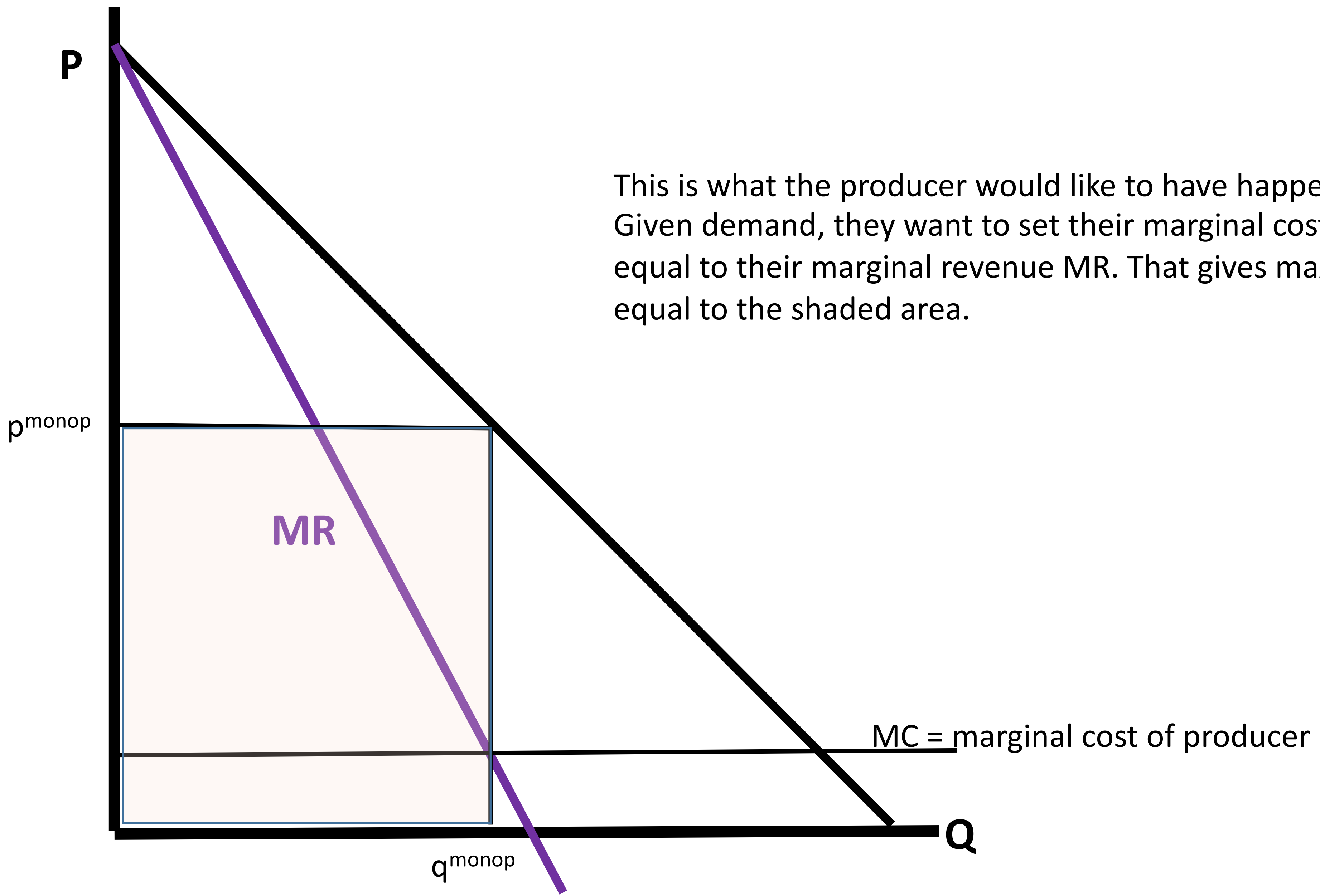
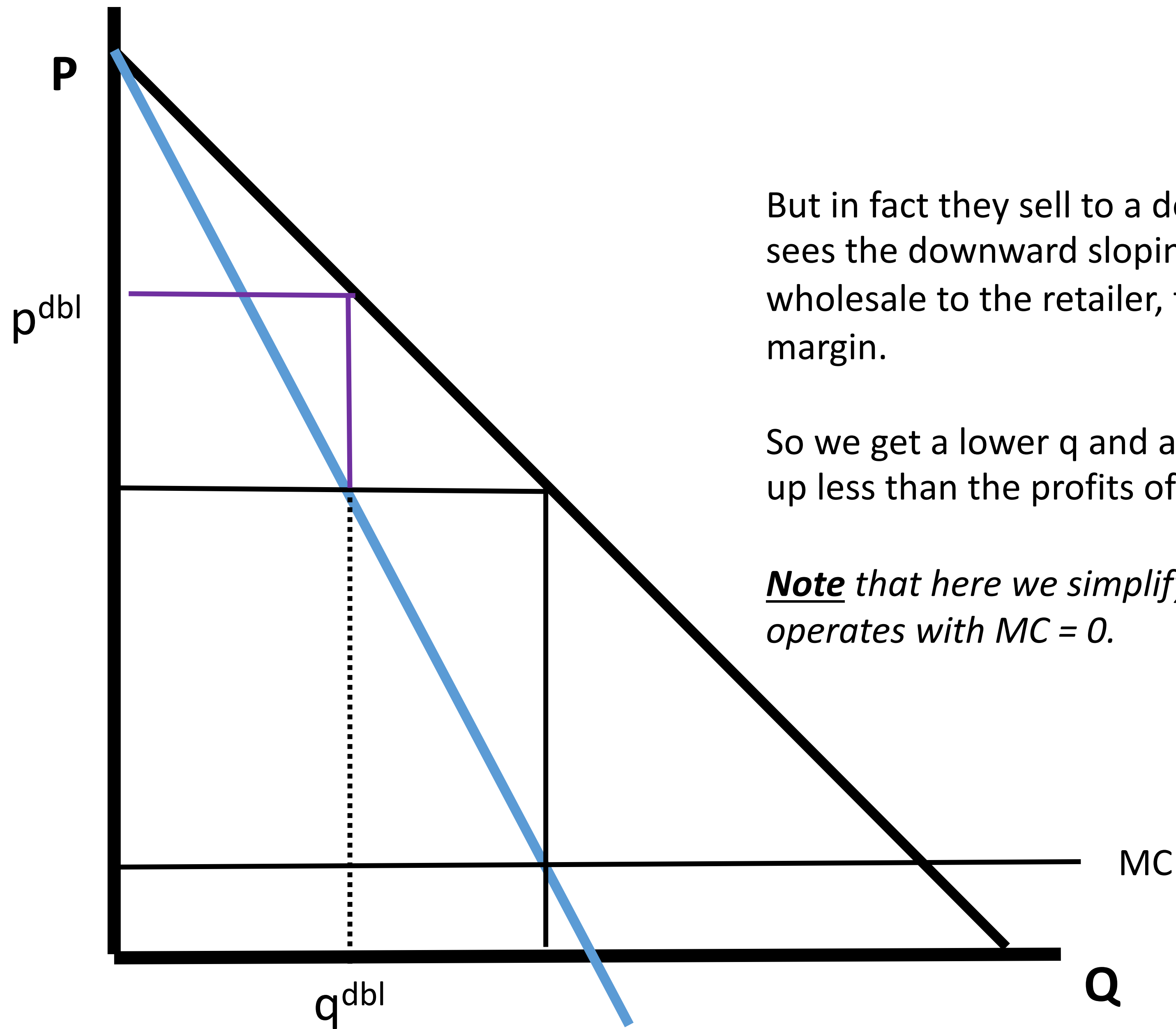
# Franchising and Double Marginalization

Econ 243 Fall 2018



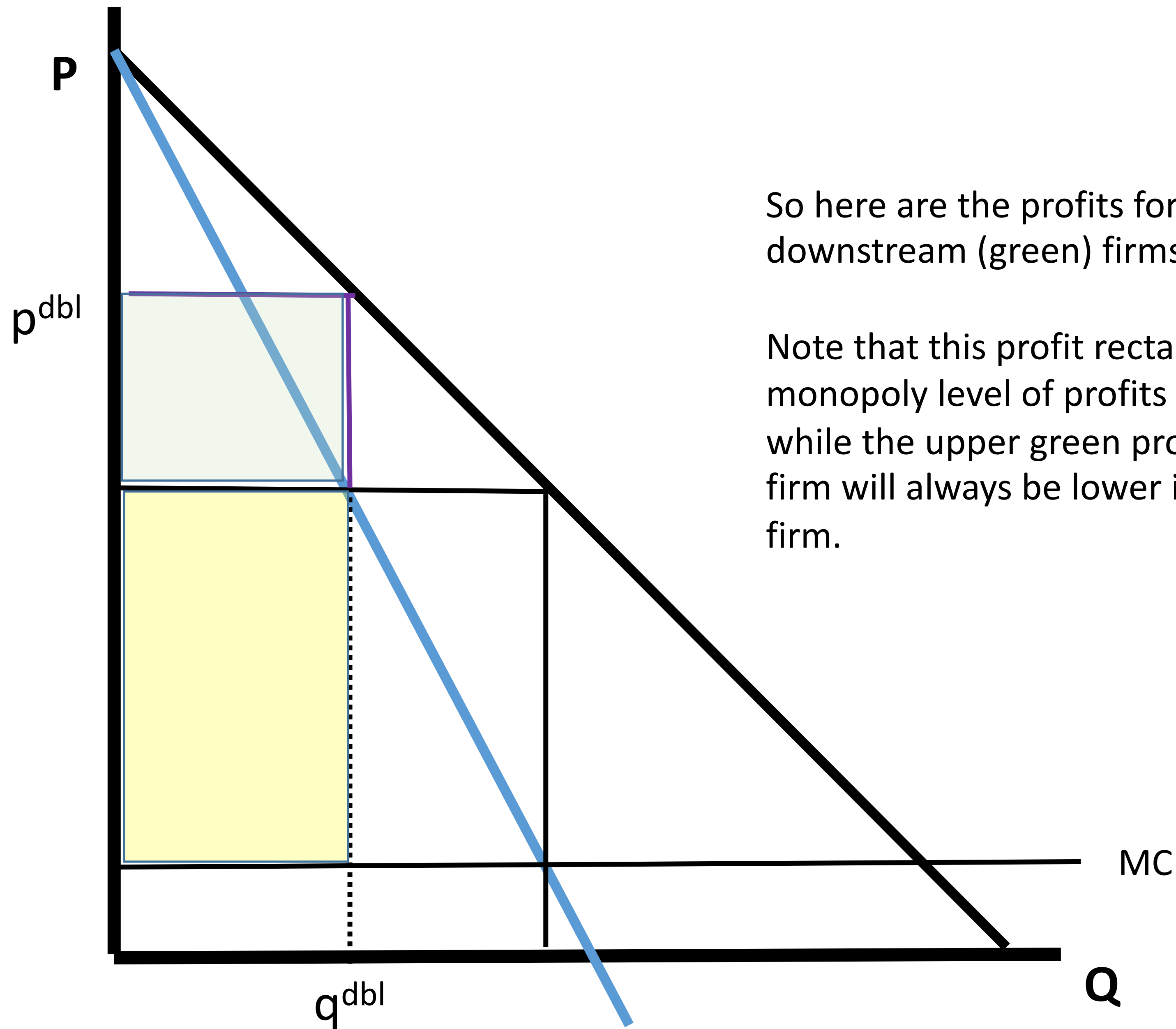

This is what the producer would like to have happen. Given demand, they want to set their marginal cost MC equal to their marginal revenue MR. That gives max $\pi$ equal to the shaded area.




But in fact they sell to a downstream retailer who likewise sees the downward sloping demand curve. So when they sell wholesale to the retailer, the retailer adds their monopolistic margin.

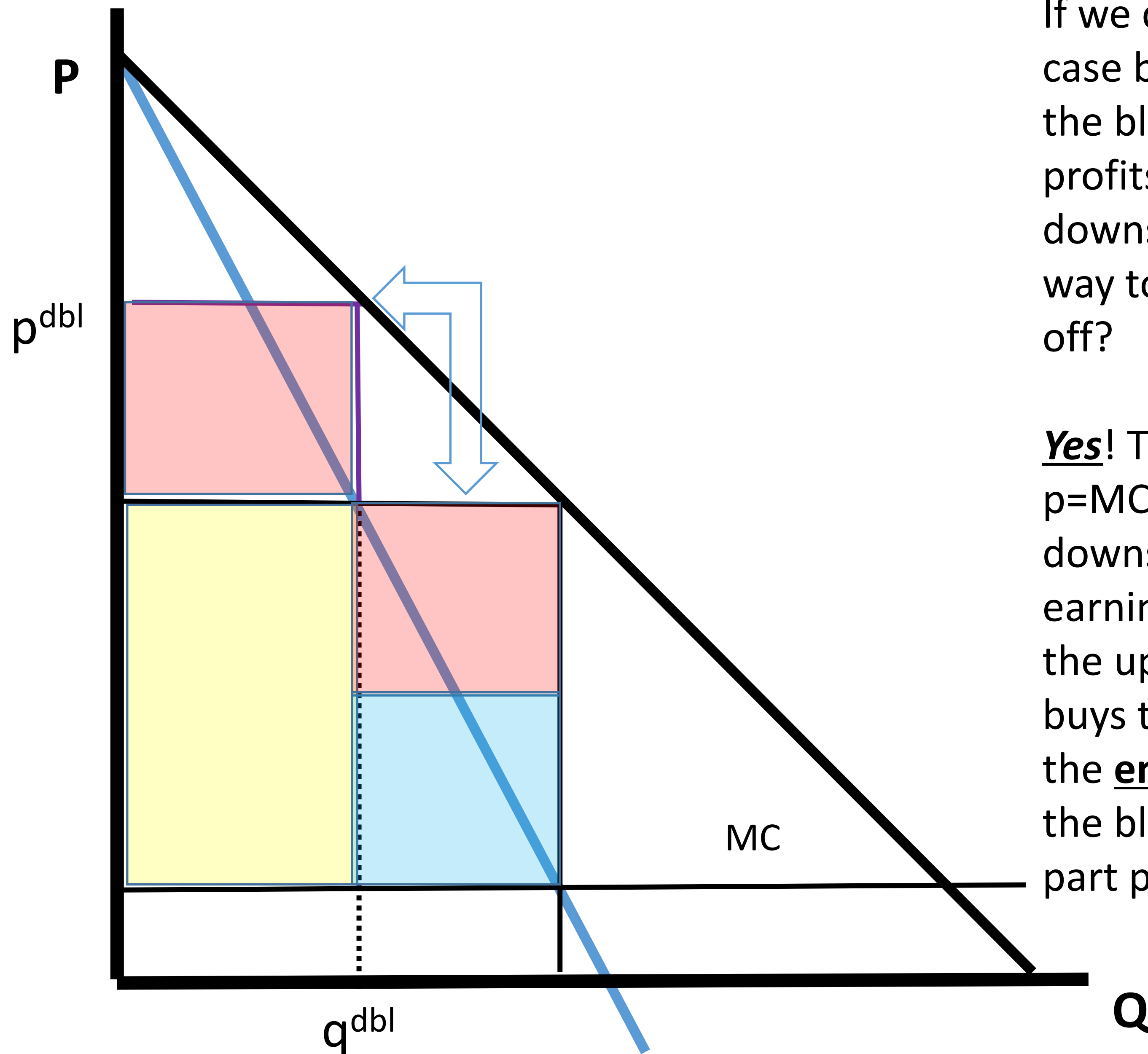
So we get a lower q and a higher price. Combined profits end up less than the profits of a simple monopoly.

***Note*** *that here we simplify by assuming the downstream firm operates with MC = 0.*




So here are the profits for the upstream (yellow) and downstream (green) firms.

Note that this profit rectangle will be **half** the width of the monopoly level of profits (since MR will hit the midpoint), while the upper green profit rectangle of the downstream firm will always be lower in height than that of the upstream firm.




If we compare the profit in our double marginalization case by moving the upper rectangle down, we see that the blue area represents the (potential) monopoly profits captured by neither the upstream nor the downstream firm. How to fix? Can they figure out a way to split the blue area so as to leave both better off?

***Yes***! The upstream firm sells to the downstream firm at p=MC (rather than at the monopoly price). The downstream firm then sets (p, q) with MC=MR, earning full monopoly profit. Joint profits rise, but now the upstream firm earns zero. The downstream firm buys their participation: it pays a fixed fee equal to (i) the **entire** yellow rectangle, plus (ii) some portion of the blue rectangle. Both firms end up with more. Two-part pricing (fixed + variable) solves the problem.

# Franchise discussion

I. Franchising saves the franchiser (the upstream firm) capital.
   a) This is important to a firm that is expanding quickly. It will have a hard time funding its own core operations. Adding downstream operations would impede growth.
   b) Until roughly the end of WWI, Ford was supply-constrained: it struggled to add capacity fast enough, with dealers begging to buy more cars.

II. Is this a big number? YES, and critical once Tesla is no longer supply constrained so that inventory at sales points rises.
   a) 60 days inventory x 1000 units / year x 1 year / 360 days x $60,000 per car
      1) Numbers for Tesla, 200,000 US cars per year, 200 sales points for national coverage
      2) But for profitability Tesla will also need comparable used car inventory, albeit a lower price point
   b) But also land, building, service bays for 200 sales points, none cheap.
   c) Add everything up: factory stores cost $6 billion in capital (*some in leases*).

# What a dealer does: business units

## In order of contribution to overall profits

1. **Service**
2. **F&I – finance and insurance**
   a) **up-front fee income from lenders, also necessary to do deals**
   b) **extended warranties, very high profit margins. <u>not</u>** collision insurance!
3. **Used car sales (**but margins shrinking with internet**)**
4. **New car sales (**net margins now near-zero**)**
5. **Parts wholesaling (**to independent repair shops, only some do**)**
6. **Body shop (**invisible to consumers. most "dealership principals" have multiple "stores" and share across them**)**

# Risk and cash flow

- If sales turn down, dealers hold the extra unsold inventory
  - It's their balance sheets that bloat, not the upstream firm's / car company's
- Dealerships save working capital, too.
  - Dealers pay upon production, while car companies pay suppliers 60 or 90 days in arrears.
  - **In effect, car companies are financed by dealers and (to a lesser extent) by suppliers. They don't need much capital, relative to sales.**
- The Dicke chapter notes that Ford began in 1903 with only $14,000 in actual investment.
  - Subsequent expansion of production capacity was **entirely** self-financed, as Henry Ford didn't believe in debt.
  - He couldn't have done that without dealers!

# What a franchiser provides

- Branded good that sells in volume
  - Frequent model updates
  - Handling scandals and recalls
- Advertising (including in-dealership marketing materials)
- Management consulting
  - ➢Providing information on market trends to help dealers plan better
  - ➢Accounting systems
- Employee training (service staff)
- Policing of free riders (trying to weed out dealers that create a bad name for everyone else)
- Lobbying on behalf of all

# What franchiser provides (*continued*)

- Access to credit and markets
  - Keeping brand name valuable
  - Creating reputation for not arbitrarily cutting dealers
- Facilitating finance
  - Universal Credit Corporation at Ford from 1928 (now Ford Credit Corp)
  - “Floorplan” (inventory finance) for dealerships
    - through UCC so not part of Ford’s balance sheet
  - Consumer finance (initially up to 2/3rds with short maturity).
    - Now done by packaging in asset-backed securities and sold to institutional investors so not part of Ford’s balance sheet

# What franchisee provides

- **Capital**
- Legal independence / much lower liability
  - For parent company
  - For other franchisees
  - One bad apple doesn’t poison the entire Ford universe, only a single dealer
- Operational independence
  - Hiring can be in line with local market and management goals
  - Strong incentives for local management
    - Company stores can’t provide good incentives. Tracking sales doesn’t work: a poor manager in a good location out-earns a good manager in a poor location.
    - So lots of bureaucratic efforts to game the system.
    - A dealership owner has no system to game. Skin in the game creates strong incentives
  - Product mix and market can be set to local tastes – colors, sedans vs pickups etc

# What can go wrong?

- By franchiser
  - Overdealering
  - Cutting margins / systematically undercutting dealer profits for themselves
    - Dealership and franchise councils provide feedback
    - Not viable strategy for a franchiser in the market for the long haul
  - But “pushing metal” – asking dealers to order extra cars or not cut their orders – is a perennial issue when sales slow down.
- By franchisee
  - Stinting on advertising and service to detriment of surrounding dealers
  - Poor operations: undercharging out of incompetence, to detriment of surrounding dealers.
  - Focusing on complements (used cars, “dual” brands) not sales of new cars

# What can go wrong?

- How adjust if the franchiser has a poor product?
  - Cars that don’t sell or (fast food) a menu that is behind the times
  - Successful franchisees thus have a strong tendency to add a **different** franchise rather than a second store of the same
  - In the auto industry, an owner will have multiple stores, independently run, so as not to infringe upon one-store, one-product rules
    - These may be physically adjacent, but (if you ask) you can’t get from one store to the other without leaving the building

# What can go wrong?

- How can a franchiser react to changing overall economics?
  - They can exit!
  - What has happened?
    - Consumers are more mobile – road networks mean small towns and suburbs aren't isolated and so are no longer "safe" markets where poorly managed dealers can survive
    - The internet (and before that various buying services) have improved consumer access to information on "appropriate" prices
  - In fact, year by year, the total number of dealers in the auto industry has declined, even as certain brands have added new dealers.

# Puzzle: the rise of multistore dealers

- How do they different from “factory stores”?
- Hypothesis:
  - better management information plus
  - flexibility in bonuses and staffing plus
  - high-quality “head office” consulting services
  - plus “economies of scale” in certain management functions
    - Accounting, payroll
    - Vehicle registrations
    - Shared body shops and used vehicle / off-lease reconditioning
    - Shared used car inventory, tire inventory, etc
- But can’t a “factory store” offer much the same?
  - To date, the empirical answer is “no”