



Worksheet – Monopoly

Related news article: [The Live Nation and Ticketmaster dominate the live entertainment industry](#) (CNBC, January 25, 2023)

Summary: This worksheet could be used for in-class or homework practice. Students will be asked to read a short article about Live Nation Entertainment’s monopoly on live entertainment. Then, students will be asked to analyze whether the company is a monopoly, apply the rules for profit maximization to determine the optimal price and quantity of tickets for Taylor Swift’s concert, and graphically show the profit of the company. Students will also explore the potential problems arising from Ticketmaster’s market power. **Answers are provided at the end of this document.**

Learning objectives:

At the end of this worksheet, students will be able to:

- o Understand what a merger is;
- o Analyze whether Live Nation Entertainment is a monopoly or not;
- o Apply the rules for profit maximization of a monopolist to determine Ticketmaster’s optimal price and quantity of tickets for Taylor Swift’s concert;
- o Graph and estimate the maximum profit of a monopolist;
- o Analyze possible problems due to the fact that Ticketmaster lacks competitors.

Economics concepts: Monopoly, Market power, Merger, Profit

Suggested excerpts:

“Live Nation Entertainment is composed of Live Nation, an events promoter and venue operator, and Ticketmaster, a ticket sales giant. The two companies merged in 2010 and now control an estimated 70% of the ticketing and live event venues market.”

“It’s no secret that Taylor Swift fans were outraged in November 2022 when millions flocked to Ticketmaster.com to grab tickets to see the heartbreak queen for the first time since 2018 and the website crashed. The long wait lines and frozen screens sparked an uproar with fans, blaming Ticketmaster for ruining their chances to see the pop star.”

“While Live Nation Entertainment arguably has a monopoly on the industry, a monopoly in itself is not illegal in the United States. A monopoly occurs when a company holds exclusive possession or control of an industry.”

““If we made monopolies illegal on the basis of pricing above cost and generating monopoly profits for a firm, the concern would be that that would potentially stifle risk-taking and entrepreneurial activity,” said Diana Moss, president of the American Antitrust Institute.”

“Abuse of a monopoly position is another matter. It’s illegal for a business to establish or maintain a monopoly through improper conduct and not allow for others to enter the market.”

“While the company [Live Nation Entertainment] does have some competition, experts say no other firm currently stands a chance.”

Questions

1. The article explains that “Live Nation, an events promoter and venue operator, and Ticketmaster, a ticket sales giant” merged in 2010. Which of the following statements correctly explains what this means?
 - a. Live Nation and Ticketmaster united to become one big company.
 - b. Live Nation and Ticketmaster agreed to charge the same price for event promotion.
 - c. Live Nation and Ticketmaster agreed to sell the same number of tickets.
 - d. Live Nation bought 70% of the shares of Ticketmaster.

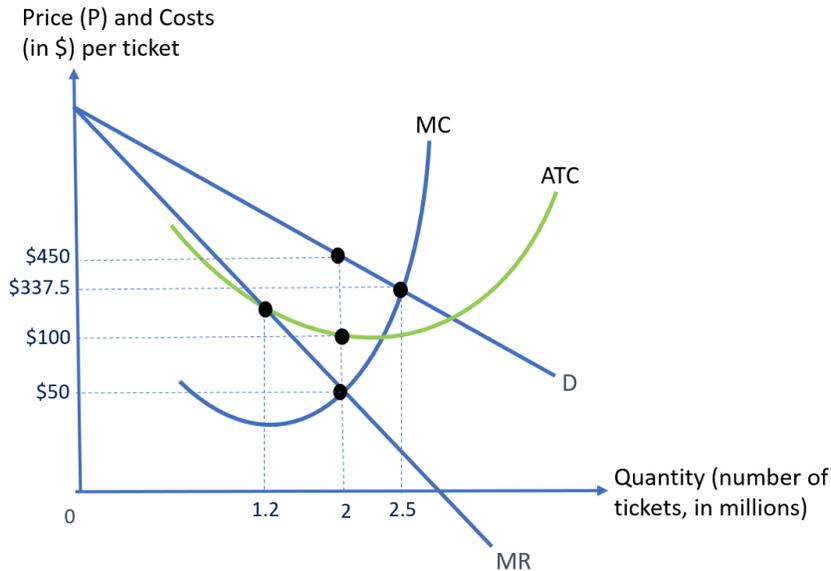
2. According to the article, what part of the ticketing and live event venues market does Live Nation Entertainment control?
 - a. 50%
 - b. 60%
 - c. 70%
 - d. 80%

3. In your opinion, does Live Nation Entertainment hold an “exclusive possession or control of an [the ticketing and live event] industry,” i.e., is it a monopoly? Justify your answer.
4. According to the article, “Live Nation Entertainment arguably has a monopoly on the [ticketing and live event] industry.” If this is true, how many competitors does Live Nation Entertainment have?
 - a. No competitors.
 - b. One competitor.
 - c. A few competitors.
 - d. Many competitors.

5. True or False? A monopoly is illegal in the U.S.
6. Ticketmaster’s market power implies that:
 - a. It is expected that Ticketmaster would set a price of the tickets for Taylor Swift’s tour that equals the marginal cost of the last ticket it sells for the concert.
 - b. It is expected that Ticketmaster would set a price of the tickets for Taylor Swift’s tour that is lower than the marginal cost of the last ticket it sells for the concert.
 - c. It is expected that Ticketmaster would set a price of the tickets for Taylor Swift’s tour that is higher than the marginal cost of the last ticket it sells for the concert.

- a. Ticketmaster has no control over the price of tickets for Taylor Swift’s tour and takes it as given from the market.

7. The following graph shows the demand (D) for tickets for Taylor Swift’s concert, and the marginal revenue (MR), marginal cost (MC), and average total cost (ATC) curves of Ticketmaster. Use the graph to answer questions 7 to 10.



Given that Ticketmaster’s goal is to maximize its profit, what is the optimal number of tickets for Taylor Swift’s concert it has to sell?

- a. 1.2 million
- b. 2 million
- c. 2.5 million
- d. 3 million

8. According to the article, Ticketmaster is a monopoly. Given that, what is the profit-maximizing price per ticket for Taylor Swift’s concert Ticketmaster should charge?

- a. \$50
- b. \$100
- c. \$337.5
- d. \$450

9. On the graph above, shade the area that represents Ticketmaster's profit provided that it sells the profit-maximizing number of tickets for Taylor Swift's concert at the profit-maximizing price.
10. What is Ticketmaster's profit provided that it sells the profit-maximizing number of tickets for Taylor Swift's concert at the profit-maximizing price?
11. The article mentions a band called Lawrence. Which of the following is a problem associated with the fact that Live Nation Entertainment is often the promoter, venue operator and ticketer of the band?
- If the promoter and the venue are parts of the same corporate entity, the promoter may not search for the best deal from the venue.
 - The band might not be allowed to choose a ticketer other than Ticketmaster.
 - If the band is looking for a venue of a given size in an area where Live Nation Entertainment has no competitors, this company is their only choice.
 - All of the above.
12. The high demand for presale tickets for Taylor Swift's tour in November 2022 caused Ticketmaster's website to crash. If Ticketmaster had innovated and had improved its ticketing service, it might have been more likely to avoid service failure. What do you think might be the reason why Ticketmaster had not innovated?
13. What are some other examples of monopolies that you have recently encountered?

Answer Key

1. The article explains that “Live Nation, an events promoter and venue operator, and Ticketmaster, a ticket sales giant” merged in 2010. Which of the following statements correctly explains what this means?
- Live Nation and Ticketmaster united to become one big company.
 - Live Nation and Ticketmaster agreed to charge the same price for event promotion.
 - Live Nation and Ticketmaster agreed to sell the same number of tickets.
 - Live Nation bought 70% of the shares of Ticketmaster.

Answer: A.

2. According to the article, what part of the ticketing and live event venues market does Live Nation Entertainment control?
- 50%
 - 60%
 - 70%
 - 80%

Answer: C.

3. In your opinion, does Live Nation Entertainment hold an “exclusive possession or control of an [the ticketing and live event] industry,” i.e., is it a monopoly? Justify your answer.

Answer: Answers will vary. The article suggests that Live Nation Entertainment has a monopoly on the ticketing and live event industry. However, students might argue that it does not control the entire industry.

4. According to the article, “Live Nation Entertainment arguably has a monopoly on the [ticketing and live event] industry.” If this is true, how many competitors does Live Nation Entertainment have?
- No competitors.
 - One competitor.
 - A few competitors.
 - Many competitors.

Answer: A. A monopolist is the only provider of a good or service, so there is no competition.

5. True or False? A monopoly is illegal in the U.S.

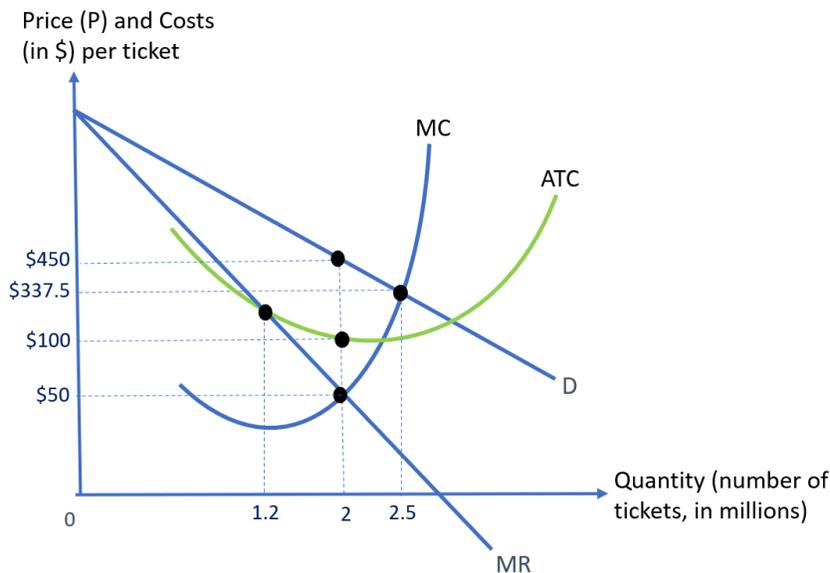
Answer: False. The article states that “a monopoly in itself is not illegal in the United States.” However, “abuse of a monopoly position” is. According to the article, “it’s illegal for a business to establish or maintain a monopoly through improper conduct and not allow for others to enter the market.”

6. Ticketmaster’s market power implies that:

- a. It is expected that Ticketmaster would set a price of the tickets for Taylor Swift’s tour that equals the marginal cost of the last ticket it sells for the concert.
- b. It is expected that Ticketmaster would set a price of the tickets for Taylor Swift’s tour that is lower than the marginal cost of the last ticket it sells for the concert.
- c. It is expected that Ticketmaster would set a price of the tickets for Taylor Swift’s tour that is higher than the marginal cost of the last ticket it sells for the concert.
- d. Ticketmaster has no control over the price of tickets for Taylor Swift’s tour and takes it as given from the market.

Answer: C.

7. The following graph shows the demand (D) for tickets for Taylor Swift’s concert, and the marginal revenue (MR), marginal cost (MC), and average total cost (ATC) curves of Ticketmaster. Use the graph to answer questions 7 to 10.



Given that Ticketmaster’s goal is to maximize its profit, what is the optimal number of tickets for Taylor Swift’s concert it has to sell?

- a. 1.2 million
- b. 2 million
- c. 2.5 million
- d. 3 million

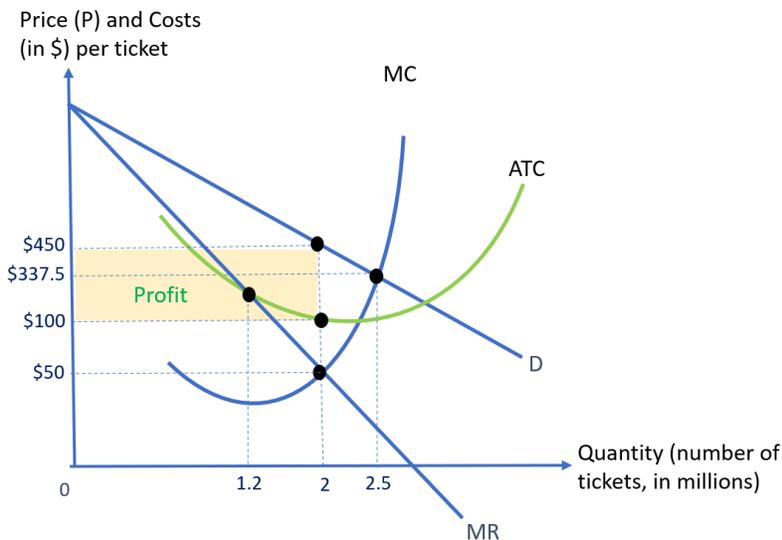
Answer: B. To find the profit-maximizing number of tickets, set $MR = MC$. The quantity at the intersection point of the MR and MC curves is 2 million tickets.

8. According to the article, Ticketmaster is a monopoly. Given that, what is the profit-maximizing price per ticket for Taylor Swift’s concert Ticketmaster should charge?
- a. \$50
 - b. \$100
 - c. \$337.5
 - d. \$450

Answer: D. After finding the optimal number of tickets (2 million), the optimal price can be found from the demand curve. In this case, the price is \$450 per ticket.

9. On the graph above, shade the area that represents Ticketmaster’s profit provided that it sells the profit-maximizing number of tickets for Taylor Swift’s concert at the profit-maximizing price.

Answer: The shaded area on the following graph shows Ticketmaster’s profit:



10. What is Ticketmaster’s profit provided that it sells the profit-maximizing number of tickets for Taylor Swift’s concert at the profit-maximizing price?

Answer: The profit is $TR - TC = Q*(P - ATC) = 2 \text{ million} * (\$450 - \$100) = \700 million .

11. The article mentions a band called Lawrence. Which of the following is a problem associated with the fact that Live Nation Entertainment is often the promoter, venue operator and ticketer of the band?
- If the promoter and the venue are parts of the same corporate entity, the promoter may not search for the best deal from the venue.
 - The band might not be allowed to choose a ticketer other than Ticketmaster.
 - If the band is looking for a venue of a given size in an area where Live Nation Entertainment has no competitors, this company is their only choice.
 - All of the above.

Answer: D. The article states the following: ““In a world where the promoter and the venue are not affiliated with each other, we [the band] can trust that the promoter will look to get the best deal from the venue; however, in this case the promoter and the venue are part of the same corporate entity so the line items are essentially Live Nation negotiating to pay itself,”” and “...if they want to play a certain size venue in a particular city, they are sometimes left no choice other than to use Live Nation because of the lack of competition in some regions. Then if they would like to use another ticketer other than Ticketmaster, they say that is not an option.”

12. The high demand for presale tickets for Taylor Swift’s tour in November 2022 caused Ticketmaster’s website to crash. If Ticketmaster had innovated and had improved its ticketing service, it might have been more likely to avoid service failure. What do you think might be the reason why Ticketmaster had not innovated?

Answer: Answers will vary. The company has a large degree of power in the primary ticket market.

13. What are some other examples of monopolies that you have recently encountered?

Answer: Answers will vary.