Minimum Wage Laws and Labor Market Outcomes: Through a Gendered Lens

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Abstract

This paper, through a gendered lens, extends the work of Dube et. al. (2016) on the impact of Minimum Wage Laws on employment stock, flows, and duration in the US labor market. Using a border discontinuity design, we draw five main conclusions. Increases in minimum wages (i) has disemployment effects for female workers at a national level (ii) positively impacts restaurant earnings, with a gender differential in favor of female earnings (iii) reduces separations and turnover rate among female workers (more pronounced in restaurant industry) (iv) positively impacts earnings for female movers (hires and separations) at both national and restaurant levels (v) has null effects on non-employment duration for all industrial and gender groups. Increased earnings, decreased turnover rates, and no impact on non-employment duration has positive implications for gender wage gap and female labor force (re)participation.

1 Introduction

Dube et. al. (2016), based on their analysis using policy discontinuities at state borders, offered one of the first estimates of the effects of minimum wages on employment flows - hires, separations, and turnover rates, in addition to earnings and employment levels. Standard in minimum wage literature, their analysis focused on teens and restaurant workers. This paper extends their work to focus on another important demographic group with regard to minimum wage laws i.e. female workers. Ozturk (2006) argues that policy changes in minimum wages can be material for females, where one can expect presence of low-productivity labor due to historically low rates of human capital accumulation (lack of access to education) and/or low labor market participation rates (lack of access to on-the-job learning).

This paper extends the work of Dube et. al. (2016) in two ways. First, it conducts a gender analysis of the impact of minimum wage increases at a national level i.e. for the entire working age population (ages 14-99 years) employed in all industries. Second, standard to minimum wage literature, we also study gender differentials in impact of minimum wage increases, if any, in the restaurant industry, the biggest employer of minimum wage workers.

2 Data and Methodology

For data and methodology, this paper depends completely on the work by Dube et. al. (2010, 2016).

2.1 Data

Outcome Variables: The analysis is based on employment stock, flows, and duration data from Quarterly Workforce Indicators (QWI). QWI is the public-use aggregated version of the individual-level Longitudinal Employer Household Dynamics (LEHD) database collected in partnership by the US Census Bureau and the state Labor Market Information (LMI) offices. The QWI data is created by matching the employment, earnings, industry, and firm characteristics data (geography, industry, age, size) found in Unemployment Insurance records with the demographic data from Social Security records. It has monthly data for employment counts and average earnings by industry, age, and gender. It also has quarterly data on hires, separations, and turnover rates.

Minimum Wage Laws (MWL) and County Pairs: I will use the datasets made available by Dube et. al. (2016). The QWI sample consists of 1130 counties that border another state. In all, there are unique 1181 county pairs. After restricting for counties with centroids within 75 kilometers, we have 972 unique county pairs. They are mapped in Figure C1 of Appendix in Dube et. al. (2016). Following Dube et. al. (2016), we use QWI data beginning 2000 when majority (42) of the states had joined in. During the period of interest 2000-2011, there are 88 instances of policy-border-pairs (with centroids within 75 kilometers) wherein we see minimum wage variation i.e. differential increases across counties in a pair. They are reported in Figure B1 of Appendix in Dube et. al. (2016).

2.2 Methodology

Following Dube et. al. (2010, 2016), we propose to exploit the policy discontinuities at US state borders to identify the impact of changes in MWL on earnings, employment stock, flows, and duration. The border discontinuity design in Dube et. al. (2010, 2016) offers a unique identification strategy that helps overcome the problem of non-randomness in minimum wage policies across the US states by comparing labor market outcomes between mostly similar adjacent counties. We focus on two industrial groups in our analysis – national (all industries) and restaurant industry (NAICS 722), a high-impact industry. Within both these industrial groups, we focus on the working age population within age groups between 14-99 years. We look at five outcomes – log of overall private sector employment, log population, private sector employment-to-population ratio (EPOP), log of average private sector earnings, and overall turnover rate. The analysis is granulated by gender in three groups – all, males, and females.

This paper follows the regression models below for each of the industrial groups - National and Restaurants. Specification (ii) is the preferred model as it also accounts for spatial heterogeneity.

Specification (i):

$$Y_{ijt} = \alpha + \beta ln(MWL_{s(i)t}) + \Gamma X_{ijt} + c_i + \lambda_t + \epsilon_{ijt}$$
(1)

Specification (ii):

$$Y_{ijt} = \alpha + \beta ln(MWL_{s(i)t}) + \Gamma X_{ijt} + c_i + \lambda_t + c_i * \lambda_t + \epsilon_{ijt}$$
 (2)

where

- Y_{ijt} is the outcome of interest in county i, at time t, for each of the gender groups j
- $ln(MWL_{s(i)t})$ is the minimum wage in a given county i is set at the level of the state, s(i)
- β is the primary coefficient of interest
- X_{it} is the vector of time-varying controls which include the natural log of total private sector employment and population in each county
- c_i and λ_t are county and time fixed effects respectively.
- $c_i * \lambda_t$ is the county-pair-specific time fixed effects.

2.3 Descriptive Statistics

We present in Table 1 and 2 the means and standard deviations for the outcome variables granulated by genders at the national level (for all industries) and for restaurants, respectively. The tables summarize these outcomes for all US counties and for contiguous counties whose centroids are less than 75 kms apart. The tables also provides summaries for workers with tenure greater than 1 quarter and for movers (hires and separations.

At the national level (Table 1), we find that the outcome variables are modestly lower (earnings and employment) or similar (hire rates, separation rates, and turnover rates) in contiguous county pair sample as compared to all counties sample. This holds true across gender groups. Within gender groups in the all counties sample, we see that a gender differential in favor of male earnings and employment and hire rates, separation rates, and turnover rates higher for male workers as compared to female workers. This general pattern holds in the contiguous county pair sample, pointing that the characteristics of the two samples are similar. These observations also hold for the restaurant industry (Table 2).

Table 1: Descriptive Statistics, All Industries

			All Counties Sample	unties ple				Co	ntiguous Cou Sample	Contiguous County Pair Sample	uir	
	A	All	Male	ale	Ferr	Female	A	All	Ma	Male	Fen	Female
	Mean	SD	Mean	$^{\mathrm{SD}}$	Mean	SD	Mean	$^{\mathrm{SD}}$	Mean	$^{\mathrm{SD}}$	Mean	$^{\mathrm{SD}}$
All: Monthly earnings (\$) Employment Hire rates Separation rates Turnover rate Fraction short term (tenure <1.00 quarter)	2398.62 39924.80 0.22 0.21 0.21	629.09 145263.30 0.10 0.08 0.08	2933.63 20173.69 0.23 0.22 0.23	845.21 74853.13 0.11 0.09 0.09	1862.85 19751.12 0.21 0.20 0.20	447.37 70507.94 0.09 0.07 0.08	2426.14 39232.31 0.21 0.20 0.20 0.13	649.79 2 124716.50 1 0.07 0.06 0.06	2972.16 19716.07 0.22 0.21 0.21	822.25 63066.15 0.08 0.07 0.07	1879.43 19516.24 0.20 0.19 0.19	499.41 61719.43 0.07 0.06 0.06
Full quarter: (tenure >= 1.00 quarter) Monthly earnings (\$) Employment Hire rates Separation rates Turnover rate	2623.99 34777.25 0.09 0.08	680.40 127514.10 0.03 0.03	3215.62 17523.13 0.09 0.09	939.35 65575.06 0.03 0.03	2035.70 17254.13 0.09 0.08	478.97 62029.49 0.03 0.03	2642.73 34317.27 0.08 0.08 0.10	694.98 110041.60 0.02 0.02	3244.36 17201.74 0.09 0.08	877.25 55582.48 0.03 0.02	2045.63 17115.54 0.08 0.08	537.09 54524.09 0.03 0.02
Movers (separations): Monthly earnings (full quarter, \$) Quarters of nonemployment	1765.87	629.40 0.27	2177.89	981.66	1339.00	403.09	1783.65	560.04	2203.22 1.97	728.06	1348.59	407.26
Movers (hires): Monthly earnings (full quarter, \$) Quarters of nonemployment	1723.94	550.29 0.27	2120.36	672.34	1311.61	461.19	1741.59	530.56	2145.60	661.82	1321.91	402.67

Table 2: Descriptive Statistics, Restaurants (NAICS 722)

			All Counties Sample	unties ıple				Cor	Contiguous County Pair Sample	County F	air	
	A	All	Male	ıle	Fen	Female	A	All	Male	ıle	Female	ale
	Mean	$^{\mathrm{SD}}$	Mean	$^{\mathrm{SD}}$	Mean	$^{\mathrm{SD}}$	Mean	$^{\mathrm{SD}}$	Mean	$^{\mathrm{SD}}$	Mean	$^{\mathrm{SD}}$
All:												
Monthly earnings (\$)	827.21	258.48	942.45	335.64	762.24	223.78	818.77	238.61	933.52	301.75	757.21	199.41
Employment	2923.84	9713.97	1393.18	4961.42	1592.04	4884.39	2846.71	8000.75	1378.18	4293.77	1547.93	3900.05
Hire rates	0.42	0.19	0.47	0.22	0.40	0.18	0.42	0.18	0.46	0.20	0.39	0.18
Separation rates	0.41	0.15	0.45	0.18	0.39	0.14	0.41	0.14	0.45	0.17	0.39	0.14
Turnover rate	0.42	0.16	0.46	0.18	0.40	0.15	0.41	0.15	0.46	0.18	0.39	0.14
Fraction short term (tenure <1.00 quarter)	0.25	0.07	0.27	0.08	0.24	0.07	0.24	0.07	0.26	0.08	0.23	0.07
Full quarter:												
(benure $>= 1.00$ quarter) Monthly earnings (\$)	983.06	313.49	1143.68	409.90	897.35	273.18	969.20	275.44	1128.86	350.17	887.21	229.14
Employment	2252.51	7757.57	1088.77	4014.73	1233.94	3892.69	2200.14	6361.24	1085.79	3489.80	1205.16	3089.45
Hire rates	0.14	0.04	0.15	0.04	0.14	0.04	0.14	0.04	0.15	0.04	0.14	0.04
Separation rates Turnover rate	$0.14 \\ 0.20$	$0.04 \\ 0.15$	$0.14 \\ 0.21$	0.04	$0.14 \\ 0.19$	0.04	$0.14 \\ 0.19$	0.03	$0.14 \\ 0.21$	0.09	0.14	0.08
Monthly earnings	737.78	295.46	822.77	428.98	689.33	263.73	729.06	248.42	811.64	330.90	682.45	229.25
(1mt quarter, *) Quarters of nonemployment	1.73	0.35	1.80	0.39	1.69	0.37	1.87	0.36	1.94	0.42	1.82	0.38
Movers (hires):												
Monthly earnings $(\text{full quarter, }\$)$	730.49	267.47	809.20	335.62	684.83	251.60	722.89	234.42	799.99	318.61	678.15	207.24
Quarters of nonemployment	2.05	0.36	2.13	0.41	2.00	0.38	2.17	0.37	2.25	0.42	2.11	0.38

2.4 Similarity of Control Groups

To assess the superiority of the border discontinuity design in overcoming confounding factors, we must assess if contiguous county pairs offer more similar controls than other pairs. Following Dube et. al. (2016), we calculate mean differences in controls for each gender group between (i) a border county and its contiguous pair in the adjacent state and (ii) a border county and every non-contiguous pair in another state.

Table 3 presents these mean absolute differences in levels, 4 quarter changes, and 12 quarter changes and test for significant differences for five covariates – log of overall private sector employment, log population, private sector employment-to-population ratio (EPOP), log of average private sector earnings, and overall turnover rate. We make two observations – first, mean absolute differences are smaller for contiguous pairs across gender groups, and second, the gap between these mean absolute differences are highly statistically significant. This helps us make the case for contiguous cross-border counties as better control groups.

Table 3: Mean Absolute Differences in Covariates between Counties in Contiguous versus Other Pairs, by Gender

		All			Male			Female	
	Noncontiguous Pair	Contiguous Pair	Gap	Noncontiguous Pair	Contiguous Pair	$_{ m Gap}$	Noncontiguous Pair	Contiguous Pair	Gap
Level:									
Employment	6.05e+04***	4.53e+04***	1.53e+04***	3.08e+04***	2.30e+04***	7826.9279***	2.98e+04***	2.23e+04***	7460.9605***
	(4116.3273)	(4754.8395)	(2902.9404)	(2091.3375)	(2413.5171)	(1468.4884)	(2026.8879)	(2343.8998)	(1437.2848)
Log employment	1.7520***	1.2334***	0.5193***	1.7854***	1.2571***	0.5290***	1.7331***	1.2212***	0.5126***
	(0.0258)	(0.0272)	(0.0325)	(0.0261)	(0.0279)	(0.0332)	(0.0255)	(0.0267)	(0.0320)
Log population	1.5305***	0.9640***	0.5665***						
•	(0.0231)	(0.0227)	(0.0291)						
EPOP	0.0415***	0.0387***	0.0029***						
	(0.0007)	(0.0011)	(0.0008)						
Log earnings	0.2300***	0.1695***	0.0603***	0.2332***	0.1734***	0.0597***	0.2112***	0.1533***	0.0577***
	(0.0038)	(0.0038)	(0.0044)	(0.0037)	(0.0039)	(0.0044)	(0.0038)	(0.0033)	(0.0041)
Turnover Rate	0.0579***	0.0481***	0.0097***	0.0655***	0.0553***	0.0101***	0.0569***	0.0476***	0.0093***
	(0.0008)	(0.0011)	(0.0000)	(0.0008)	(0.0012)	(0.0010)	(0.0008)	(0.0011)	(0.0000)
4-quarter difference:									
Log employment	0.0615**	0.0581***	0.0031***	0.0705***	***69900	0.0049**	0.0643***	0.0618**	**66000
	(0.0008)	(0.0011)	(0.0008)	(6000'0)	(0.0013)	(0.000)	(0.0008)	(0.0012)	(0.0008)
Log population	0.0138***	0.0108***	0.0030***	(2000)		(2000)	(00000)	(======)	(22222)
1 10	(0.0002)	(0.0002)	(0.0002)						
EPOP	0.0132***	0.0124***	***60000						
	(0.0002)	(0.0003)	(0.0002)						
Log earnings	0.0489***	0.0465***	0.0024***	0.0542***	0.0515***	0.0027***	0.0481***	0.0462***	0.0019**
)	(0.0008)	(0.0011)	(0.0008)	(0.0006)	(0.0010)	(0.0007)	(0.0009)	(0.0013)	(0.000)
Turnover Rate	0.0383***	0.0360***	0.0021***	0.0447***	0.0416***	0.0029***	0.0410***	0.0390***	0.0018***
	(0.0005)	(0.0008)	(0.0005)	(0.0007)	(0.0010)	(0.0007)	(0.0006)	(0.0009)	(0.0000)
12-quarter difference:									
Log employment	0.0993***	0.0910***	0.0079***	0.1173***	0.1063***	0.0106***	0.0983***	0.0922***	0.0055***
	(0.0013)	(0.0019)	(0.0014)	(0.0016)	(0.0024)	(0.0017)	(0.0014)	(0.0019)	(0.0014)
Log population	0.0368***	0.0267***	0.0100***						
	(0.0006)	(0.0007)	(0.0000)						
EPOP	0.0175***	0.0165***	0.0014***						
	(0.0003)	(0.0004)	(0.0003)						
Log earnings	0.0704***	0.0658***	0.0047***	0.0761***	0.0709***	0.0052***	0.0673***	0.0643***	0.0030**
	(0.0010)	(0.0016)	(0.0011)	(0.0009)	(0.0015)	(0.0010)	(0.0011)	(0.0017)	(0.0012)
Turnover Rate	0.0456***	0.0411***	0.0041***	0.0528***	0.0478***	0.0047***	0.0476***	0.0433***	0.0038***
	(0.0006)	(0.0009)	(0.0000)	(0.0008)	(0.0012)	(0.0008)	(0.0007)	(0.0010)	(0.0007)

3 Results

3.1 Earnings, Employment Stocks, and Flows

We present in Table 4 and 5 the empirical findings of the impact of minimum wage increases at a national level (population aged 14-99 employed in all industries in the US) and the restaurant industry (population aged 14-99 employed in NAICS 722), respectively. The results are further granulated to see any differential impact across genders. As in Dube et. al., we estimate two different specifications for the two groups – (i) with controls for common time effects and (ii) with controls for county-pair-specific time effects. The latter model is the preferred model as it internalizes spatial heterogeneity. Both specifications control for county-specific fixed effects. We discuss the results one-by-one below. Table 5, columns 1 and 2 are analogous to findings for restaurant workers in Dube et. al. (2016).

National Earnings: At a national level, we find no conclusive evidence of the impact of minimum wage increases on log average monthly earnings. While the changing direction of the elasticities is boggling, I do not think it is a point of worry as the magnitude is small and insignificant. This observation stands for all gender groups.

Restaurant Earnings: Whereas, in the restaurant industry, there is a positive and highly significant impact. The elasticity of earnings is 0.207 for all restaurant workers, 0.203 for male restaurant workers, and 0.224 for female restaurant workers. This suggests that an increase in minimum wages may benefit female earnings more than male earnings.

National Employment: Overall, we find that increases in minimum wages has disemployment effect. For the entire population, specification (i) yields an employment elasticity of -0.063 (significant at 10% level of significance), which then becomes insignificant when we account for spatial heterogeneity in specification (ii). We get no significant estimates for male workers, however we note significant (at 5%) disemployment effects for female workers which higher estimated effect in specification (ii).

Restaurant Employment: For all genders, we replicate estimates from Dube et. al. (2016) who found a significant employment elasticity of 0.073, which after taking in account spatial heterogeneity in specification (ii) reduces the magnitude and renders it insignificant. We find no conclusive results for male or female workers. However, we note opposite signs in elasticities, which may indicate some substitution away from some demographic groups. Dube et. al. (2016) test this hypothesis and find no conclusive evidence of any labor-labor substitution among gender groups in the restaurant industry.

National Hires: Hires fall for all gender groups, although only significantly in specification (i). We do see a gender differential, with female workers facing higher decline in hiring than male workers and national estimate.

Restaurant Hires: Similar to the national trend, hires fall for all gender groups. The estimates are highly significant for specification (i) with a gender differential in favor of female workers. This result is in contrast to the national trend. As we account for spatial heterogeneity in specification (ii), estimates reduce in intensity but remain significant for female workers.

National Separations: Separations fall for all gender groups and are highly significant in specification (i). Separation elasticity estimate remains significant for female workers in specification (ii) (-0.264 vs. -0.146).

Restaurant Separations: Similar to the national trend, separations fall for all gender groups and are highly significant in specification (i). Separation elasticity estimate remains significant for all restaurant workers in specification (ii) (-0.467 vs. -0.225). As in Dube et. al. (2016), we find hires and separations elasticity to be similar across all gender groups at the national level and for restaurants.

National Turnover Rate: Turnover rate decreases in response to increase in minimum wages. The elasticities are highly significant in specification (i) but not so in specification (ii). The elasticities are similar across gender groups, slightly higher for female workers.

Restaurant Turnover Rate: Similar to the national trends, turnover rate decreases in response to increase in minimum wages. This result is significant in both specifications. We note a higher turnover rate among male restaurant workers as compared to female restaurant workers.

Table 4: Minimum Wage Elasticities by Gender, All Industries

	Al	1	Ma	le	Fem	ale
	(1)	(2)	(3)	(4)	(5)	(6)
Earnings	-0.010	0.010	-0.014	-0.000	-0.005	0.009
	(0.024)	(0.026)	(0.028)	(0.028)	(0.022)	(0.032)
	84221	84221	84221	84221	84221	84221
Employment	-0.063*	-0.064	-0.065	-0.044	-0.061**	-0.083**
1 0	(0.034)	(0.044)	(0.042)	(0.062)	(0.029)	(0.036)
	85676	85676	85676	85676	85676	85676
Hires	-0.281***	-0.117	-0.273***	-0.087	-0.288***	-0.145
	(0.068)	(0.087)	(0.076)	(0.086)	(0.065)	(0.097)
	85676	85676	85580	85580	85580	85580
Separations	-0.268***	-0.102	-0.272***	-0.061	-0.264***	-0.146*
•	(0.070)	(0.079)	(0.076)	(0.087)	(0.067)	(0.080)
	84221	84221	83939	83939	84033	84033
Turnover Rate	-0.210***	-0.042	-0.210***	-0.030	-0.213***	-0.057
	(0.062)	(0.075)	(0.062)	(0.073)	(0.064)	(0.087)
	83788	83788	83506	83506	83506	83506
Controls:						
County FE	Y	Y	Y	Y	Y	Y
Time FE	Ÿ	N	Y	N	Y	N
County-Pair Time FE	N	Y	N	Y	N	Y

Table 5: Minimum Wage Elasticities by Gender, Restaurants (NAICS 722)

	\mathbf{A}	11	$\mathbf{M}_{\mathbf{a}}$	ale	Fem	ale
	(1)	(2)	(3)	(4)	(5)	(6)
Earnings	0.203***	0.207***	0.190***	0.203***	0.216***	0.224***
	(0.028)	(0.059)	(0.036)	(0.072)	(0.023)	(0.047)
	81954	81954	77108	77108	81954	81954
Employment	-0.073*	-0.022	-0.059	0.059	-0.062	-0.038
- v	(0.042)	(0.091)	(0.053)	(0.092)	(0.045)	(0.099)
	79089	79089	74101	74101	79089	79089
Hires	-0.467***	-0.264**	-0.527***	-0.215	-0.450***	-0.271*
	(0.087)	(0.134)	(0.095)	(0.145)	(0.090)	(0.139)
	74365	74365	60100	60100	70914	70914
Separations	-0.467***	-0.225*	-0.523***	-0.219	-0.426***	-0.220
_	(0.080)	(0.126)	(0.090)	(0.134)	(0.087)	(0.137)
	72859	72859	59016	59016	70466	70466
Turnover Rate	-0.392***	-0.212**	-0.437***	-0.216*	-0.376***	-0.198**
	(0.067)	(0.090)	(0.075)	(0.112)	(0.068)	(0.089)
	71438	71438	57184	57184	67684	67684
Controls:						
County FE	Y	Y	Y	Y	Y	Y
Time FE	Y	N	Y	N	Y	N
Pair Time FE	N	Y	N	Y	N	Y

3.2 Non-employment Duration of Movers

We present in Table 6 and 7 the empirical findings of the impact of minimum wage increases on non-employment duration of movers by gender at a national level and for restuarants respectively. According to Dube et. al. (2016), minimum wages may impact the duration of jobless spells between jobs. This piece of evidence is particularly informative on the tightness of the labor market for female workers, which may be a contributing factor to lower rates of female labor force participation in world economies. The QWI data reports the average number of quarters spent unemployed by newly hired (separated) workers prior (after) their current job.

We find that, at a national level (Table 6), a 10 percent minimum wage increase changes the non-employment spell by 0.04-0.23 percent in magnitude for hires and separations. Thus, the impact is virtually negligible. Also, non-employment spells of Separations are longer than of Hires for all genders. Male workers follow this trend, however for female workers, non-employment spells are longer for Hires. Although all these estimates are insignificant, we note that non-employment spells for female workers are much longer than those of male workers. In terms of earnings, we find that increase in minimum wages, significantly (10% level) positively impact female earnings for movers. Recall from Table 4, we found null effects of minimum wages increases on earnings, including for female workers.

For the restaurant industry, a 10 percent minimum wage increase changes the non-employment spell by no more than 0.5 percent in magnitude for both separations and hires across genders. We do note a gender differential depending on Hires or Separations – increases in minimum wages reduces non-employment duration of Hires, with gender differential in favor of male workers by 44 percent, and increases non-employment duration of Separations, with gender differential in favor of female workers. Of note is that minimum wage increases lead to statistically significant (at 1% level) increases in earnings across all gender groups. The gender differential is in favor of female workers by 18.2 (Hires) and 14.1 (Separations) percent.

Table 6: Minimum Wage Elasticities for Movers by Gender, All Industries

		All		Male	F	Temale
	Hires	Separations	Hires	Separations	Hires	Separations
Full-quarter earnings	0.060	0.050	0.039	0.032	0.078*	0.069*
	(0.063)	(0.041)	(0.070)	(0.048)	(0.046)	(0.040)
	83355	81808	83073	81624	83073	81624
Non-employment duration	0.012	0.014	0.004	0.006	0.023	0.019
	(0.042)	(0.043)	(0.042)	(0.046)	(0.043)	(0.042)
	84365	78124	84365	78036	84365	78124

Table 7: Minimum Wage Elasticities for Movers by Gender, Restaurants (NAICS 722)

		All		Male	Fe	emale
	Hires	Separations	Hires	Separations	Hires	Separations
Full-quarter earnings	0.299***	0.261***	0.255***	0.262***	0.312***	0.305***
J	(0.062)	(0.051)	(0.071)	(0.064)	(0.057)	(0.049)
	71477	70936	56612	54955	67780	68737
Non-employment	-0.026	0.022	-0.044	0.019	-0.008	0.005
	(0.038) 78549	(0.052) 72710	(0.045) 68703	(0.067) 63583	(0.037) 76665	(0.049) 71630

4 Conclusion

We find that increase in minimum wages impacts restaurant earnings, with gender differential in favor of female earnings. We do not find conclusive evidence for impact at a national level. We also find that minimum wage increase has disemployment effects for female workers at a national level. For the restaurant industry, minimum wage increases impact restaurant earnings, with gender differential in favor of female earnings. The policy also reduces turnover rate both female and male restaurant workers, with gender differential in favor of the latter. When we restrict the analysis to movers (hires and separations), we find that increases in minimum wages positively impacts earnings for female movers at both national and restaurant levels but has null effects on non-employment duration for all industrial and gender groups.

Our estimates offer some understanding on how minimum wage laws might impact outcomes of female workers – an important demographic group often ignored in the minimum wage literature. We find that minimum wage increases differentially favor female earnings increases. We also find that female separations and turnover rate are decreased (more pronounced in the restaurant industry) which leads to improved job stability for females. The finding that there is no impact of minimum wage increases on duration of non-employment spells is encouraging evidence for female force re-participation – an important friction specific to and rampant in female labor market.

5 References

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