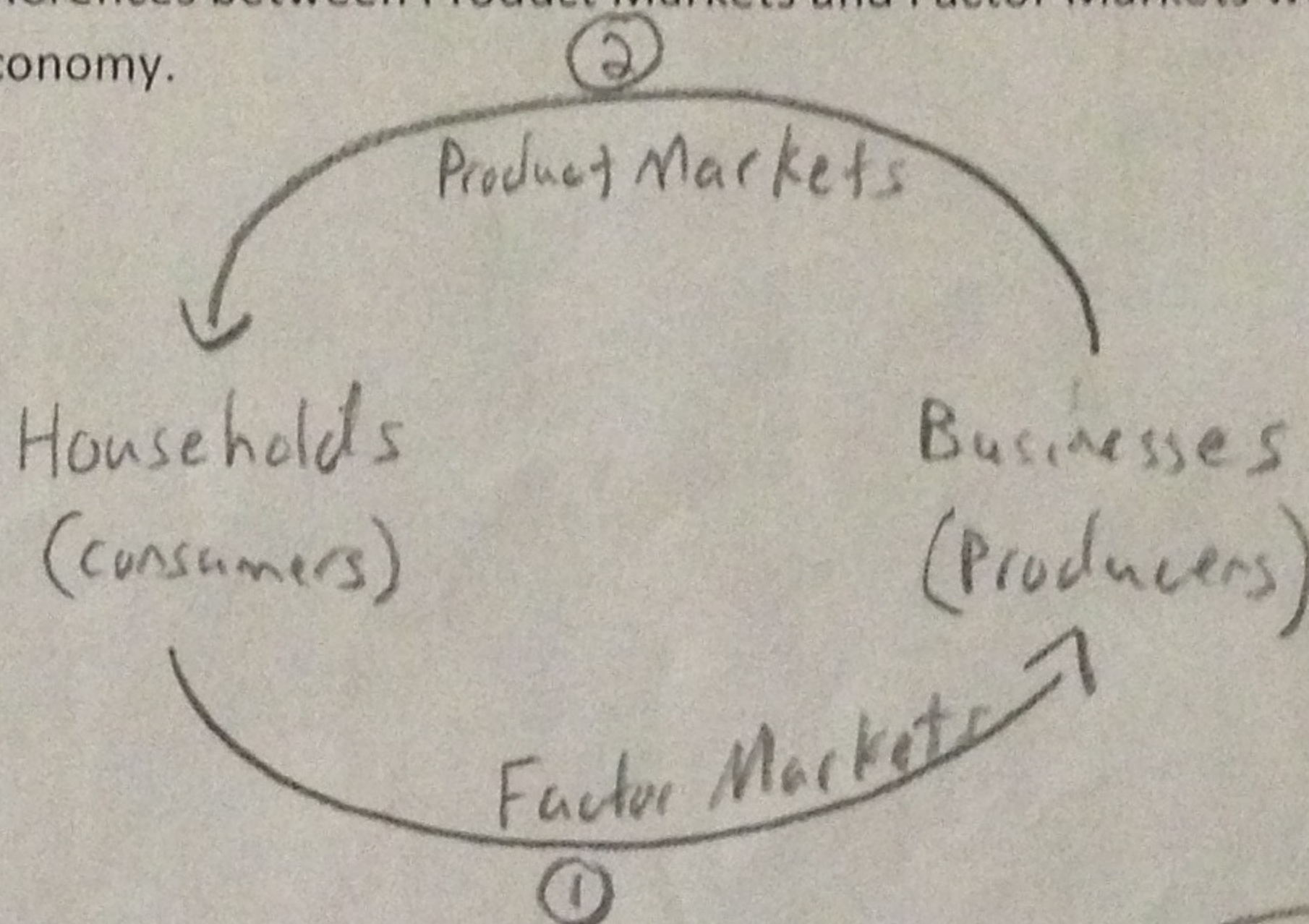


Intro to Factor Markets

I. "Circular Flow" of the Economy

- Up to this point in time we have dealt with the buying and selling of finished products. Finished Products are exchanged in: Product Markets
- Today, we are going to turn our attention to the buying and selling of the resources that go into making finished products. These resources, also called Factors of Production, are exchanged in Factor Markets (inputs)
- To help understand the differences between Product Markets and Factor Markets we look at a model called the "Circular Flow" of the Economy.

Circular Flow



- This basic version of the "Circular Flow" illustrates how households supply and businesses demand the Factors of Production in Factor Markets. (Factors of Production: Land, Labor, Capital, Entrepreneurship)
- Then, through the production process, businesses turn these resources into finished products. These finished products are exchanged in Product Markets.
- Remember, Product Markets are what we have dealt with up to this point in time. In Product Markets: Businesses Supply and Consumers Demand.
- IN FACTOR MARKETS, WHERE RESOURCES ARE EXCHANGED, CONSUMERS DO THE SUPPLYING (B/C WE APPLY FOR JOBS) AND BUSINESSES DO THE DEMANDING (B/C THEY BUY THE LABOR)
- This role reversal, where consumers supply and businesses demand, plays a very important part in all the concepts we learn in this unit.

II. The Hiring Decision: How many workers should a firm hire?

- This very important question is at the heart of what Unit 8 is all about. Please understand though, that Unit 8 is not just limited to labor. We can use these concepts to figure out how much of any Factor of Production a firm should buy. The easiest to start with is: Labor Markets
- Marginal Revenue Product of Labor (MRP_L): additional revenue generated from the hiring of one more worker. It is calculated by first identifying a worker's Marginal Physical Product (actual # of tacos the worker produces). Then, multiply that Quantity by the price the tacos sell for.

$$MRP_L = MPP \times P$$

- Marginal Factor Cost (MFC): additional cost incurred when a business buys one more unit of a factor of production (additional cost of hiring one more worker = wage)
- Profit Maximization Rule in Factor Markets – firms make the hiring decision just like they make the production decision. They compare the revenues generated (MRP_L) to the costs of hiring (MFC). They hire until:

$$MRP_L = MFC$$

# workers	# of tacos	MPP	P	MRP _L
0	-	-	-	-
1	80	80	.50¢	\$40
2	150	70	.50¢	\$35
3	200	50	.50¢	\$25
4	240	40	.50¢	\$20
5	250	10	.50¢	\$5
6	230	-20	.50¢	
7	200	-30	.50¢	

The MRP_L is also referred to as the "value of the marginal product."

Breaking Down the MFC (cost of hiring one more worker) to the MC (cost of producing one more taco).

In a Perfectly competitive market, the P=MR for firms b/c they don't have to worry about "Revenue Sacrificed..."

Profit Max Rule: MC = MR

Marginal Cost: cost of producing one more unit of output.

Marginal Product of Labor (MP_L): additional units of output produced by 1 more worker.

Wage (w): total cost paid to the worker to get those additional units of output.

You can use these 2 pieces of information to calculate the MC by dividing out the # of units produced (MP_L) from the wage. $MC = w / MP_L$

Ex. $w = \$20$ $MP_L = 80$ tacos $\frac{\$20}{80 \text{ tacos}} = \frac{\$1}{4} = .25¢$ per taco [MC of a taco]

This ratio of the wage to the marginal product of labor [essentially MC] can be compared to the price of the product to determine if the correct # of workers have been hired in a P.C. market [P=MR].

• $MC < P$: hire more workers • $MC > P$: lay workers off • $MC = P$: just right