Economic Profit[1]
In-Class Problem[2]

Economic Profit

Assume Sudweeks Consulting is a small firm operating in a competitive goods market for legal services in which each firm experiences the following supply and demand relationships:

$Q_S = -200 + 3P$ (1)

$Q_D = 1{,}000 - P$ (2)

Jessica Sudweeks, the firm's owner and attorney, finds that she has the following expenses in her business:

Rent	$15,000
Salaries	$70,000
Utilities	$1,200
Phone	$2,000
Printing	$5,000
Postage	$2,000
Court fees	$4,000
Supplies	$5,000
Travel	$12,000
Business Meals	$14,000

She also recalls that she invested $100,000 in the business when she started it, and like most small business owners, she only pays herself an amount equal to the annual profits from the =consulting operation. However, Sudweeks, an attorney, is in a market where attorneys can expect the kind of earning that come from the following labor market parameters and she's in a market in which Treasury Bond yields are 1.25%.

$L_S = -70 + ½ W$ (3)

$L_D = 200 - W$ (4)

Where W = weekly wages in $10's and L = workers in 100's

[1] This primer is intended to present an abbreviated discussion of the included economic concepts and is not intended to be a full or complete representation of them or the underlying economic foundations from which they are built.

[2] This In-Class Problem was developed by Rick Haskell, Ph.D. Student, Department of Economics, College of Social and Behavioral Sciences, The University of Utah, Salt Lake City, Utah (2014).

a. What are the total revenues for Sudweeks Consulting?

Total revenue = price x quantity, so to find total revenue we first need to find the price and quantity of the goods Sudweeks is providing. We can do this through the goods market equations given:

$Q_S = Q_D$ $\quad -200 + 3P = 1{,}000 - P$

$4P = 1200$

$P^* = 300$

$Q^* = 1000 - (300) = 700$

$TR = P \times Q = 300 \times 700 = 210{,}000$

b. What is the accounting profit for Sudweeks Consulting?

Accounting profit is TR – TC, before considering opportunity costs of investors' time and capital, so we simply sum the expenses listed and subtract them from the total revenue as follows:

Total Revenue		**$210,000**	
Expenses			
Rent	$15,000		
Salaries	$70,000		
Utilities	$1,200		
Phone	$2,000		
Printing	$5,000		
Postage	$2,000		
Court fees	$4,000		
Supplies	$5,000		
Travel	$12,000		
Business Meals	$14,000		
Subtotal Expenses		**$130,200**	
Total Accounting Profit			**$79,800**

c. What is the economic profit for Sudweeks Consulting?

To find the economic profit we need to first identify the opportunity costs of the investors' time and capital. In this case we know Sudweeks is an attorney and we have labor market parameters for attorneys, so we can infer that the market clearing wage for attorneys would be equal to the opportunity cost of her time. We also have the current Treasury Bond rate and can use that to infer the opportunity cost of her capital.

$L_S = L_D$ $\quad -70 + ½ W = 200 – W$

$1 ½ W = 270$

$W^* = \$180$

Recall that W = weekly wages in 10's, so we need to multiply W* by 52 and again by 10 to arrive at Sudweeks' opportunity cost of time:

(W*)(52)(10) = ($180)(52)(10) = $93,600

We also need to find the opportunity cost of her capital and can do this by taking the amount invested multiplied by the current expected rate, which we've identified as the Treasury Bond rate of 1.25%

$100,000 x .0125 = $1,250

With the opportunity costs in hand we can deduct them from the accounting profit to arrive at the economic profit

Accounting Profit	$79,800
- Opp Cost: Time	-$93,600
- Opp Cost: Capital	-$1,250
Economic Profit	-$15,050

d. Based on the firm's economic profit, what is it you would say Jessica is maximizing based on how she manages her business?

Assuming Jessica is satisfied with her level of economic profit, we must assume that she's maximizing utility and not simply a profit maximizer. This is likely more common of business owners than one might suppose. In effect, she is indicating that she prefers a lesser income in exchange for her time and capital investment than she might obtain were they employed elsewhere. As economists we might wonder if this in strictly efficient, but when we consider Jessica's decision making process as a rational economic agent, then we might decide it is efficient given her priorities.

But is she's not satisfied, then we're left to consider why she might be willing to have an economic loss. In most cases we'll find that the investor/business owner considers the economic loss to be part of her investment in her firm and expects that future profits will make up for the current loss. In which case we need to think about her accumulated investment over the years as we undertake this same form of analysis in the future.