Did the Minimum Wage Alleviate Poverty? New Evidence from a Residual Welfare State

Extended Abstract

The statutory minimum wage has been advocated by policymakers worldwide as a measure to combat poverty. While minimum wages provide a safety net for low-paid employees (if they remain employed after the policy intervention), research findings regarding their impact on poverty reduction have been inconsistent, with variations across countries. The anti-poverty effects of the minimum wage have also been found to vary across different social groups in the same country. Although the assessment of the anti-poverty effects of a minimum wage has yielded mixed results among young and less-educated populations in the United States (Addison & Blackburn, 1999; Sabia & Nielsen, 2015), most studies have documented little or no effect (Burkhauser & Finegan, 1989; Burkhauser & Sabia, 2007; Sabia & Nielsen, 2015).

One reason why the minimum wage is often ineffective in reducing poverty is poor target efficiency (Bruckmeier & Bruttel, 2021; Burkhauser & Finegan, 1989; Gindling 2018; Sabia, 2014), in addition to the adverse effects on employment and consumer prices, which result in poorer people being net losers (MaCurdy, 2015; Neumark, 2019). Target efficiency measures whether the minimum wage effectively benefits those in poverty. If most minimum wage earners live in non-poor households and/or employees in poor households are paid a rate above the minimum, such policies will fail to decrease poverty (Burkhauser & Sabia, 2007; Leigh, 2008).

This study assessed the target efficiency of the minimum wage policy in the Hong Kong Special Administrative Region (HKSAR), where working poverty is widespread and many minimum wage workers live in poverty. Hong Kong first implemented a minimum wage in

2011, and although the official statistics and some research have suggested that it increased the incomes of low-paid employees (Minimum Wage Commission, 2012; Wong and Ye, 2015), it is unclear whether the minimum wage has effectively alleviated poverty. We employ city-wide representative data drawn from the Hong Kong Panel Studies of Social Dynamics (HKPSSD) from 2011 and 2013 to evaluate the effects of the minimum wage in reducing poverty in Hong Kong.

The results from the DID estimations with fixed effects showed that, in general the introduction of the minimum wage alleviated poverty for low-paid employees (the less-HK$28 employees) and their households. Their incomes increased after the introduction of the minimum wage. We further differentiated the treated group into two subgroups using HK$25 per hour as the threshold. Our results showed that, although the incomes of extremely low-paid employees significantly increased, the HK$28 per hour minimum wage did not effectively alleviate their poverty.

This study makes several contributions to the literature. We examine a non-Western context in which the minimum wage policy is aimed at the working poor who make up a significant proportion of the labor market and find that when those on the minimum wage are the main breadwinners in poor households, the policy is effective, but it does not help the very poorest. By investigating the social context of a welfare state regime in East Asia, we extend the literature beyond the U.S., other Western countries, and developing countries.

Figures

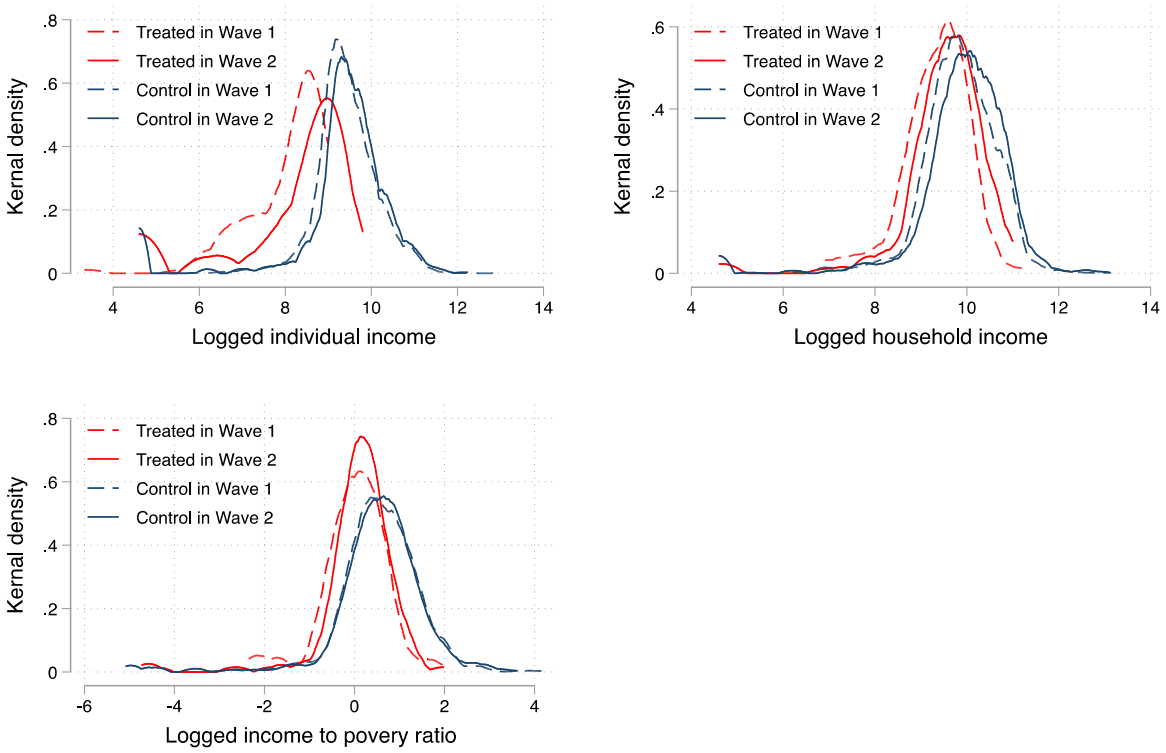

Figure 1. Kernel Density of Income and Poverty, HKPSSD Waves 1 and 2

Table 1. Models of Minimum Wage Effects on Income and Poverty, HKPSSD Waves 1 and 2

	Log (individual income)	Log (household income)	Poverty incidence	Log (income to poverty ratio)
Variables	Model 1	Model 2	Model 3	Model 4
Treated × Wave 2	0.560***	0.188*	-0.112*	0.182*
	(0.132)	(0.089)	(0.055)	(0.090)
Working	2.320***			
	(0.170)			
Household size		0.139**	0.016	-0.070+
		(0.043)	(0.017)	(0.040)
Working number		0.180***	-0.062***	0.180***
		(0.030)	(0.012)	(0.029)
Individual fixed effect	Yes			
Household fixed effect		Yes	Yes	Yes
Wave fixed effect	Yes	Yes	Yes	Yes
Constant	6.998***	9.034***	0.254***	0.499***
	(0.163)	(0.154)	(0.060)	(0.143)
R-squared	0.802	0.728	0.693	0.737
N	3,270	2,866	2,866	2,866

Note: Model 1 was estimated at the individual level, and Models 2, 3, and 4 were estimated at the household level. Dependent variables were the natural logarithm of individual income in Model 1, the natural logarithm of household income in Model 2, poverty incidence in Model 3, and the natural logarithm of income to poverty ratio in Model 4. In Model 1, the treated group consisted of the less-HK$28 employees in Wave 1, and the untreated group consisted of other working individuals. In Models 2, 3, and 4, the treated groups consisted of households with the less-HK$28 member(s) in Wave 1, and the untreated groups consisted of working households without the less-HK$28 member. Robust standard errors are in parentheses. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Table 2. Models of Minimum Wage Effects on Income and Poverty by Differentiating the Treated Intensity, HKPSSD Waves 1 and 2

Variables	Logged (individual income) Model 1	Logged (household income) Model 2	Poverty incidence Model 3	Logged (income to poverty ratio) Model 4
Treated intensity × Wave 2				
< **HK$25** × Wave 2	0.758***	0.144	-0.084	0.138
	(0.202)	(0.139)	(0.075)	(0.141)
HK$25-28 × Wave 2	0.339*	0.237*	-0.143+	0.231*
	(0.150)	(0.099)	(0.080)	(0.100)
Working	2.314***			
	(0.170)			
Household size		0.138**	0.016	-0.071+
		(0.043)	(0.017)	(0.041)
Working number		0.180***	-0.062***	0.180***
		(0.030)	(0.012)	(0.029)
Individual fixed effect	Yes			
Household fixed effect		Yes	Yes	Yes
Wave fixed effect	Yes	Yes	Yes	Yes
Constant	7.003***	9.038***	0.251***	0.502***
	(0.164)	(0.155)	(0.060)	(0.144)
R-squared	0.802	0.728	0.693	0.737
N	3,270	2,866	2,866	2,866

Note: Model 1 was estimated at the individual level, and Models 2, 3, and 4 were estimated at the household level. Dependent variables were the natural log of individual income in Model 1, the natural log of household income in Model 2, poverty incidence in Model 3, and the natural log of income to poverty ratio in Model 4. In Model 1, the treated groups consisted of the less-HK$25 employees and the HK$25-28 employees in Wave 1, and the untreated group consisted of other working individuals. In Models 2, 3, and 4, the treated groups consisted of households with the less-HK$25 member(s) and households with the HK$25-28 member(s) in Wave 1, and the untreated groups consisted of working households without the less-HK$28 member. Robust standard errors are in parentheses. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.1$.