

# Economics of Competition, Monopoly, and Market Power 

## Antitrust

Eric E. Johnson
ericejohnson.com

## First, a review problem ...

## Problem: Hal's House

Your friend Hal flips houses and trades stocks for a living. Right now, he's got some stock options, expiring next week, that allow him to purchase 2,000 shares of stock in GameBeyond at $\$ 100$ each. That stock is trading currently at $\$ 200$ a share. The problem is Hal doesn't have the cash to exercise the options because his money is tied up in a house he's trying to flip. He bought the house at 42 Pineberry Drive for $\$ 200,000$ and put $\$ 100,000$ into renovating it. He was hoping to sell it for $\$ 400,000$, but now his best offer is $\$ 270,000$. If he waits another six months, he's sure can sell it for $\$ 300,000$. "I want to get rid of that house," he tells you. "But I can't afford to sell it at a loss!" What do you advise him?

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A good answer: "Hal, you can't afford to not sell it at a loss! That $\$ 300,000$ is a sunk cost. Right now, if you can get $\$ 270,000$ for it, then you can exercise your options for $\$ 200,000$ and turn around and sell them for $\$ 400,000$ for a gain of $\$ 200,000$. That's $\$ 170,000$ better than waiting six months for an extra $\$ 30,000$ on the sale of your house."


## Okay, now on to the new material ...

## Thoughts on POE Ch. 8

- In Ch. 8, once again, we're way "overlearning" the economics ...
- The math stuff in this chapter is skimmable material. It's unnecessary for our purposes, and there's even an arithmetic error on p. 196. :
- but this material will help us understand what's at stake with antitrust law.
- It's a necessary building block for monopoly economics.
- Combined with the concepts of monopoly economics, the Ch. 8 material will help us understand market power, dominant firms, oligopoly, etc.
- I think the most useful part of the chapter is the tables. Scrutinize them and think about how actors make decisions on the margins ( $a / \mathrm{k} / \mathrm{a}$ marginal analysis).
- Then let the tables help you make sense of the graphs to which they correspond.
- Remember-it's a warm up to going through stuff in class.


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- Can you understand the slides in class?
- Can you get the assigned review questions?
- Can you get the problems we do in class?

If so, you're good to go.

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## Thoughts on POE Ch. 9

## [which is assigned after Ch. 8 ... ]

- With previous chapters in POE, I said we were "overlearning" the economics ...
- That's still true in large part with Ch .9, but Ch. 9 is also underlearning content at the same time.
- It's still true that we care more about conceptual understanding than math. But Ch. 9 is heavy on conceptual material, and when it comes to that, this chapter glosses over a lot that is important.
- I'm not going to go through the chapter and exhaustively point out perilous gloss and places needing caveats and nuance ...
- just remember that it's about giving us an introductory framework, and, in particular,
don't use this chapter as a source for any statement about the law!
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OVER THE PAST 10 YEARS









## MR. DARP

## How firms in a perfectly competitive market make decisions ... in the short run.

- We're assuming the firm is tiny compared to the market, and the market is perfectly competitive.
- The firm wants to maximize profit.
- (Or minimize loss-same thing).
- Obvious, of course! This is what firms always want to do. (At least in our regular microeconomic assumptions of rational behavior.)
- As a firm in a perfectly competitive market, it is a price taker. The market determines the price, and the firm can't do anything to change the price.
- And as the firm is a tiny participant in a huge market, the market will absorb as much quantity as the firm produces.
- So the firm's ONLY decision is how much to produce.
- And the firm decides this purely on the basis of its costs-it's marginal costs.
- The marginal cost curve goes up. (Remember?)
- So the firm will produce up to the point at which the marginal cost equals the market price ( $\mathrm{a} / \mathrm{k} / \mathrm{a}$ demand $\mathrm{a} / \mathrm{k} / \mathrm{a}$ marginal revenue $a / k / a$ average revenue).







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## Review Questions for Ch. $B^{3}$

Similar to self-check questions ...

1. If you sell products in a perfectly competitive market, would you lower your price below the market price in order to sell more units?
2. If you sell products in a perfectly competitive market, would you lower your price below the market price in order to sell more units?
No, because then you would still sell the same number of units, because from the perspective of a firm in a perfectly competitive market, demand is perfectly elastic. The market will take as much as you provide as long as it's not above the market price. Selling below market won't increase your sales volume, it will just leave money on the table.

Similar to self-check questions ...
2. Would sales of concrete sand to the construction industry fit the characteristics of a perfectly competitive market?
2. Would sales of concrete sand to the construction industry fit the characteristics of a perfectly competitive market? It would probably be pretty close. Why pay over the market price for sand that's going to be mixed into concrete?
3. What about the retail market for gasoline - does that fit the characteristics of a perfectly competitive market?

Similar to self-check questions ...
3. What about the retail market for gasoline - does that fit the characteristics of a perfectly competitive market?
On the one hand, I want to say yes, because gas is pretty much the same. But in reality, I guess not not so much, because if I drive around town, I see that gas prices vary. That must have to do with the convenience of the location mostly, but perhaps other things as well, such as the cleanliness of restrooms, credit terms, or loyalty programs.

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|  |  | $A$ | $B$ | $C$ | $C$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total <br> Revenue | Price | Quantity | Marginal <br> Revenue |  |
| 2 | 11 | 11 | 1 |  |  |
| 3 | 20 | 10 | 2 |  |  |
| 4 | 27 | 9 | 3 |  |  |
| 5 | 32 | 8 | 4 |  |  |
| 6 | 35 | 7 | 5 |  |  |
| 7 | 36 | 6 | 6 |  |  |
| 8 | 35 | 5 | 7 |  |  |
| 9 | 32 | 4 | 8 |  |  |
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| 6 | 35 | 7 | 5 | 3 |  |
| 7 | 36 | 6 | 6 | 1 |  |
| 8 | 35 | 5 | 7 | -1 |  |
| 9 | 32 | 4 | 8 | -3 |  |
| 10 | 27 | 3 | 9 | -5 |  |
| 11 | 20 | 2 | 10 | -7 |  |
| 12 | 11 | 1 | 11 | -9 |  |
| 13 |  |  |  |  |  |











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| :---: | :---: | :---: |
| You mey be elgble for the Co-Pay Seavigs Propren il you are cormercialy nnured and not enroled in a state or tederaly tinded program: | Az8serw is deegred to heip quellyng peopie whiout inmance and those on Medicive who are havng troucie aftording their Aetrizerneca modicalions. | Other Resourcas Indecendent Patient Assstence Foundetiona |
| Learn more > | Learn more > | Learn more > |

## Co-Pay Savings

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AstraZeneca Prescription Savings Program Ne Vou Engine Home > Are You Eligbie?

## Are You Eligible?



## Are You Eligible?

In order to make this process as smooth as possible, make sure that you have everyt pre-screening process, including:

- the name(s) of your AstraZeneca medication(s)
- information about whether you have prescription drug coverage
- information about your total household income

Once you do, please click the role below that fits you best.

## > Are You Eligible?

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In order to make this process as smooth as possible, make sure that you have everyt


- information about who you have prescription drug coverage
- information about your total household income

Once you do, please click the role below that fits you best.



## Dominant Market Power

- Short of a monopoly, a dominant firm can have some power over prices.
- This can happen because:
- Rivals have capacity constraints.
- Rivals have higher costs.
- This can allow a dominant firm to raise prices to supracompetitive levels.
- The bottom-line is, you don't need a monopoly or a leak-proof cartel to have the power to raise prices and create deadweight loss.


## Dominant Market Power and Mergers

- Mergers that don't create a monopoly can still create dominant market power.
$\rightarrow$ This can increase producer surplus, which is good for the firm and incentivizes the merger.
$\rightarrow$ This can decrease allocative efficiency, which is bad for society.
- Mergers can allow firms to avoid wasteful, duplicative costs, and thus create beneficial efficiencies.
$\rightarrow$ This can increase producer surplus, which is good for the firm and incentivizes the merger.
$\rightarrow$ This can increase productive efficiency, which is good for society.
- Gains in productive efficiency can be offset by losses in allocative efficiency.
- If we are looking out for society, we need to figure out whether a merger raises productive efficiency more than it lowers allocative efficiency.


## Allocative and Productive Efficiency

- Productive efficiency is that we are being as productive as we can be with regard to one thing we want without any offset reduction in producing something else we want.
- Allocative efficiency is that all production and consumption is efficiently allocated.
- Goods go to their highest and best uses.
- Capital and labor go to their highest and best uses.


## Allocative and Productive Efficiency

"Productive efficiency means that, given the available inputs and technology, it is impossible to produce more of one good without decreasing the quantity that is produced of another good."
"Allocative efficiency means that the particular combination of goods and services on the production possibility curve that a society produces represents the combination that society most desires."

- POE 2d ed. p. 35


## Example: Windchimes in Wendover on Wednesday

## An economy with just eight people and one day:

- Allen, who adores windchimes and would pay $\$ 20$ for one.
- Bonnie, who thinks windchimes are okay, and would pay $\$ 15$ for one.
- Chuck finds windchimes uncharming, but he would buy one at $\$ 10$ just to have the option of annoying his neighbor, Darla, if Darla's incense burning was annoying him.
- Darla hates windchimes and she would only pay $\$ 5$ for one, which she could use for smashing with a hammer to let off steam. If the price were \$2, she'd buy two. For $\$ 1$, she'd get up to 5 and smash them all.
- Wendy loves making windchimes, and she's good at it. She can churn out two out for \$5 each.
- Xavier likes making things out of metal and clay. It would be worth it for him to make one set of windchimes if it could fetch \$10.
- Yvonne like playing video games and not working. It would only be worth it for her to make one set of windchimes if she got $\$ 15$ for it.
- Zendaya is a successful celebrity actor and singer. For it to be worth it to her to make windchimes, she'd have to be paid $\$ 20$ each, and even then she'd mostly do if for Instagram value. But she's a fast worker, so she could make four.
What is the efficient number of windchimes for this society to produce?



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B. productive inefficiencyto
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## A. allocative inefficiency

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