

# FTC/DOJ Hearings on Health Care

Hospitals – Post Merger Conduct

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# Outline of Topics

- Observations on Post-Merger Pricing Behavior
- Basics of Geographic Market Definition
- Courts' Pre-Merger Geographic Market Definition Analyses
- Courts' Analysis of Competitive Effects
- Using Post-Merger Pricing Behavior to Test Courts' Approach to Geographic Market Definition & Competitive Effects
- FTC/DOJ's Unique Position

# Changes in Pricing Behavior

- Pre-merger: the acquired hospital charges *lower* rates to private payors than the acquiring hospital
- Post-merger: the combined hospitals charges rates to payors *equal to* the higher rates of the acquiring hospital
- Post-merger: price increases have been by as much 50 %

# Market Definition Analysis

- Market is defined using “hypothetical monopolist” test, assuming:
  - all candidate firms behave as one in pricing
  - firms outside the proposed market do not change prices

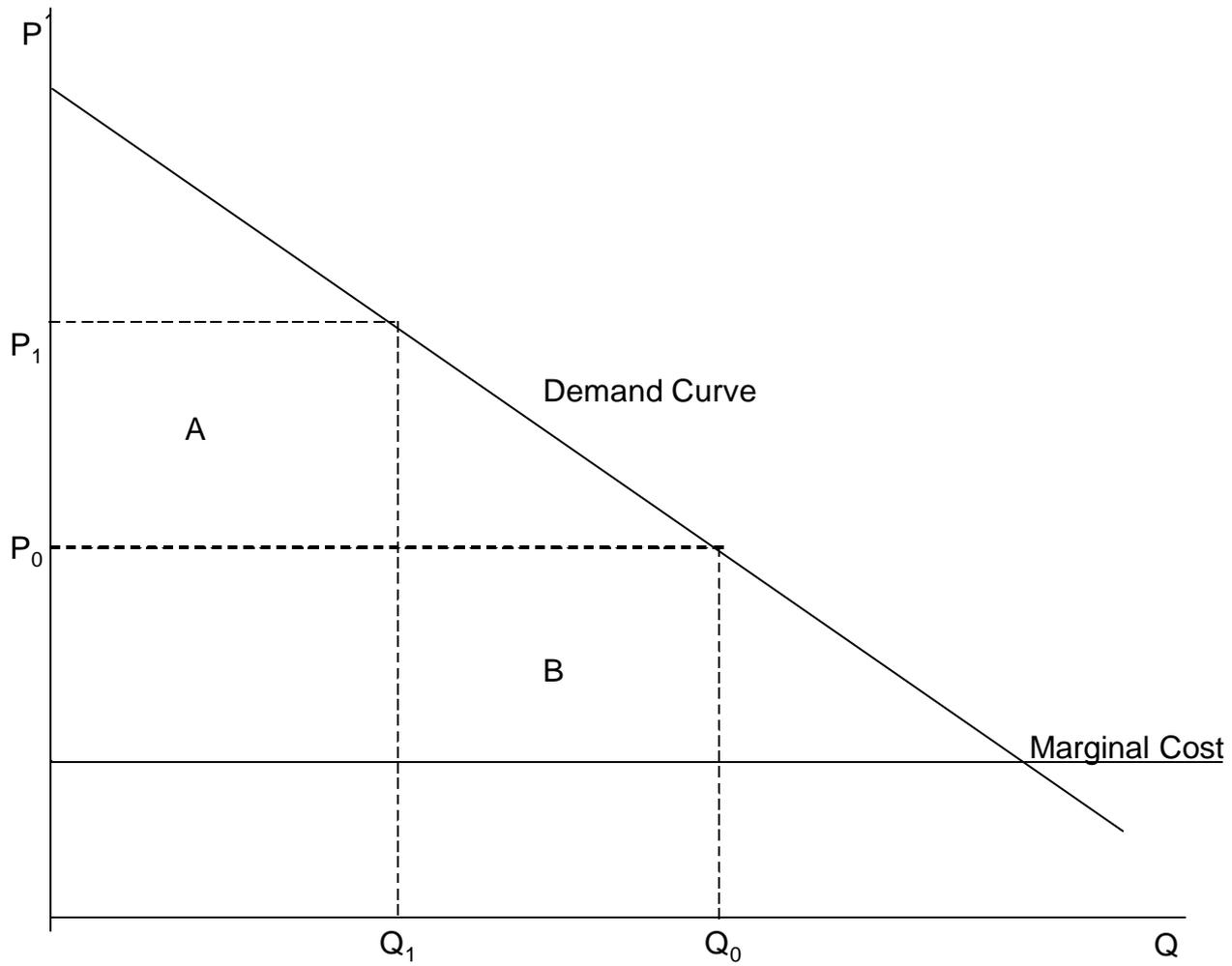


Figure 1

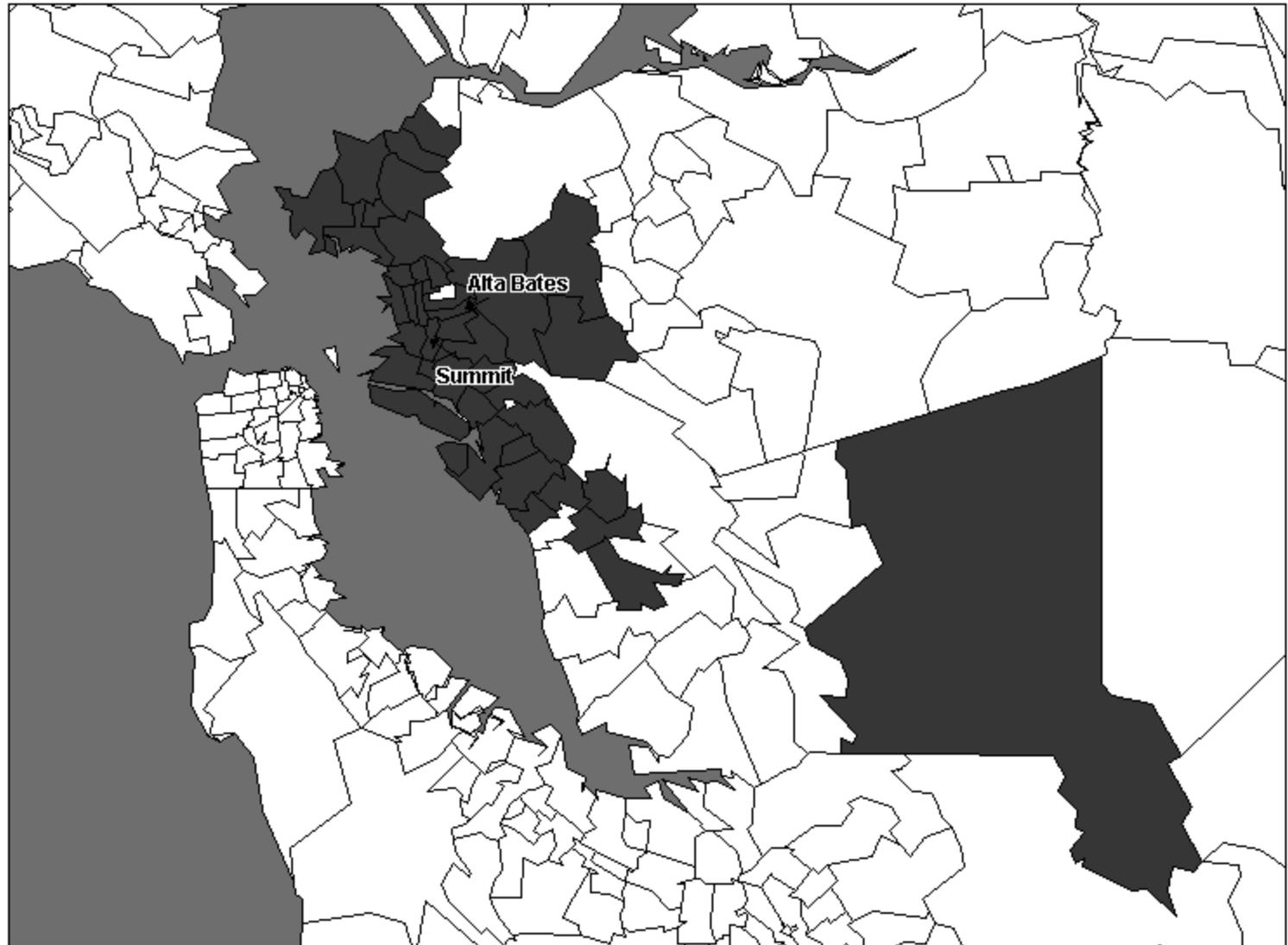
## Basic Concept in Market Definition

- Price increase is profitable as long as:  
 $t/(m+t) > \Delta Q/Q$
- Must estimate “m”, the existing margin:  
 $(P-MC)/P$
- Must estimate  $\Delta Q$ , the change in sales due to a price increase of  $t = \Delta P/P$

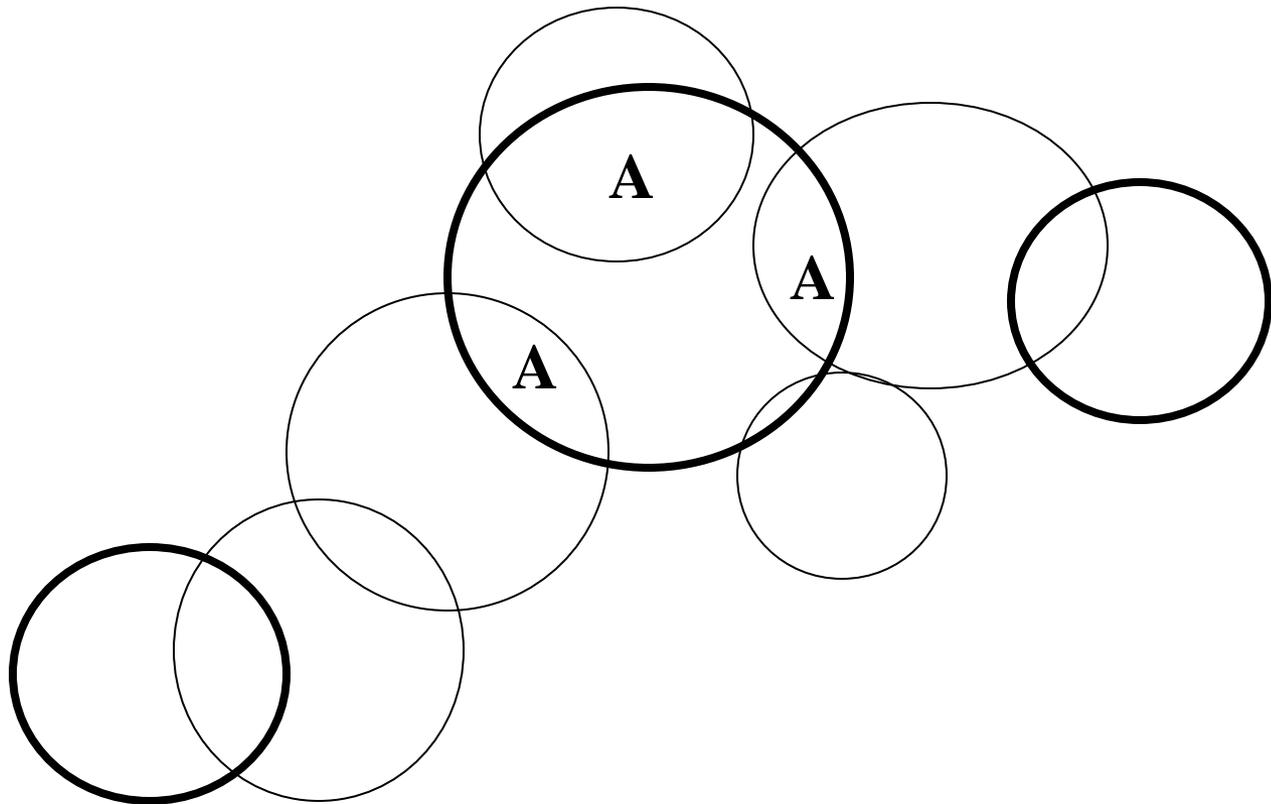
# Courts & Geographic Market Definition

- Courts have focused on pre-merger patient migration patterns
  - Elzinga-Hogarty tests
  - Overlapping draw areas
- Inferred profitability of hypothetical price increases from static migration patterns

**Alta Bates and Summit Combined 90% Patient Draw Areas  
GAC DRGs, All Payers, 1997  
Assuming Kaiser Oakland Stay Open  
Ranked by Alta Bates and Summit Discharge**



# Overlapping Draw Area Analysis



# Specific Tests of Courts' Geographic Market Definition

- Migration responses to post-merger price increases
- 5 % price test

# Payor Induced & Patient Migration Patterns In Response to Post-Merger Price Increases

- Hospital services are not homogeneous
- Patients have non-price related reasons for pre-merger migration
- Payors have limited ability to induce patients to switch to more distant hospitals
- *Should be no presumption that existing migration patterns change in response to post-merger price increases*

## Price Increases Greater than 5 Percent

- Courts have rigidly focused on 5 percent price increase test
- *Merger Guidelines* recognize 5 percent test should not always be applied
- Under certain circumstances 10 percent price increase or more will be profitable when 5 percent price increase is not

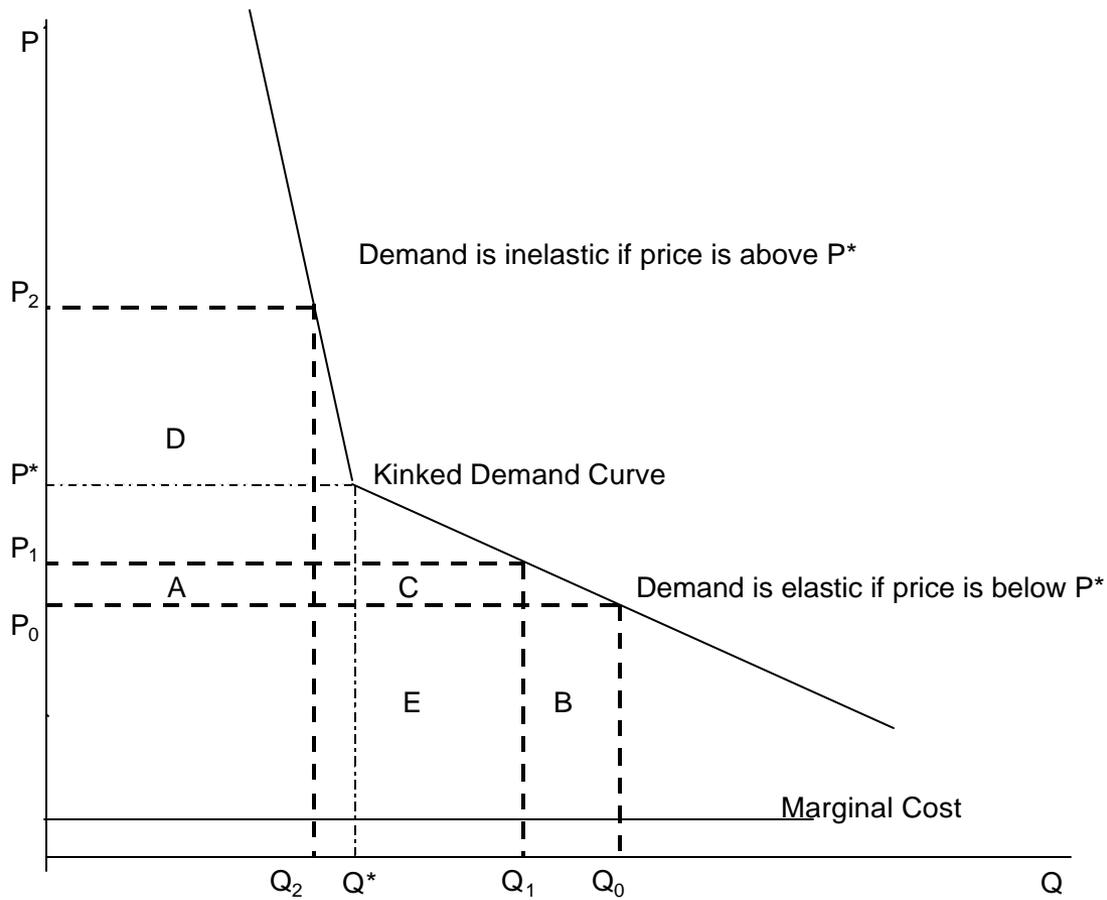


Figure 2

Areas defined by " - - - - - ".

Price increase from  $P_0$  to  $P_1$  is not profitable because area B > area A + area C

Price increase from  $P_0$  to  $P_2$  is profitable because area B + area E < area A + area D.

# Courts & Competitive Effects

- Assumed other hospitals would not follow any price increase
- Assumed other hospitals would expand services & geographic coverage in response to any attempted price increase

# Specific Tests of Courts' Competitive Effects Analysis

- Asymmetric price increases
- Reactions of other hospitals
  - Pricing
  - Expansion of services
  - Expansion of geographic service areas

## Competitive Effects: Asymmetric Price Increase

- Critical loss formula for the merged firm should be adjusted when price is only increased one of the merging firms products
- $t_a/[m_a+t_a-m_b(P_b/P_a)D_{ab}] > \Delta Q_a/Q_a$
- Increases the likelihood of a unilateral price increase being more profitable after the merger

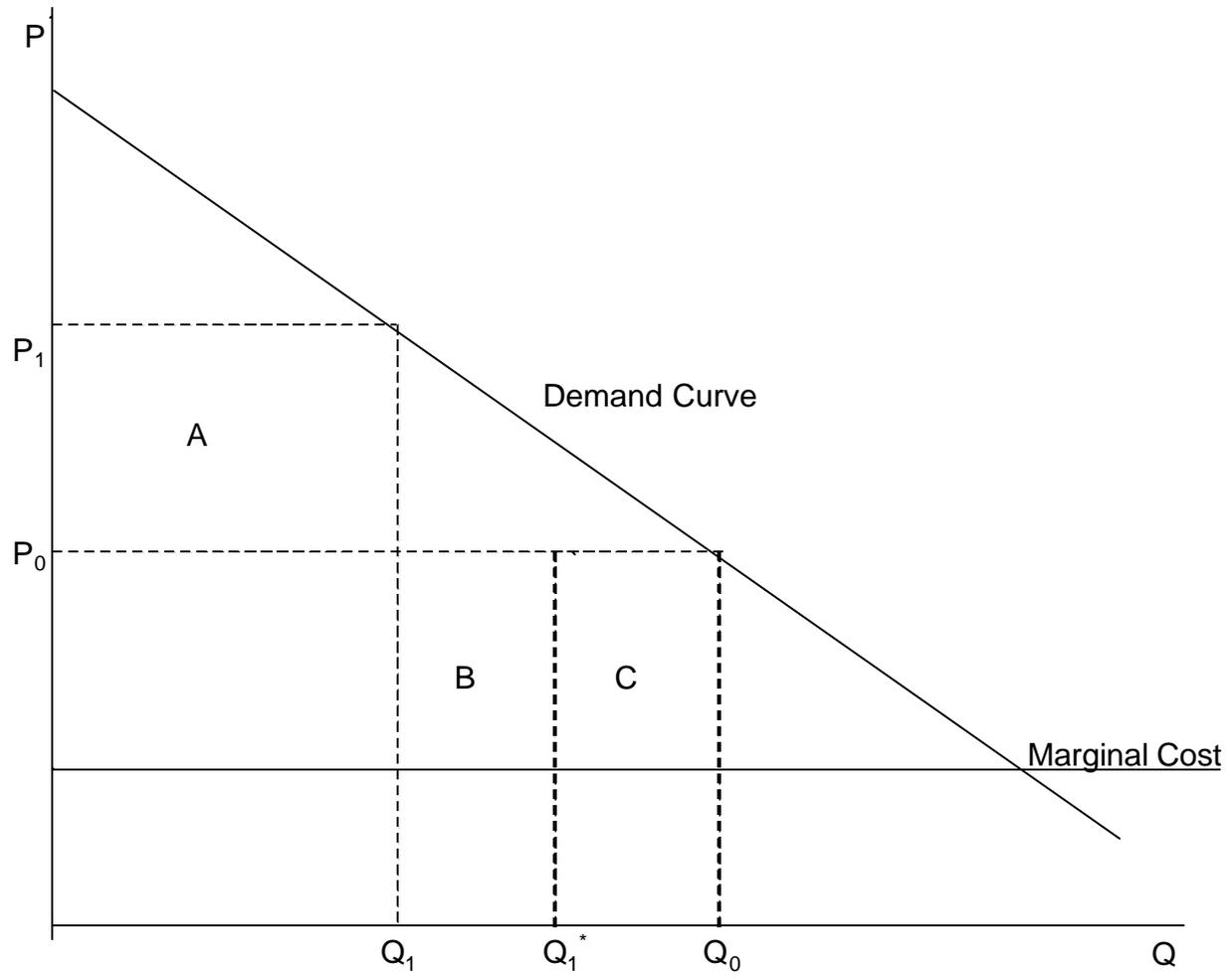


Figure 3

## Competitive Effects: Reactions of Other Hospitals

- In general, competitors can be expected to follow *in part* a price increase from a merger that creates a dominate firm
- Critical loss analysis of merged firm price increase should take this into account
- Makes it more likely that a unilateral price increase will be profitable

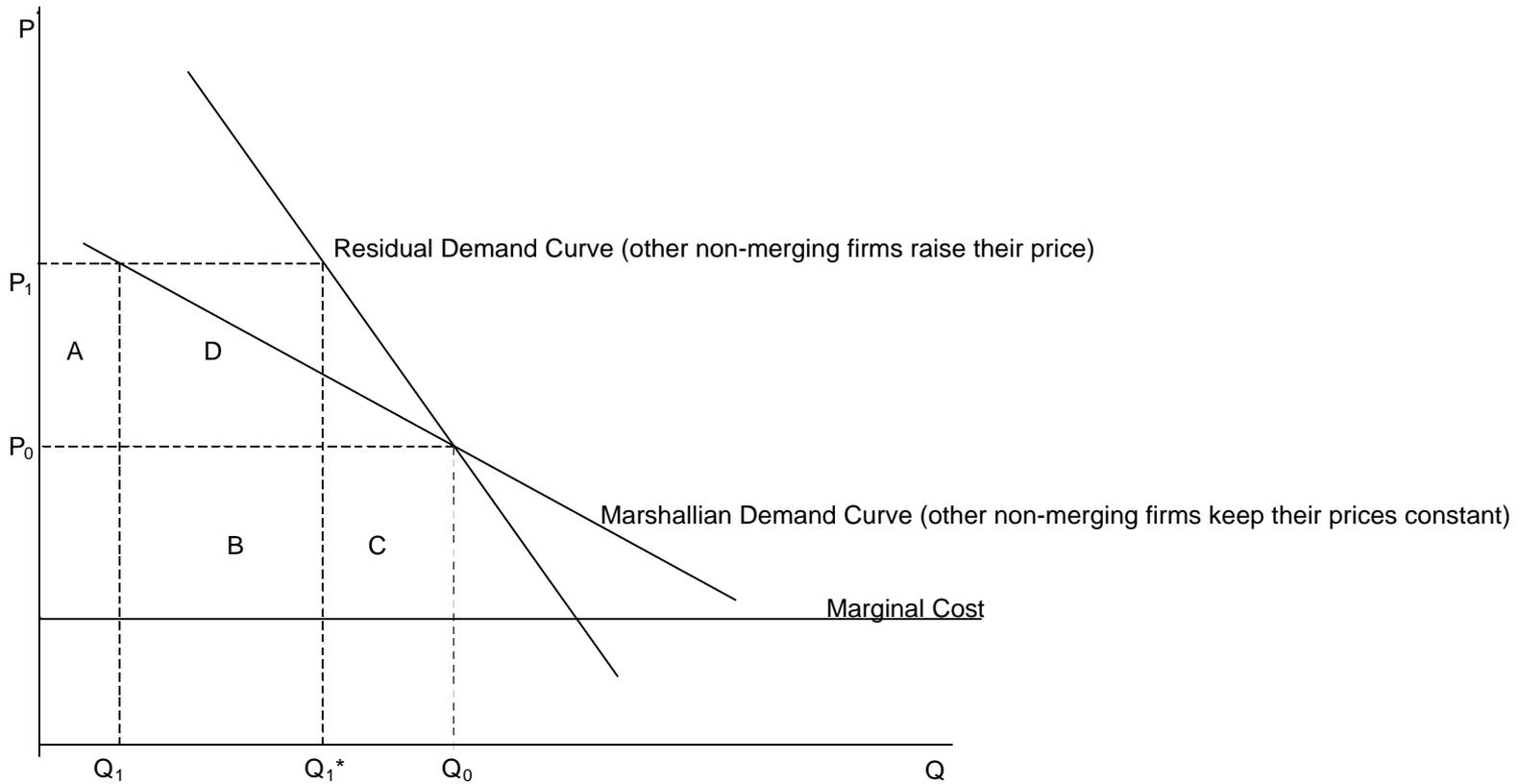


Figure 4

Areas defined by " - - - - - ":

Under the Marshallian demand curve, the price increase from  $P_0$  to  $P_1$  is not profitable because area A < area B + area C.

Under the residual demand curve, the price increase from  $P_0$  to  $P_1$  is profitable because area A + area D > area C.

# Competitive Effects: Reactions of Other Hospitals

- Analyze whether other hospitals:
  - Expand their services post-merger
  - Increase their geographic draw areas

# Tests of Courts' Analyses With Post-Merger Conduct

- Direct measure of mergers' effects on pricing
- Geographic market definition:
  - Testing whether migration patterns change with increased charges by zip code
- Analyzing competitive effects:
  - Differential price increases by merged firm
  - Pricing and supply responses of other hospitals
  - Check impact on non-price services

# FTC Hospital Merger Retrospective

- Agencies are in a unique position to get the information needed to determine post-merger behavior
- Have resources to analyze post-merger behavior
- Can provide key empirical evidence
- Can test the Courts' pre-merger approaches to predicting the impact of a merger