Wages, Minimum Wages, and Price Pass-Through: The Case of McDonald's Restaurants

ECAG-6665: Research Report

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Research Question

- The research question for this study is whether the minimum wage increase affects the prices of McDonald's products. [1]

Justification of Research

- This study provides insight into whether increases of the minimum wage affect the prices of products and determine its elasticity.
- The study also provides whether the introduction of labor saving technology like touch screens ordering kiosks affects the price of products.

Literature Review

- Minimum wage hikes are often associated with a positive spillover (or ”ripple effect”) on wages above the new minimum [2].
- Wage spillovers may reflect the value of outside options or within-firm pay norms [3]
- Potential for technological substitution of low-skill labor is limited to cognitively routine tasks, i.e., it may not apply to manually routine jobs. [5]
- Under monopsonistic competition in local markets, fims face an upward sloping labor supply curve. [4]

Data Characteristics and Data Sources

- The data comes form the annual geo-coded listing of all McDonald's restaurants.
- The database was obtained from AggData, a market research company
- 2016-2020 annual telephone surveys of McDonald's restaurants done by the author of the study.
- of these, 720 observations come from stores that are observed only once.
- The reliability ration corresponding to annual wage changes is about 0.9.
- The survey data was supplemented with data from owner identities by FranData.

Methodology

- Estimating the McWage elasticity with respect o minimum wages from 2016 to 2020.

$$\ln McWage_{it} = \alpha + \beta \ln MW_{it} + \delta_i + \phi_t + \epsilon_{it} \quad (1)$$

- Estimating a two-stage least square regression of prices on wages where wages are instrumented using minimum wages.

$$\ln BigMacPrice_{it} = \alpha + \beta \ln McWage_{it} + \delta_i + \phi_t + \epsilon_{it} \quad (2)$$

- The reduced form relationship between prices and minimum wages is given by:

$$\ln BigMacPrice_{it} = \alpha + \beta \ln MW_{it} + \delta_i + \phi_t + \epsilon_{it} \quad (3)$$

Methodology

- Estimate a specification relating the probability of restaurant ecit to minimum wages at the county level.

$$\ln Exit_{it} = \alpha + \beta \ln MW_{it} + \delta_i + \phi_t + \epsilon_{it} \tag{4}$$

Results Figures

Descriptive Statistics

Results

Graphs

Conclusions

Bibliography

[1] Orley Ashenfelter and Štěpán Jurajda. “Minimum wages, wages, and price pass-through: The case of McDonald’s Restaurants”. In: *Journal of Labor Economics* 40.S1 (2022), S179–S201.

[2] Doruk Cengiz et al. “The effect of minimum wages on low-wage jobs”. In: *The Quarterly Journal of Economics* 134.3 (2019), pp. 1405–1454.

[3] Christopher J Flinn. “Minimum wage effects on labor market outcomes under search, matching, and endogenous contact rates”. In: *Econometrica* 74.4 (2006), pp. 1013–1062.

[4] Alan Manning. *Monopsony in motion: Imperfect competition in labor markets*. Princeton University Press, 2013.

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[5] Brian J Phelan. “Hedonic-based labor supply substitution and the ripple effect of minimum wages”. In: *Journal of Labor Economics* 37.3 (2019), pp. 905–947.