

The Role of Search Frictions and Monopsony Power in Shaping the Effects of Tipped Minimum Wage Policy in the U.S. Restaurant Industry

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Abstract. In the U.S. restaurant industry, tipped workers receive a large share of their earnings from customers rather than from their employers, and tip credit provisions allow restaurants to pay cash wages below the standard minimum wage. This paper examines why this compensation structure persists and how raising the tipped minimum wage affects wages, employment, and firm behavior. Based on the literature on modern monopsony power and existing evidence on minimum wage policies, labor market concentration, and tipping, this paper develops a search-friction framework in which job-switching costs give individual restaurants wage-setting power even in markets with many employers. The results indicate that restaurants' wage-setting power enables them to maintain wages below competitive levels, implying that a moderate increase in the tipped minimum wage can improve worker earnings and reduce turnover without generating a proportionate loss in employment. However, restaurants respond through multiple channels, including raising menu prices, adjusting service charges and compensation structures, slowing hiring, reducing working hours, and, for low-margin firms, exiting the market. The effects of tipped minimum wage policies therefore rely on the magnitude of the wage increase, restaurant characteristics, and local labor market conditions.

Keywords: Tipped minimum wage, Search frictions, Monopsony power, Tip credit, Restaurant labor market

1. Introduction

In the U.S. restaurant industry, tipping income forms a significant portion of total earnings for many tipped employees and constitutes a key element of restaurant compensation systems, rather than serving solely as a performance-based reward for service quality. Because tip income is determined by customers and varies across shifts and dining conditions, tipped workers face uncertainty regarding their total earnings and cannot fully anticipate their income in advance [1]. However, the reliance on tips alone does not fully account for why restaurants are able to sustain relatively low direct wages while continuing to rely on customer-provided gratuities. Moreover, this pattern can be partly explained by search frictions: because workers face costs when changing jobs, the labor supply faced by an individual restaurant may not be perfectly elastic, allowing employers to retain

wage-setting power even in labor markets with many employers [2]. This mechanism reflects modern monopsony models, which show that employers can exercise wage-setting power even without being the sole or dominant employer in the market. Based on this framework, this paper investigates how increases in the tipped minimum wage affect worker earnings and turnover without necessarily causing proportional employment declines. It also considers how restaurants may respond to higher labor costs through menu price increases, service charges, reduced hiring, shorter operating hours, or market exit.

2. The role of search frictions in restaurant labor markets

2.1. Search frictions and imperfect labor market competition

In traditional competitive labor market models, employees are assumed to be able to switch jobs easily, and individual firms are assumed to face perfectly elastic labor supply. Therefore, if an employer pays below the market wage, it would quickly lose workers to competing employers offering higher wages. However, restaurant workers frequently face substantial barriers to job mobility, like long travel distances, irregular schedules, limited knowledge of available jobs, and the costs associated with searching for new employment. These constraints are particularly relevant in restaurant labor markets, where workers often place significant value on flexible schedules, convenient job locations, and the ability to balance work with other employment or personal commitments. Because job changes require resources and involve uncertainty about future employment outcomes, workers may not immediately leave in response to small wage differences. As a result, even in local markets with many restaurants, the labor supply curve facing an individual restaurant may be upward sloping rather than perfectly elastic. This gives restaurants some degree of wage-setting power, allowing them to maintain wages below the competitive level without immediately losing their entire workforce.

2.2. Search frictions and employer wage-setting power

By making job transitions costly, search frictions give firms some control over wages even when many employers operate in the same labor market. Unlike the traditional monopsony model, which focuses on a single dominant employer, modern monopsony emphasizes that firms can possess wage-setting power when workers face costs of finding and switching jobs, which makes labor supply to individual firms less than perfectly elastic [3]. Labor market frictions, including search costs, employer concentration, and limited outside options, enable firms to retain workers without offering fully competitive wages. In restaurant labor markets, costly job search and limited information about alternative opportunities may prevent workers from immediately responding to small wage differentials. Research by Azar et al. further indicates that the effects of minimum wage policies vary with the degree of employer market power, highlighting the role of labor market concentration as an additional factor shaping wage-setting power and employment responses [4].

When workers face costs in searching for and switching jobs, restaurants can use their wage-setting power to maintain lower fixed cash wages without immediately losing employees. As a result, customer-provided tips may become a more important and flexible component of employee earnings. More broadly, search frictions affect not only worker mobility but also how labor costs are allocated among employers, employees, and customers.

2.3. Search frictions and the tipped wage system

In states that allow tip credits, employers may count a portion of employees' tip income toward meeting minimum wage requirements, while remaining responsible for ensuring that workers receive at least the legally required minimum wage [1]. Therefore, tip credit does more than alter the way minimum wage obligations are calculated; it creates a compensation structure in which customer-provided tips constitute an important component of employee earnings. Unlike employer-determined fixed wages, tips fluctuate with customer preferences, perceived service quality, and dining circumstances, functioning as a variable component of compensation rather than merely a reward for good service.

Prior research showed that tips can account for more than half of servers' income at many full-service restaurants [1]. Under this compensation structure, restaurants determine the fixed cash wage, while a substantial share of employee earnings depends on customer payments. Because tip income varies with factors such as customer demand, shift conditions, and service interactions, workers may face greater uncertainty over total earnings than employees who rely primarily on fixed wages. Moreover, scheduling decisions may further affect expected earnings by determining access to high- or low-demand shifts. Though existing research does not establish whether tipped workers experience greater income volatility than other low-wage workers, the large share of earnings derived from tips indicates that a significant portion of their compensation depends on factors outside the worker's direct control.

3. Tipped minimum wage policy and its effects on wages and employment

3.1. Minimum wage policy under a monopsony labor market

In a competitive labor market, an increase in the minimum wage is generally expected to raise labor costs and reduce firms' demand for workers. However, the monopsony model allows for a different outcome because employers may possess wage-setting power and pay wages below the competitive level. If wages are set below the monopsony equilibrium level, a moderate minimum wage increase may raise workers' pay and reduce employer wage-setting power without leading to lower employment [5].

The employment effects of a tipped minimum wage increase therefore depend on the relationship between the new wage floor and the wage-setting conditions faced by employers. If the policy raises wages from below the monopsony equilibrium toward the competitive wage level, restaurants may face higher labor costs but may also experience improved recruitment and retention, potentially offsetting some employment effects. In contrast, if the wage increase exceeds the level consistent with firms' labor demand and productivity conditions, restaurants may respond by reducing hiring, adjusting work hours, or making other operational changes. Thus, monopsony theory does not predict a uniform employment response to higher minimum wages; rather, it predicts that the effects depend on the degree of employer wage-setting power, the size of the policy change, and local labor market conditions [4].

3.2. Wage, employment, and turnover responses to minimum wage increases

Based on empirical evidence from studies of minimum wage policies, higher wages do not necessarily generate proportional job losses, in line with monopsony predictions. However, whether these findings apply to tipped restaurants depends on whether similar wage-setting mechanisms

operate in those settings. For example, Wiltshire et al.'s study of the fast-food industry in California and New York showed that a minimum wage increase led to significant gains in average employee wages, little change in employment, and lower worker turnover [5]. These findings provide evidence that minimum wage increases may affect labor market outcomes through channels beyond direct employment reductions, like improved retention and reduced worker flows. However, tipped restaurants differ from fast-food restaurants because workers rely more heavily on customer-provided tips than employer-paid wages. Therefore, evidence from fast-food settings should be interpreted as supporting the broader monopsony adjustment mechanism rather than as direct evidence for tipped minimum wage effects [5].

In addition, Dube et al. further show that minimum wage increases reduce entry and turnover among low-wage workers while having little effect on total employment [2]. These changes in labor market flows may reflect improved retention, but they may also be influenced by factors such as labor demand conditions, worker composition, and broader economic trends. Thus, minimum wage increases may influence worker mobility and retention without leading to substantial job losses. Tipped worker research tests whether these effects also occur in restaurant jobs that rely heavily on tips.

3.3. Restaurant-level differences in minimum wage effects

The effects of tipped minimum wage increases may differ across restaurant types because restaurants vary in their reliance on tips, labor intensity, and compensation structures. For instance, Even and Macpherson find that higher tipped minimum wages increased weekly earnings among tipped workers but reduced working hours in some cases [6]. This suggests that wage policies may generate different adjustments depending on the characteristics of the restaurant segment.

In particular, restaurants differ in their dependence on customer-provided tips. Full-service restaurants typically rely heavily on tipping as a major component of employee compensation, meaning that changes in the tipped minimum wage may alter the relative roles of employer-paid wages and customer-provided tips in total compensation. In contrast, fast-food restaurants face a more direct increase in labor costs from wage increases because they rely less on customer-provided tips.

Furthermore, restaurant segments differ in labor intensity and production processes. Full-service restaurants rely more heavily on customer-facing labor and flexible staffing, so adjustments in schedules and working hours become important responses to higher labor costs. Fast-food restaurants typically use more standardized operations, which may lead firms to adjust via pricing, staffing levels, or productivity improvements. Meanwhile, differences in compensation structures influence how wage increases affect workers and firms. Because tipped workers receive a larger share of earnings from customer tips, changes in cash wages can alter both total compensation and the distribution of labor costs between employers and customers. Therefore, the monopsony framework explains why minimum wage increases do not necessarily cause large employment losses, but the effects vary across restaurants with different tip reliance, labor requirements, and compensation structures.

4. Firm responses and heterogeneous effects of tipped minimum wage increases

4.1. Price adjustments and labor cost pass-through

When the minimum wage increases, restaurants do not necessarily respond to higher labor costs by reducing employment. Instead, they may raise menu prices and pass part of the additional labor costs onto consumers. However, the extent of price adjustment may differ in tipped restaurant settings because labor compensation is partly funded through customer-provided tips rather than solely through employer-paid wages.

According to research by Wiltshire et al., minimum wage increases raised fast-food workers' wages, but price increases offset only part of the resulting labor cost growth [5]. This suggests that price pass-through is generally incomplete, requiring restaurants to absorb remaining costs through lower profits, productivity improvements, or other operational adjustments. In tipped restaurants, however, the effect may operate through additional channels: increases in the employer-paid cash wage may alter the relative contribution of tips to total compensation, influence tipping behavior, or encourage restaurants to modify service charges and other compensation arrangements.

However, a restaurant's ability to adjust prices depends on demand elasticity, market competition, and its position within the local market. Restaurants with strong customer loyalty, differentiated products, or greater pricing power may be better able to pass through wage increases, whereas restaurants facing more elastic demand may have limited ability to raise prices [7]. Therefore, the same tipped minimum wage policy may generate different price responses depending not only on market conditions but also on the restaurant's reliance on tips and compensation structure.

4.2. Compensation restructuring in response to higher labor costs

Facing higher labor costs, restaurants may adjust both prices and compensation systems by altering the mix of wages, tips, and other forms of employee compensation. For example, some restaurants may introduce service charges or reduce reliance on traditional tipping arrangements to make compensation more predictable and gain greater control over labor cost allocation. Unlike customer-determined tips paid directly to servers, service charges are mandatory fees set by restaurants. Depending on regulations and firm practices, these charges may or may not be treated as employee tips and may be distributed among workers or retained by the business [6].

However, compensation changes do not always increase earnings or reduce income uncertainty. For tipped employees, shifting from customer-based tips to fixed compensation can affect both earnings levels and income variability, particularly when tips account for a substantial share of total pay. In such cases, some restaurant workers have expressed resistance to changes away from traditional tipping arrangements. For example, employees at Maialino and North End Grill left after compensation changes reduced reliance on traditional tipping arrangements [1]. Although these cases do not establish a general causal relationship between compensation restructuring and turnover, they illustrate that the success of such adjustments depends on whether the new compensation system can maintain competitive earnings and worker retention.

4.3. Labor input adjustments and employment decisions

If restaurants cannot fully offset higher labor costs through price increases or compensation adjustments, they may respond by changing labor inputs, such as hours and staffing levels, rather than immediately reducing employment. For example, restaurants may reduce labor inflows by

slowing hiring, leaving vacancies unfilled, or delaying expansion plans. Gopalan et al. found that businesses often respond to minimum wage increases by reducing new hires rather than substantially laying off existing workers [8]. By limiting labor growth while retaining experienced employees, restaurants can reduce costs without disrupting operations, especially when replacing trained workers is costly [9].

Moreover, restaurants may also adjust the intensive margin of employment by reducing employees' working hours. Jardim et al. showed that total hours worked among low-wage workers may decline even when employment levels remain relatively stable [10]. In restaurant settings, reducing shifts or scheduled hours allows firms to lower labor expenses while maintaining operational flexibility. However, this adjustment may limit workers' total earnings and reduce some of the income gains associated with higher hourly wages. These adjustments affect hiring and hours rather than necessarily reducing employment levels. Therefore, the effects of tipped minimum wage increases depend on how restaurants adjust hiring, scheduling, and workforce use.

4.4. Restaurant productivity and market reallocation

The influence of minimum wage increases varies across restaurants due to differences in profitability, operating conditions, and customer demand. In particular, Luca and Luca find that for every \$1 increase in the minimum wage, the probability of exit increases by about 10% for restaurants with a median Yelp rating of 3.5 stars, whereas 5-star restaurants show no statistically significant difference [7]. Yelp ratings should be interpreted as an indicator of overall market performance, reflecting factors such as customer demand, service quality, and reputation, rather than as a direct measure of productivity. Restaurants with stronger customer demand, greater pricing power, and more stable revenues may have greater ability to absorb higher labor costs through price adjustments, operational changes, or efficiency improvements. In contrast, restaurants with weaker market positions or limited financial flexibility may face greater pressure when labor costs rise.

In addition, restaurant exit may reflect market reallocation rather than a simple decline in industry employment. When some firms leave, customers and workers may shift to other restaurants, depending on local labor conditions, demand, and the ability of remaining firms to expand. Therefore, minimum wage increases may place greater pressure on marginal restaurants, while the overall industry effects depend on how stronger firms adjust their operations, sales, and hiring.

5. Conclusion

This paper applies a new monopsony framework that emphasizes search frictions as an important source of employer wage-setting power rather than relying solely on the traditional single-buyer model. The framework explains why an individual restaurant may possess wage-setting power even in labor markets with many employers. However, its implications are not uniform across restaurant types. Differences between fast-food and full-service tipped restaurants may reflect variation in tip dependence, labor intensity, compensation structures, and other operational characteristics. Thus, evidence from general minimum wage studies and fast-food settings cannot be directly applied to full-service tipped restaurants, where customer-provided tips represent a substantial component of worker earnings and where wage policies may affect compensation arrangements differently.

The monopsony framework suggests that increases in the tipped minimum wage can raise worker earnings and reduce firms' reliance on low cash wages without necessarily producing large employment losses. However, the magnitude of these effects depends on employer wage-setting power, the size of the policy change, and local market conditions. As the tipped wage system creates

a compensation structure in which customer payments constitute an important share of employee earnings, changes in the tipped minimum wage may alter the allocation of labor costs between employers and customers. Restaurants may respond through multiple adjustment margins, including menu prices, compensation redesign, hiring decisions, working hours, or market exit. Therefore, the effects of tipped minimum wage policies depend on restaurant characteristics and firm responses.

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