

# Changing Market Structure and Implications for Monetary Policy

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# (My) Definitions

- “Changing market structure”
  - Changes in the distribution of economic activity across firms within markets, industries, or sectors
  - E.g., distribution of companies’ revenues in an industry—concentration
  - Recognizing connotations to market power, pricing, etc.
- “Implications for monetary policy”
  - Multiple related things: inflation, real effects of changes in capital costs, Philips Curve

# 1. A Basic Paradox

- An (almost) accounting identity for prices

$$P = m \cdot C$$

- Price ( $P$ ) = Markup ( $m$ ) x Cost ( $C$ )
- Profit-maximization theory says:
  - Cost should be marginal cost
  - Markup should depend on buyers' price sensitivity (less sensitivity, higher markup)
- But even if prices aren't set to maximize profits, above relationship holds for any given cost and suitably defined markup

# 1. A Basic Paradox

- In growth rates:

$$g_P \approx g_m + g_C$$

- What does empirical research say about each of these growth rates over past 10-15 years?

- Price growth  $g_P$  (i.e., inflation): unusually low
- Markup growth  $g_m$ : unusually high
- Cost growth  $g_C$ : unusually high (productivity growth unusually low)

- So, how is it that:

*unusually low = unusually high + unusually high*

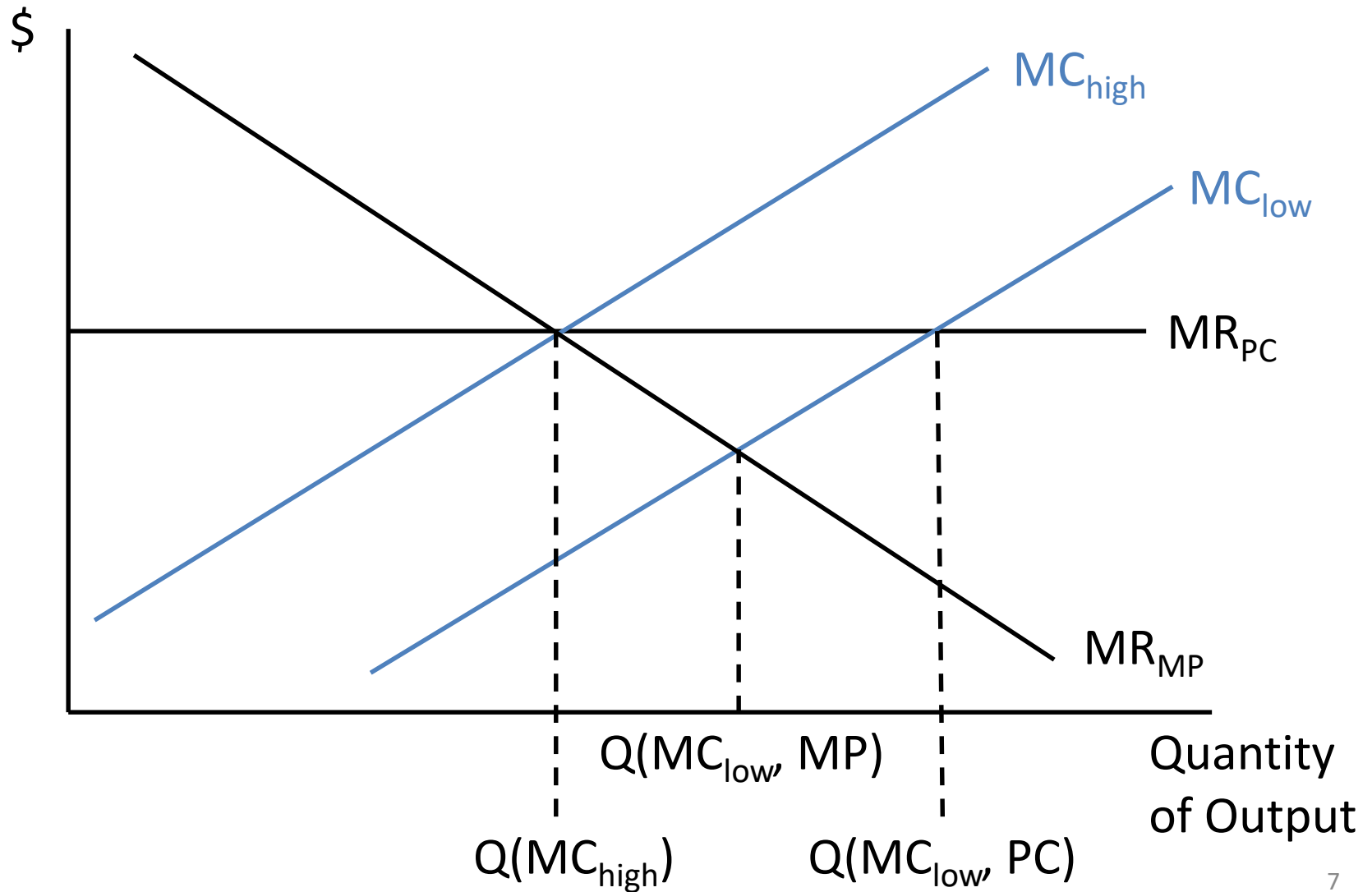
## 2. Heterogeneity Matters

- Averages can obscure
- Inside any industry/market, massive differences in size, productivity, capital intensity, etc.
- Aggregate (industry- or economy-level) changes rarely reflect a common change across all producers
- Aggregates often reflect compositional changes
- To understand aggregates, we need to understand differences within industries/markets and how markets allocate activity across different producers

### 3. Market Power, Pass-Through, and Monetary Policy

- Key mechanism of action for monetary policy: capital cost changes should move companies' activity levels (investment, employment, output, etc.)
- Strength of relationship depends on ties between companies' costs and desired activity levels
- Ties generally depend on companies' market power
- Relative to perfect competition, companies with market power expand less when costs decrease (and contract less when costs increase)

### 3. Market Power, Pass-Through, and Monetary Policy



### 3. Market Power, Pass-Through, and Monetary Policy

- What affects steepness of marginal revenue curve?
  - Shift from perfect competition to market power does steepen MR
  - BUT, shift from less market power to more market power does *not* necessarily steepen MR
  - Less competition means steeper *demand curve*, but not necessarily steeper MR curve
  - MR steepness depends on slope of demand *and* whether demand is flattening or steepening *and* size of quantity shift as competition changes



# 4. Measuring Competition and Market Power

- Concentration is a market outcome, not a market primitive
  - Thus concentration is not a direct measure of a market's competitiveness or firms' market power
- Concentration is usually related to competition, but relationship can be positive or negative
  - Greater competition can *increase* concentration
  - Not just theoretically; lots of empirical evidence that removing market frictions moves activity toward low-cost/high-quality companies

# 4. Measuring Competition and Market Power

- About 35 years ago, Industrial Organization (field of economics that specializes in market power) stopped empirically relating concentration to other market outcomes (prices, markups, profits), especially for comparisons across different industries/markets
- Relationship between two market outcomes can be misleading or uninformative about the causal effect of competition