Principles of Economics
When Competitive Markets Cannot Work Optimally
Rate Regulation

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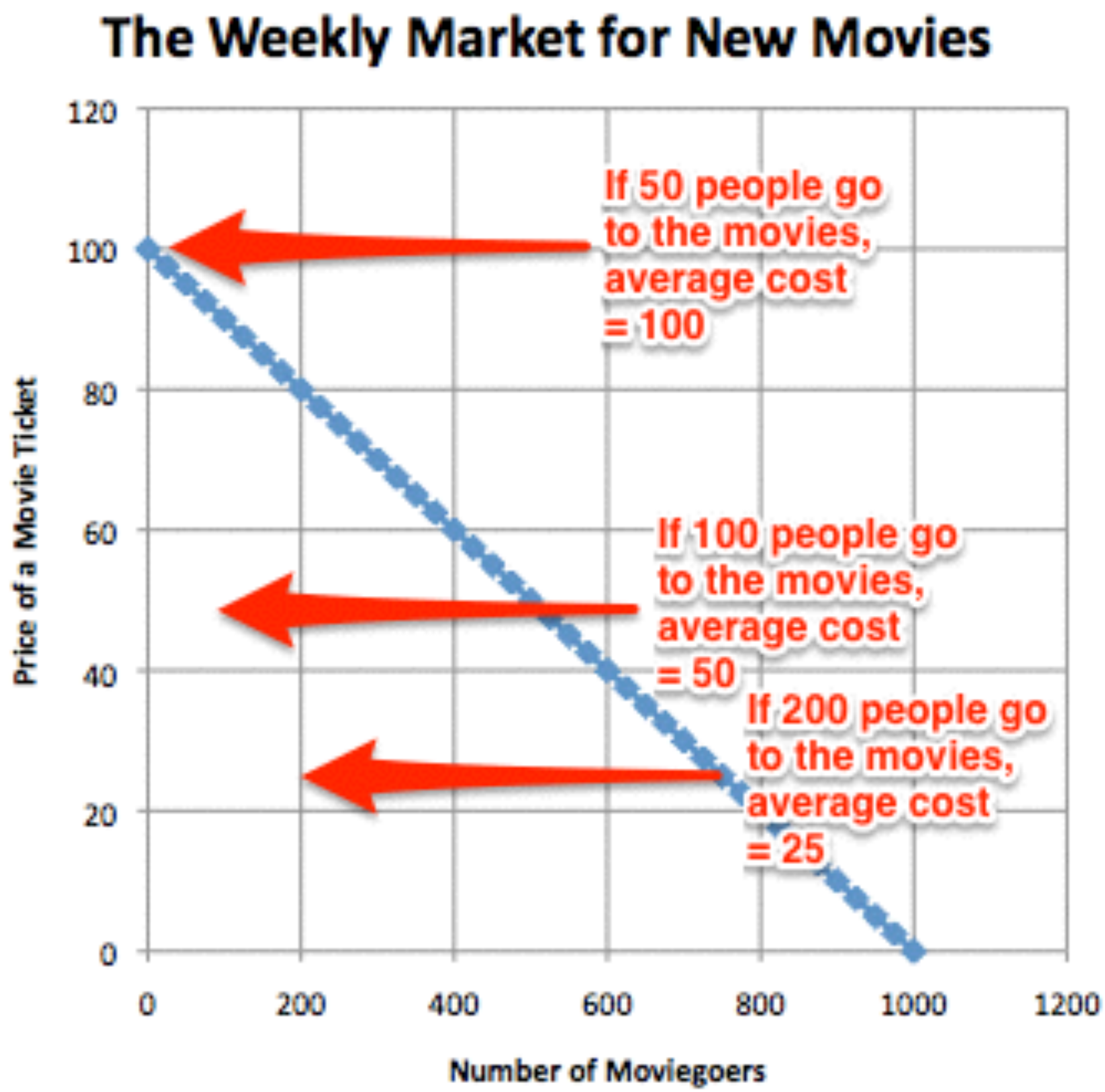
The Set-Up…

- Every weekend new movie(s) are released
- Gotta release new movies every weekend!
    - The demand for new movies is different from the demand for old movies
- Demand for new movies: $P_d = 100 - 0.1 \times Q$
- Each new movie costs 5000 to make
    - Those are the *only* costs of making a movie
- People don't care which new movie they see
- Ample space in theaters

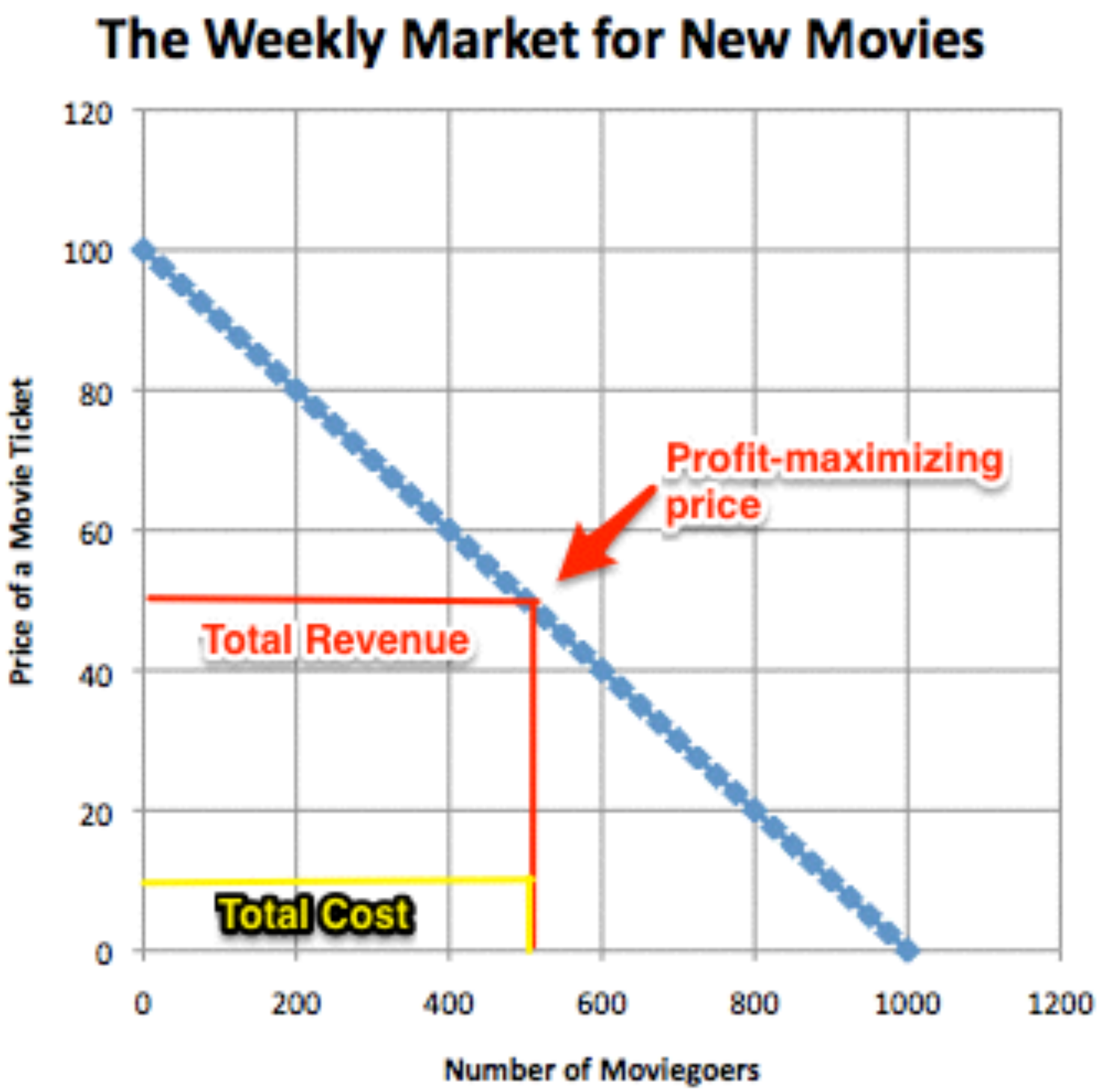


What If We Don’t Nationalize the Movie Industry and Give It Away?

- But we: don’t trust bureaucracy, want to spur innovation, are in the pocket of the Hollywood lobby
- New movies are non-rival: you make it, and then can show it to as many people as are willing to pay that weekend for no additional cost
- But you can charge a price: a ticket-taker: the first-run movie is *excludible*
- One new movie produced each week: mono = one, poly = seller. One seller. Spent 5000 to make this week’s movie.

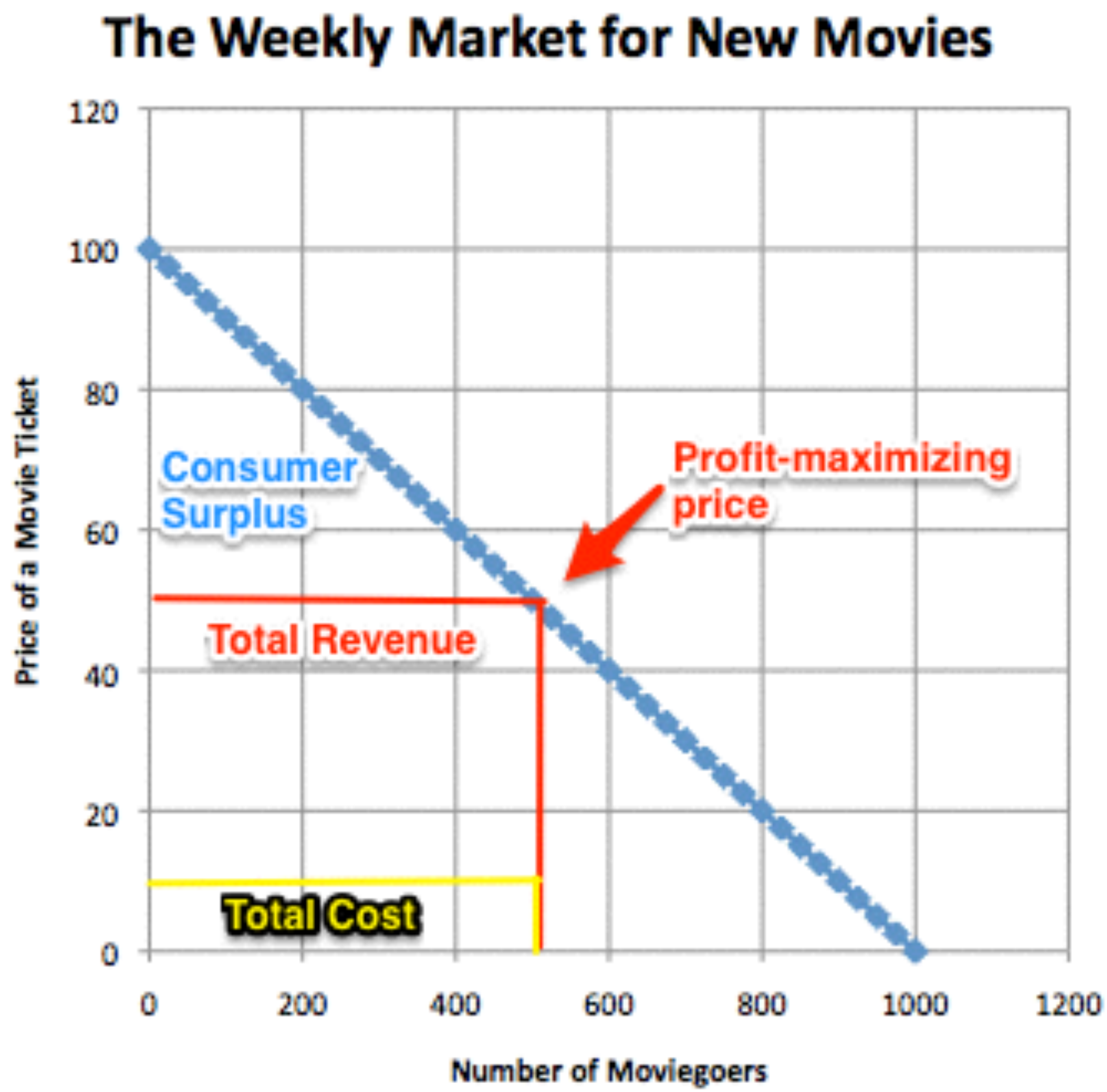
What is the Monopoly Outcome?

- Profit maximized when: $Q = P_{d0}/2a$
- Price = 50; Q = 500
- TR = 50x500 = 25000
- TC = FC = 5000
- Profit = TR-TC = 20000
- Consumer Surplus = 12500
- Total Surplus = 32,500
- Contrast with FBS = 45,000



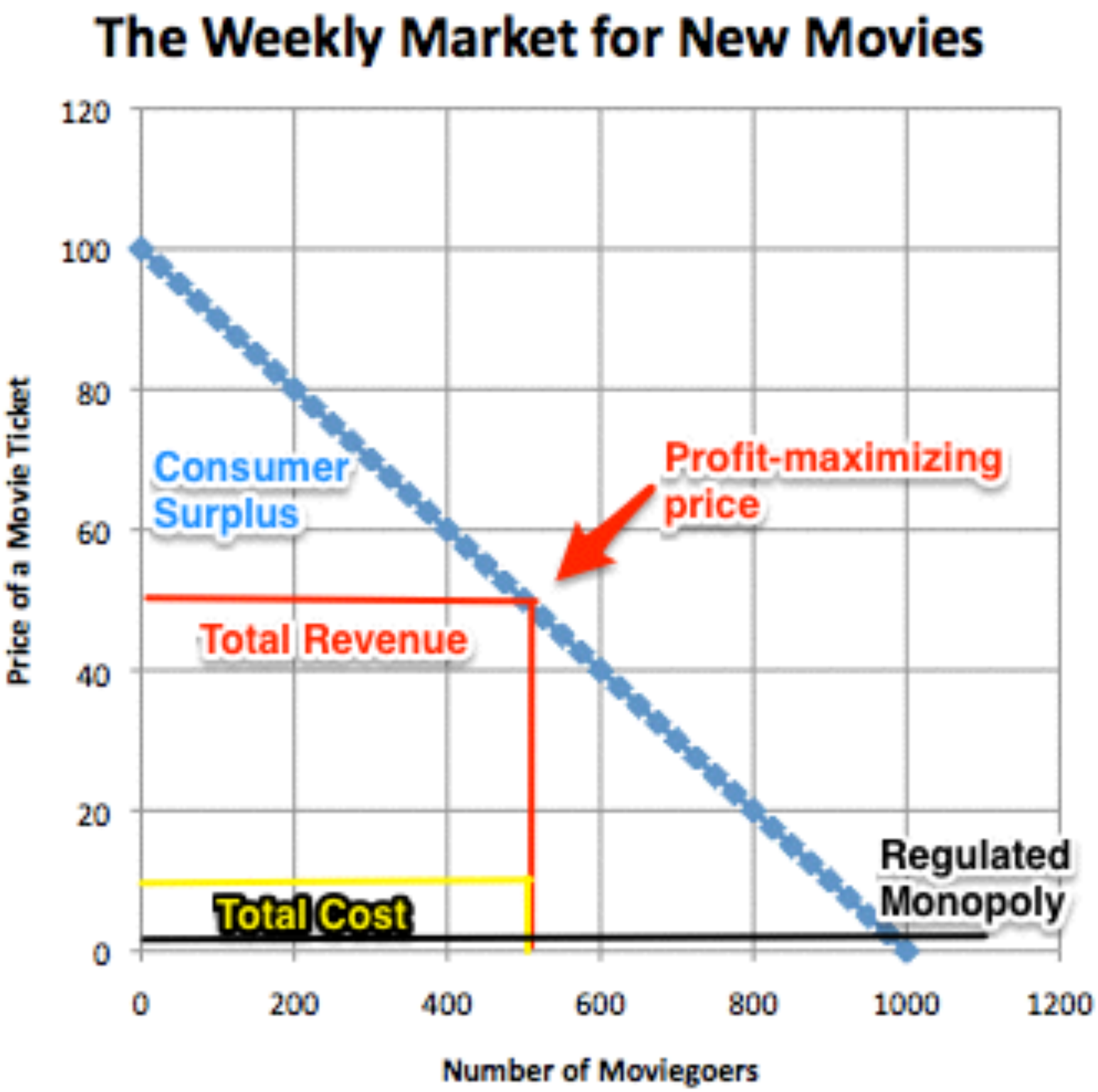
Ladies, Gentlemen, and First-Run Moviegoers, to Your i>Clickers!

- Fixing things without nationalization…
- I know, I know we talked about how lousy price ceilings are…
- But suppose we imposed a price ceiling of 5.30: How many tickets does the monopolist then sell?
    - A. 1000
    - B. 500
    - C. 947
    - D. 53
    - E. None of the above



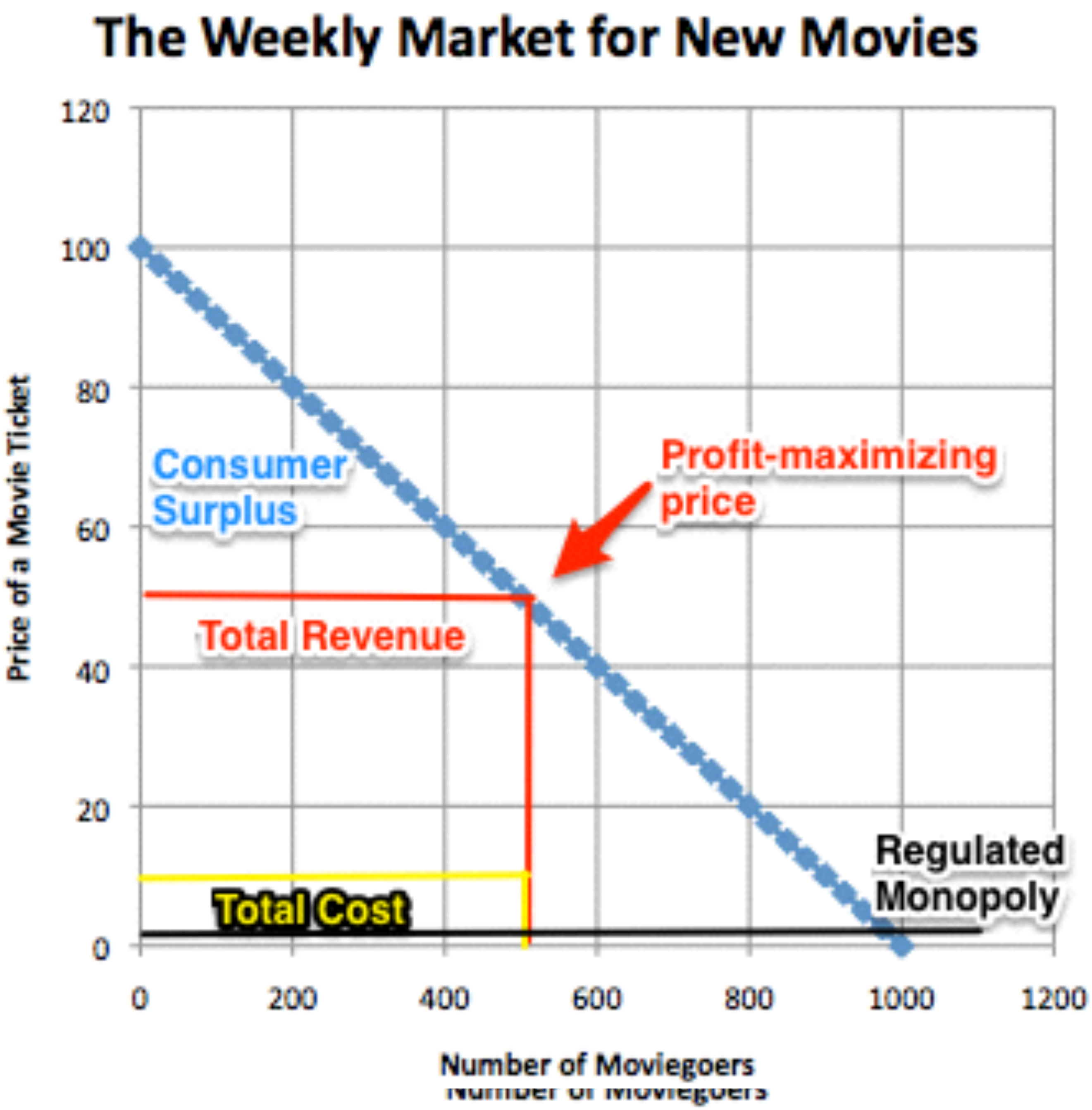
Ladies, Gentlemen, and First-Run Moviegoers, to Your i>Clickers!: Answer

- Fixing things without nationalization…
- I know, I know we talked about how lousy price ceilings are…
- But suppose we imposed a price ceiling of 5.30: How many tickets does the monopolist then sell? A. 1000 B. 500 **C. 947** D. 53 E. None of the above
- **The monopolist free to set the price found that selling fewer tickets allowed them to raise the price, and might boost revenue**
- **A monopolist with a regulated price doesn't benefit from a higher price by restricting supply**
- **A monopolist regulated at 5.30 sells as many tickets as they can—947**



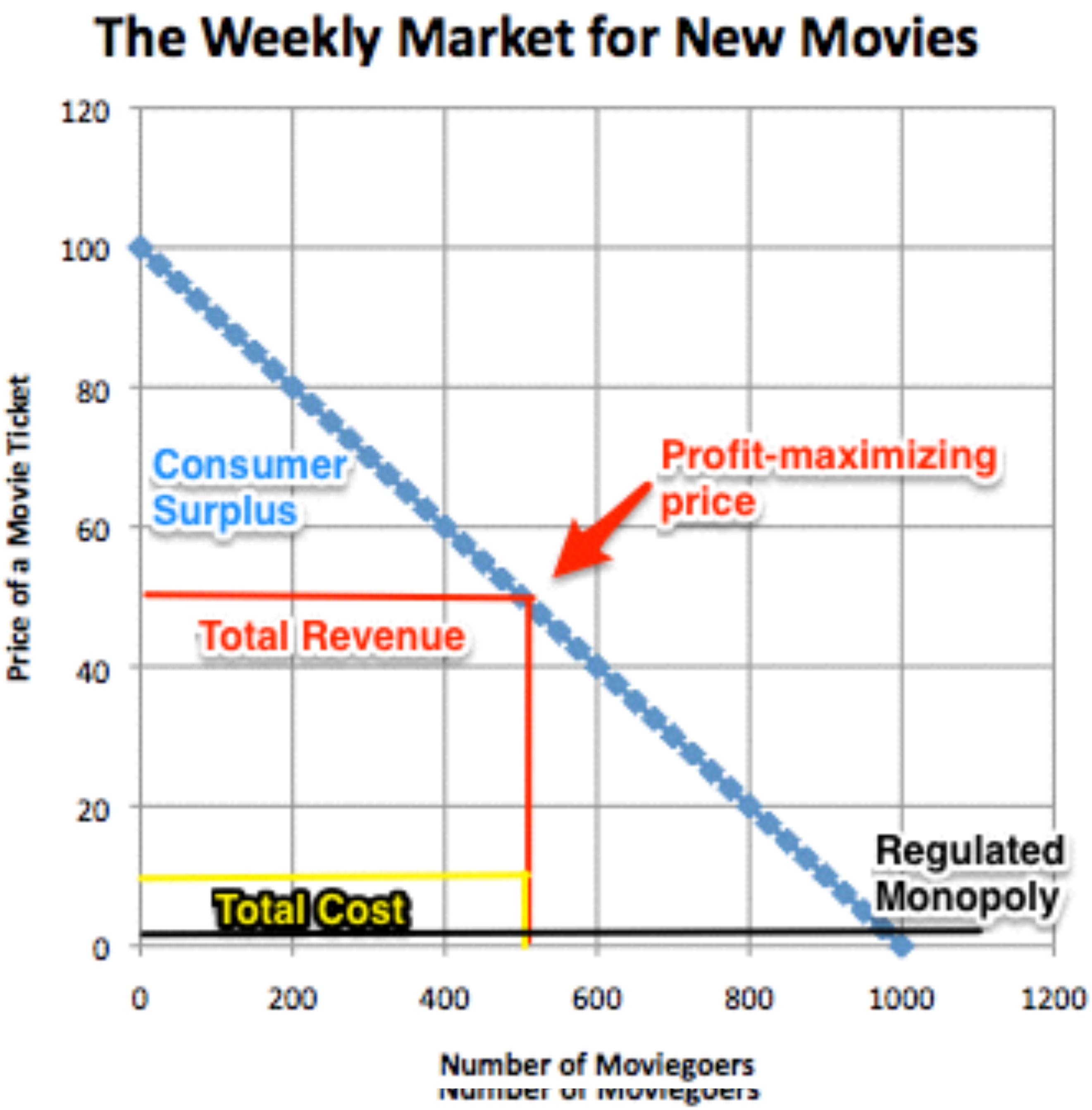
What Is the Outcome?

- A price ceiling of 5.30
- Demand: P = 100 - 0.1Q
- Sells 947 tickets
- Earns 947 x 5.3 - 5000 = 19.1 of profit
- Consumer surplus = 947 x (100 + 5.3)/2 = 44,840.4
- Total surplus = 44,859.5
- Contrast with FBS of 45,000



Regulated Monopoly!

- A price ceiling of 5.30. Sells 947 tickets. Earns 947 x 5.3 - 5000 = 19.1 of profit. CS = 44,840.4
- Total surplus = 44,859.5
- Contrast with FBS of 45,000
- This was the high-tech frontier of economic policy from 1880 or so to 1950



Arguments Against Regulating Monopoly

- What reasons can you think of not to institute rate regulation over monopolies?