DISCUSSION PAPERS IN ECONOMICS

Working Paper No. 22-03

!

!
!
!

Department of Economics

University of Colorado Boulder
Boulder, Colorado 80309

Jieun Lee*

Effects of a national work hours restriction in a high hours country

Abstract

1 Introduction

Long work hours cause negative impacts to the health and safety of workers, families, and society overall. (Harrington, 2001; Caruso, 2006; Caruso, 2014). As South Korea has been known for its long work hours compared to other Organization for Economic Cooperation and Development (OECD) countries (OECD, 2020), the South Korean government tried to decrease work hours by passing an amendment to the Korean Labor Standards Act in February 2018. According to the amendment, the maximum work hours per week decreased from 68 h to 52 h, including overtime and weekend work.

In this paper, I study how the new workweek limit in Korea a ects individual-level labor market outcomes including work hours, monthly earnings, and hourly wages. Changes in individual worker hours, wage, and earnings, however, will not fully capture the policy e ects, as employers may also adjust employment levels. To understand the e ect of the policy on the amount of labor hired and labor costs of employers, I also analyze total worker hours, total employment, and total worker pay at the industry-occupation-education group level.

If the new work hour restriction induces a decline in work hours, the resulting labor supply decrease should increase the hourly wage. However, the policy impact on average worker earnings is ambiguous, depending on the o setting e ects on work hours and hourly wage. At the industry-occupation-group levelJETEMC /Span atA(o)10.6(u)-78(o)13.9(y)S-h5 99.2126 532.6818ni3(tTd7.7(r)2.4

Before the amendment to the Labor Standards Act was passed by the National Assembly in February 2018, South Korean workers were legally allowed to work up to 68 h/week. e relevant provisions are as follows: Article 50 (*W   H   *) paragraph 1 of the Labor Standards Act states that   *a   40   a   ,   .* Article 50 paragraph 2 states that   *a   a a ,* *. Article 53 (R   E   W   )* paragraph 1 states that   *a   a   -* *a   a   ,*   *A   50   a* *12   .* However, weekend work had not been regarded as extended work because the ministry of Employment and Labor had interpreted that 1 week in the Labor Standards Act is Monday to Friday.   erefore, South Korean workers could work up to 68 h from Monday to Sunday, which consisted of 40 h of standard workweek, 12 h of extended work during weekdays, and 16 h of work during weekends.   e amendment to the Labor Standards Act added a new paragraph to Article 2 (*D*

I use the constructed hourly wages for salary workers while using reported hourly wages for hourly workers.

For the group-level outcome variables, I measure each variable by using the work hours data for all workers and full-time workers individually. Specifically, for total work hours, I individually sum actual hours worked of all workers and full-time workers at the industry-occupation-education group level. Total employment is constructed by counting the number of male workers aged between 25 and 55, who worked at least an houroFo521(l)7.83(521(l40r)5541.8(7.71369 0 T(6

changes in labor market outcomes observed across treated industry-occupation-education groups would have been the same as those of untreated groups, in the absence of the policy change.

I use two-way fixed effect models to estimate the effect of the policy change on the outcome variables. First, since actual hours worked are drawn from individual-level monthly data, I use the following estimating equation:

$$Y = P + \beta \cdot D \cdot P + \gamma + \delta + \delta + \lambda X + \varepsilon \tag{1}$$

where denotes an individual worker, denotes an industry-occupation-education group, denotes month, and denotes year. P takes the value of 0 from January 2016 to February 2018, and 1 from July 2018 onwards. I exclude March to June 2018 to rule out any possible anticipation effect. D is the proportion of workers who worked longer than 52 h/week prior to the policy change at the industry-occupation-education level and measures the policy intensity. γ are industry-occupation-education fixed effects, δ are month fixed effects, and δ are year fixed effects. X includes demographic and job characteristics that are listed in Panels C and D in Table 1.

Second, since usual hours worked, monthly earnings, and hourly wages are drawn from individual-level annual data from the August surveys, I use the following estimating equation:

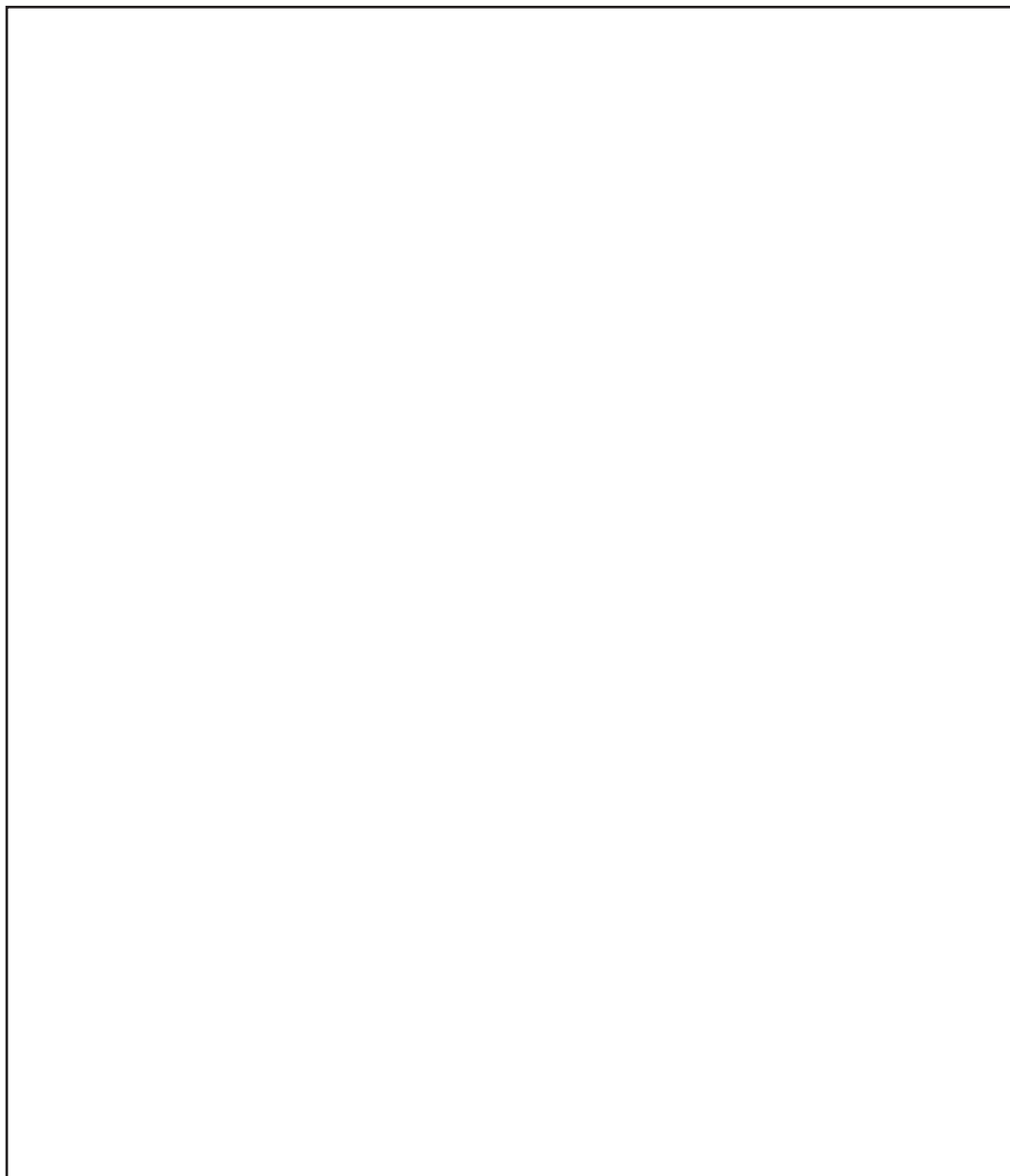$$Y = \beta \cdot D \cdot P + \gamma + \delta + \lambda X + \varepsilon \tag{2}$$

The estimating equation is similar to Eq. (1), except that I drop the month fixed effects

Figure 4 Group-level event-study estimates.

N̲o̲t̲e̲: The new work hour restriction was passed on February 28, 2018 and was first implemented on July 1, 2018. (A) Total work hours are the sum of actual hours worked of all male workers between the ages of 25 and 55 who worked at least an hour in the reference week in all industries and establishment sizes subject to the new restriction. (B) Total work hours are the sum of actual hours worked of all male workers between the ages of 25 and 55 who worked more than 34 h in the reference week in all industries and establishment sizes subject to the new restriction. (C) Total employment is the number of all male workers between the ages of 25 and 55 who worked at least an hour in the reference week in all industries and establishment sizes subject to the new restriction. (D) Total employment is the number of all male workers between the ages of 25 and 55 who worked more than 34 h in the reference week in all industries and establishment sizes subject to the new restriction. (E) Total worker pay is the sum of monthly earnings of all male workers between the ages of 25 and 55 who usually worked at least an hour per week in all industries and establishment sizes subject to the new restriction. (F) Total worker pay is the sum of monthly earnings of all male workers between the ages of 25 and 55 who usually worked more than 34 h/week in all industries and establishment sizes subject to the new restriction.

Table 5 Pre-trend tests for individual-level outcomes

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Actual hours	Usual hours	Log monthly earnings	Log hourly wages	Usual hours	Log monthly earnings	Log hourly wages
Treatment effect	−1.092						
	(0.985)						

.