

Assignment 3: Due 24 April, 2009

**Using Multipliers to Determine an Area Economic Impact – 5 points**

You are going to use the state of Iowa multipliers spreadsheet to do this assignment. You will also use the handout, too, on the two methods that we would employ to find the economic impact of an industry, to include discerning the output and the labor income of a sector when all you know is the job impacts. That handout contains the “how to” steps to both types of assessments.

Question One:

Owing to high transportation costs, Kellogg Corn Flakes (sector 55 in the multiplier spreadsheet) has decided to locate its new factory in the state of Iowa. They say that their factory will have 200 workers, that it will generate \$184 million in annual sales, and that it will pay its workers \$17.682 million in wages, salaries, and benefits (Labor Income).

Prepare a table of the expected total economic impacts. Show the direct values, show the multipliers, and show the expected total economic impacts for output, labor income, and jobs. Also, I want a paragraph explaining whether you think these are true economic impacts to the state of Iowa as we’ve learned about them: if so, why, and if not, why?

Question Two:

East Cupcake, Iowa, a small town right in the middle of the state, wants to bring a casino (sector 478) to the community. They are very hush-hush about the details as all of the financing has not been finalized. But they do claim that the new casino will add 125 new jobs. That’s all that they are telling us right now.

Using the multiplier tables, you need to determine the remaining direct amounts for output and labor income. Next, prepare a table of the expected total economic impacts. Show the direct values, show the multipliers, and show the total expected economic impacts for output, labor income, and jobs. Also, I want a paragraph explaining whether you think these are true economic impacts to the state of Iowa: if so, why, and if not, why?

Question Three:

West Cupcake, Iowa, has fallen on hard times. The famous West Cupcake Bakery (sector 73) is struggling and thinks that it might have to either close or relocate to a more prosperous and growing region. West Cupcake officials want to know what the economic impact to the community might be from the plant closing.

Here you have to use the bill of goods method for calculating the economic impact, and the following estimated costs of production for the bakery are to be used.

### Production Input

Wholesale (390)	30 percent
Electricity (30)	10 percent
Transportation (394)	10 percent
Real estate (431)	10 percent
Water and sewer (499)	5 percent
Labor	20 percent
<u>Imports</u>	<u>15 percent</u>
Total Production costs	100 percent

This bakery had \$2.5 million in sales last year and 35 jobs. Calculate the Bill of Goods economic impacts that we would expect for this plant. You will make a table that looks much like this one from the handout and hand it in, **but yours will have \$2,500,000 in output (or sales), not \$1,000,000.** To calculate the labor income impacts, you will have to use the Median HH Income Multiplier Table that is also part of the multiplier spreadsheet – I handed it out separately a couple of days later. **(Remember, you only use the Totals column on that table).**

### Example of Table

#### Furniture Economic Impact Per \$1,000,000 in Output

Inputs (Sector)	Percent	Total Impacts		
		Output	Labor Income	Jobs
Sawmill (112)	20%	351,360	60,520	1.96
Wholesale (390)	10%	155,000	55,730	1.25
Plastic parts (177)	5%	73,495	18,180	0.45
Trucking (394)	8%	132,368	44,400	1.14
Labor	30%	297,912	88,731	3.03
Imports	27%	*	*	*
<b>Sum of all Inputs</b>		<b>1,010,135</b>	<b>267,561</b>	<b>7.83</b>
<b>Direct Values</b>	<b>100%</b>	<b>1,000,000</b>	<b>300,000</b>	<b>7.75</b>
<b>Totals</b>		<b>2,010,135</b>	<b>567,561</b>	<b>15.58</b>
<b>Multiplier</b>		<b>2.01</b>	<b>1.89</b>	<b>2.01</b>