Proving Common Impact in Wage Suppression Cases

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What Makes Labor Markets Different?

- Workers are not commodities, contracting is long term (at least for permanent employees)
- Implications for wage suppression cases:
  - Contracts are a form of insurance that spreads fortune of the company more equally across employees than typical markets
  - Collusion will tend to affect all employees

+ General Complicating Factors in Proving Common Impact

- Little or no variation in the treatment ("challenged conduct") over range of available data or across firms in the industry
- High variation in the wage/prices or extreme product differentiation
- Connection between challenged conduct and individual wage/price is indirect
  - E.g., Conduct affects list prices or can only be seen on at the "averages"
- Or connection is direct but difficult to establish the association empirically
  - E.g., Too few transactions for individual class members

+ Specific Complicating Factors in *High-Tech Employee*

- Alleged web of bilateral agreements spanning various time periods
- Diverse array of class member job descriptions and compensation structures
- Lack of explicit wage fixing on the part of defendants

Two-Step Method

- Court cited two-step method in *Johnson v AzHHA*
  - Step 1: Show alleged restraints suppressed wages generally
  - Step 2: Show existence of rigid compensation structure, leading to classwide impact

Johnson v. AzHHA

- Step 1: Show general wage effect associated with the challenged conduct
- Using difference-in-difference analysis, Singer showed that increases in wages at the start of the Class Period for temporary nurses in Arizona were outpaced by increases in wages for temporary nurses in neighboring states

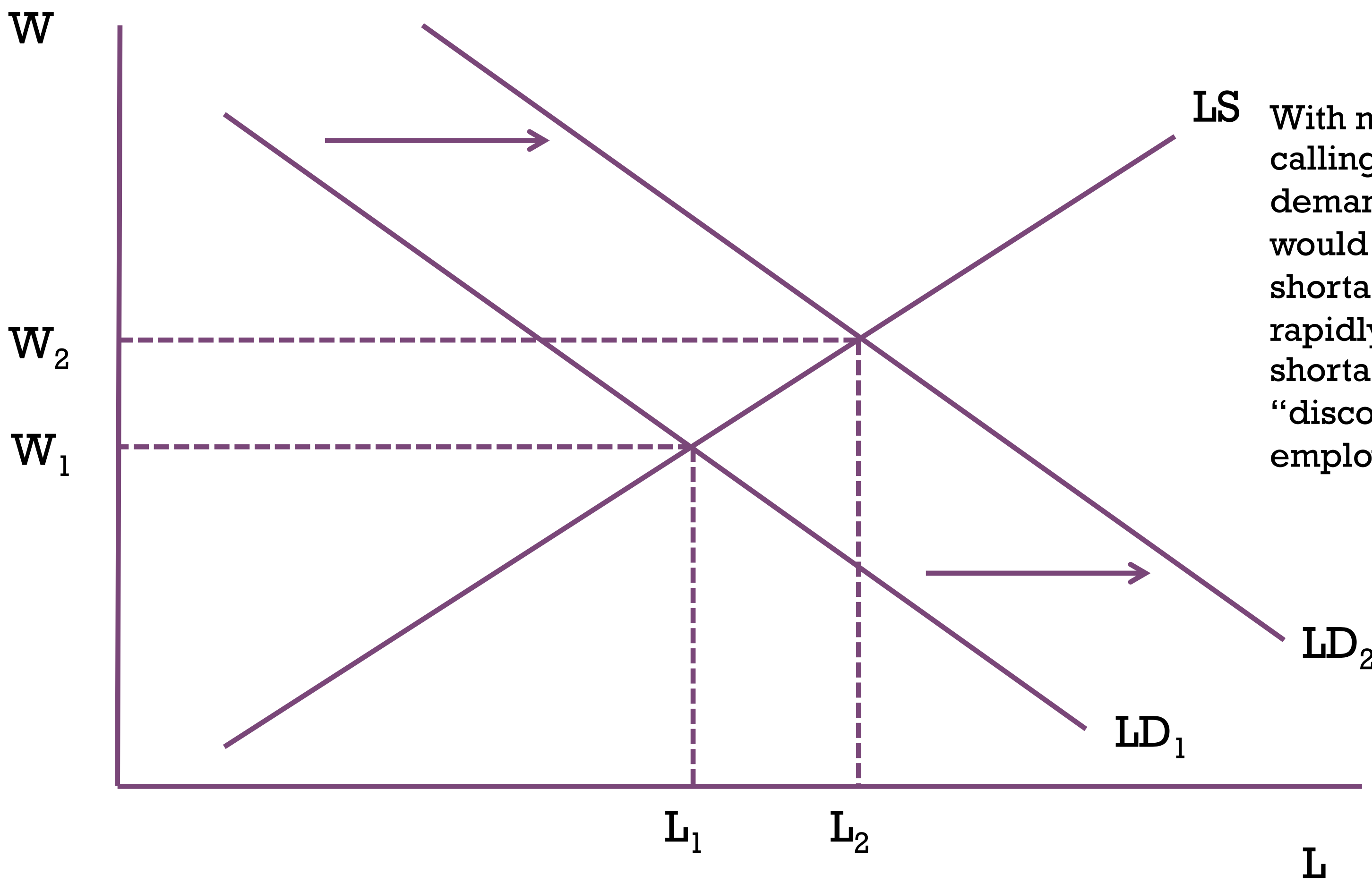
+ *Johnson v. AzHHA*

- Step 2: Pricing structure
- Hospital members of AzHHA paid travel agencies a common bill rate, and agencies would pay their nurses a percentage of that bill rate, the ratio representing the agency's pass-through rate.
- Singer showed that bill rates (serving as the "list prices") were positively correlated with pay rates for six types of temporary nursing staff.

+ *High-Tech Employee*

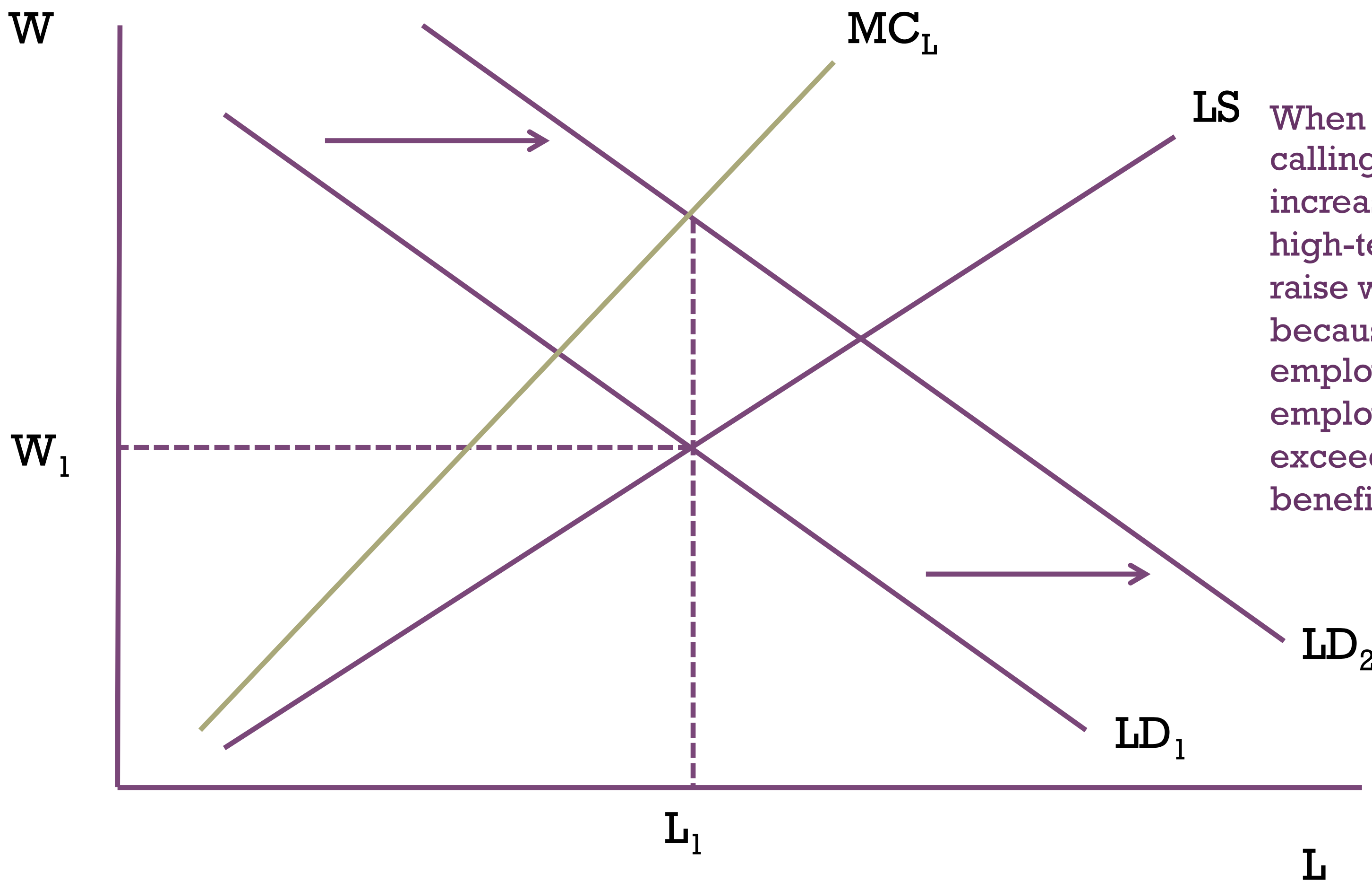
- Step 1: Show general wage effect associated with the challenged conduct
- Theory: Conduct imposed an informational asymmetry that inhibited the process of price discovery
- Method: Regress real annual compensation of employee X at firm Y on % months in a given year in which firm Y was subject to one or more anti-solicitation agreements (controlling for employee's age, gender, tenure, firm revenues, number of new hires)
  - Note: This doubled as the aggregate damages model.

Wages & Employment Growth Under Competition



With no restraints on cold calling, an increase in the demand for high-tech labor would result in a temporary shortage, which would rapidly be alleviated as the shortage is simultaneously "discovered" by both employers and employees.

Effect of Collusion on Wage & Employment Growth



When restraints on cold calling are imposed, an increase in the demand for high-tech labor would not raise wages or employment, because the marginal cost to employers of expanding employment (higher wages) exceeds the marginal benefit.

Note: For ease of exposition, this example is constructed such that an expansion in labor demand generates no change in wages or employment. In general, wages and employment can still increase under collusion, albeit at a slower pace than under competition.

+ *High-Tech Employee*

- Step 2: Pricing structure
- Theory: Defendants' emphasis on internal equity—same work generates similar compensation—created uniform pricing structure
- Record Evidence:
  - "Defendants each employed company-wide compensation structures that included grades and titles, and…high-level management established ranges of salaries for grades and titles, which left little scope for individual variation." - *Order Re: Motion to Exclude* at 10
  - "the evidence now suggests that internal equity was such an important aspect of Defendants' compensation practices that: (1) Defendants utilized software tools to generate internal equity reports and to compare each employee to his or her peers; (2) Defendants advised managers that internal equity was a prime consideration when setting and adjusting salaries; and (3) Defendants actively monitored their compensation structure to identify discrepancies within and beyond job titles and groups and to make adjustments as necessary" -*Class Cert Order* at 66.

+ *High-Tech Employee*

- Step 2: Pricing structure
- Econometric Evidence:
  - Regress *individual* compensation on job title (controlling for age, tenure, gender, location, employer) (found 90% of compensation can be explained by "common factors")
  - Regress *average* compensation of title X at firm Y on average compensation across all technical employees in all job titles at firm Y in the same period and in prior period (controlling for firm Y revenue; firm Y job growth; local economic conditions),
    - "Vast majority" of class hold job titles showing correlation between job title salary and average salary in current year, and prior year's average

+ Defendants' Critique

- Pricing structure
- Claim that compensation was set by hundreds of managers, based on declarations (as opposed to contemporaneous evidence)
- Court found this litigation-driven evidence to have "diminished probative value"

+ Defendants' Critique

- Regression models
- Claim that (1) models suffered from endogeneity bias as a result of an (unspecified) omitted variable; (2) coefficients were not significant at conventional significance levels after controlling for within-firm correlations in compensation; (3) couldn't control for other conduct not being challenged (agreements w/ non-Defendant firms)
- Court found (1) defendants failed to specify what the omitted variable might be; (2) the level of statistical significance depended on the tradeoffs of Type I and Type II errors; (3) rejected *Comcast* argument:
  - "the rationale underlying Defendants' argument—that *Comcast* holds that a damages model must precisely segregate out effects of every possible factor, including legal conduct, that could impact the dependent variable, in order to be admissible under *Daubert*—directly contravenes well established Supreme Court and Ninth Circuit authority holding that damages in antitrust cases often cannot, and therefore need not, be proven with exact certainty." – *Order Re: Motion to Exclude* at 33

Areas Not Exploited by Defendants

- Failed to identify the alleged omitted variable and to demonstrate impact of its inclusion
- Re second price-structure regression, failed to show that any factor that increased compensation for a job title must increase compensation for average across all job titles (correct with IV techniques)
- Failed to convey to court the implications of plaintiffs' theory on recruiting and hiring (both predicted to be suppressed)
  - Example: Did non-participating firms (e.g., Facebook) hire faster & raise wages more rapidly than Defendants?

+ Lessons for Plaintiffs

- Think about how to establish pricing structure from day one
- Proof will not be the same in every case
- But notion of common factors driving wages and gains being shared broadly across a firm seem to be reasonable places to start
- Don't give up on direct proof
  - See, e.g., Kevin W. Caves & Hal J. Singer (2014), Econometric tests for analyzing common impact, in James Langenfeld (ed*.) The Law and Economics of Class Actions* (Research in Law and Economics, Volume 26)