Minimum Wages and Within-Firm Wage Inequality

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November 2019

Abstract

Recent years have seen a burst of renewed interest in minimum wages in academic and policy settings around the world. A large quasi-experimental literature has found limited disemployment effects of minimum wages, though with exceptions for younger workers. Youth subminima are a policy tool that can be used to reduce such effects, but their effectiveness hinges on how firms respond to them.[1] Canonical models of competitive labor markets assume that firms passively adjust wages. But there is a growing body of empirical evidence that individual firms play an prominent role in wage setting (Card, Heining and Kline, 2013; Card et al., 2018). Moreover, recent work has documented the existence of pay equity constraints within the firm (Card et al., 2012; Breza, Kaur and Shamdasani, 2018; Dube, Giuliano and Leonard, 2019). In assessing wage-related public policies, it seems therefore important to understand the extent to which alternative models of wage determination are at play and their interaction with the policy environment.

In this paper, we analyze an age-specific minimum wage change that took place in the United Kingdom. In April 2016, the National Living Wage (NLW) – a minimum wage rate of £7.20 per hour – was introduced for workers aged 25 and over, while leaving the minimum wage rates for younger workers unchanged. Before the reform, all workers aged 21 and over were subject to the same minimum wage of £6.70 per hour.[2] We exploit this sizable and salient change in the minimum

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[1] Evidence on firm responses to youth subminima is still limited, mostly due to the lack of suitable identifying variation. Analyses of the market-level effects of age-specific minima are Bckerman and Uusitalo (2009), Kabatek (2015), and Kreiner, Reck and Skov (forthcoming).

[2] It is not unlawful age discrimination to pay workers of different ages at different rates if the pay structure is based on the age bands set out in the national minimum wage legislation.

wage structure to analyze firm responses to an age-specific labor market policy, and to provide new evidence on the determinants of within-firm wage setting in a low-pay context. Our analysis makes use of matched employer-employee registry data on the English care home sector, which earlier research has shown to be a sector highly vulnerable to minimum wage changes (Machin, Manning and Rahman, 2003; Machin and Wilson, 2004).[3]

Firstly, we document large market-level wage spillovers onto workers aged under 25. Hourly wages for these workers are shown to have risen in tandem with older workers' wages, with no detectable discontinuity at the age-25 cutoff. We estimate that the size of the wage spillover – i.e. the increase in younger workers' wages – is close to 100 percent of the difference between the old minimum and the NLW. We can reject that the observed wage spillovers are due to ageing effects, since they extend to workers well under 25. We also show that spillovers are not due to compositional effects, nor contractual rigidities, as new hires also benefit from them. By comparing the age distribution of workers before and after the NLW introduction, we do not find evidence of differential employment effects by age at the market level.

Secondly, we exploit between-firm variation in the share of older workers paid below the NLW in March 2016 to identify the effect of the minimum wage change on firm-level outcomes. We show that larger wage spillovers arise precisely in those firms that were more severely affected by the NLW – the estimated elasticity of younger workers' wages to older workers' ones being approximately 0.6. No differential employment nor hour effects by age can be detected at the firm-level. Both market-level and firm-level results appear inconsistent with the canonical competitive labor market model, and underscore the presence of frictions and monopsonistic power by firms.

A natural question is what the determinants of wage spillovers are. In principle, both inter-firm and intra-firm factors may be at play. The former relate to workers' outside options in the local labor market: if the market for vacancies is not segmented by age or if firms compete for workers, then younger workers can always leave their current firm for a better wage. Intra-firm factors refer instead to the cost of keeping a diversified wage structure. Such cost could be due to fairness concerns, or to the administrative burden of keeping track of individualized wages and of bargaining at the individual level. Our ability to exploit within-firm identifying variation is useful to investigate both intra- and inter-firm determinants.[4] The empirical evidence rejects the role of inter-firm factors. Similarly, administrative costs do not seem to be responsible for the observed wage compression. Rather, the evidence appears consistent with pay equity concerns.

In current work, we are validating our results on wage spillovers using UK-wide data. We also intend to study how firm responses evolve in the longer run – i.e. up to three rather than just one year after the policy change. This will allow us to test whether firm responses change as the new minimum wage structure becomes more established over time.

[3] In our data, more than half of the workers were paid below the NLW in March 2016.

[4] Saez, Schoefer and Seim (2019) also study market- and firm-level responses to a youth payroll tax cut in Sweden.

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