyo’s in a single factory, which it owns itself. The current owner and president, Helga, is the granddaughter of the company’s founder. She’s not very happy about working in the family company - she went to law school and would prefer to be a lawyer. The company’s financials are as follows:

Price / yoyo 10

Quantity Sold 100,000

Cost of wages 500,000

Cost of raw materials 200,000

Rent a third party would pay to use the factory 100,000

Wages Helga could make as a lawyer 150,000

1. Calculate the same values for Neato Awesome Yoyos. (Questions 1 and 2, above.)
2. Are yoyos a competitive market?
3. Borg Toys, a very large and aggressive toy company, has announced that it is planning to enter the yoyo market. The Borg have offered to acquire Neato Awesome Yoyos for $1,000,000. What factors should Helga consider when deciding whether to accept or reject Borg’s offer.

Heinrik’s Bratwurst

**1.**

Revenue = PxQ = 5,000

Explicit costs = 1,500 + 1,000 = 2,500 (wages + raw materials)

Implicit costs = 1,000 + 1,000 = 2,000 (foregone rent + value of entrepreneur’s time)

Economic costs = explicit costs + implicit costs = 2500 + 2000 = 4500

Accounting profit = revenue – explicit costs = 5,000 – 2,500 = 2,500

Economic profit = revenue – economic costs = 5,000 – 4,500 = 500

Normal profit = implicit costs = 2,000

Abnormal profit = revenue in excess economic costs = 500

**2.**

Assuming that the bratwurst stand market is competitive, we can expect people to notice Heinrik’s abnormal profits and open up competing stands to get a bit of it for themselves.

**3.**

* Revenue will fall due to a decrease in price (because supply increases), in output, or both.
* No effect on costs.
* Economic profit will fall to zero, as will abnormal profit.
* Heinrik will make normal profit, which will be unchanged.
* Accounting profit will fall (by the previous abnormal profit) but still be positive.

Neato Awesome Yoyos

**1.**

Revenue = PxQ = 1,000,000

Explicit costs = 500,000 + 200,000 = 700,000 (wages + raw materials)

Implicit costs = 100,000 + 150,000 = 250,000 (foregone rent + value of entrepreneur’s time)

Economic costs = explicit costs + implicit costs = 700,000 + 250,000 = 950,000

Accounting profit = revenue – explicit costs = 1,000,000 – 700,000 = 300,000

Economic profit = revenue – economic costs = 1,000,000 – 950,000 = 50,000

Normal profit = implicit costs = 250,000

Abnormal profit = revenue in excess economic costs = 50,000

**2.**

Depends. If the abnormal profit has persisted over a decent length of time, then no, because in a competitive market new entrants would drive economic profit back to zero. However, in the short-term, there could be abnormal profit even in a competitive market.

**3.**

If Helga does not sell the company and Borg enters the yoyo market itself, Helga should expect that price may fall because the supply of yoyos increases. Also, Helga might lose some of her sales, given that some yoyo customers may buy Borg yoyos. Given that economic profit is currently 50,000, if price or quantity sold fall by more than 5%, Neato Awesome YoYo’s will be making a loss (5% \* 1,000,000 = 50,000).