From Many to One: Minimum Wage Effects in Thailand

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Research questions & contributions

- Studying the effects of changes in the minimum wage policy during 2002 – 2013 by looking at the temporal dynamics of minimum wage introduction
 - Outcomes: employment & wage distribution
- Applying the Recentered Influenced Function (RIF) regression framework
 - Help to capture heterogenous provincial-level wage distribution
- Including geographic component of labor markets
 - Help to capture differences in the wage structure in Thailand



Paper's organization

- Literature overview
- The minimum wage system in Thailand
- Data description
 - Wage inequality trends
 - Latest minimum wage bite and non-compliance
- Impact of the minimum wage on employment
 - Level
 - Dynamic (with lags, with changes)
- Impact on the earnings distribution
 - Heterogenous response of provincial distributions
 - Wage effects: minimum wage as a numeraire
 - Mechanisms of provincial labor markets
 - Robustness check
 - Theoretical interpretation of employment and wage effects



Overview

- Very thorough research
 - Cover almost all issues that might be related:
 - Varying provincial wage distributions >> RIF + geographic controls & multiway clustering method
 - Richness of robustness checks
 - Explore in different aspects:
 - Time periods: 2002 2013, 2011-2013 [2002-2011?]
 - Different types of earnings & sectors & firm sizes
 - Not just only after the change in the minimum wage, but also before the change to see anticipation
 - Focus on the employment effects on low-skilled workers, but also investigate on high-skilled workers as well, which show the opposite direction as expected



Overall comments

- 25 tables & 17 figures with Appendices A1 A6, B & C are very detailed (great!), but a bit difficult in catching up
- Some interpretations are mainly econometric or technical interpretations. There might be more explanations behind or more explicit policy implications
- There might be some selection issues regarding sectors/wage vs. non-wage work



Further discussions



Table 8: Descriptive statistics for private sector wage workers by relative position to the minimum wage level, Q3 2011-2012-2013.

_														
	Population +/-5%		2011			2012		2013		Test 2011-12		Test 2012-13		
_	the MW	Below	At	Above	Below	At	Above	Below	At	Above	test	p-val	test	p-val
	Age	35.6	34.0	35.0	35.3	34.1	35.5	34.9	33.8	35.7	2.41	0.02	-2.33	0.02
	Male	0.46	0.47	0.58	0.52	0.54	0.57	0.54	0.56	0.56	47.25	0.00	7.43	0.01
	Edu below secondary	0.84	0.81	0.52	0.81	0.78	0.44	0.78	0.77	0.43	14.35	0.00	27.42	0.00
	Full time	0.94	0.98	0.94	0.94	0.97	0.93	0.94	0.99	0.92	5.63	0.02	5.89	0.02
	Married	0.56	0.62	0.61	0.60	0.63	0.63	0.61	0.64	0.63	-5.00	0.00	-0.52	0.60
	Bangkok	0.12	0.12	0.23	0.09	0.11	0.26	0.05	0.08	0.28	35.92	0.00	31.43	0.00
	Central	0.27	0.42	0.38	0.26	0.46	0.41	0.24	0.55	0.40	14.10	0.00	1.53	0.22
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	North	0.22	0.15	0.12	0.22	0.12	0.10	0.23	0.11	0.08	2.12	0.15	1.67	0.20
	Northeast	0.30	0.21	0.17	0.31	0.23	0.14	0.34	0.20	0.14	2.52	0.11	14.37	0.00
	South	0.10	0.10	0.11	0.13	0.08	0.09	0.14	0.05	0.10	25.98	0.00	1.52	0.22
	Firm < 10	0.59	0.36	0.28	0.57	0.33	0.21	0.57	0.24	0.19	10.09	0.00	0.32	0.57
	Firm 10-99	0.28	0.26	0.33	0.29	0.29	0.34	0.29	0.30	0.34	0.17	0.68	5.28	0.02
	Firm 100 +	0.13	0.38	0.39	0.14	0.38	0.45	0.14	0.46	0.48	16.37	0.00	4.85	0.03
	** * .					0.40	0.40				4.50			
	Manufacture	0.32	0.47	0.39	0.28	0.48	0.42	0.29	0.57	0.41	1.52	0.22	0.06	0.81
	Construction	0.21	0.15	0.15	0.26	0.19	0.12	0.26	0.16	0.10	65.32	0.00	6.73	0.01
	Wholesale	0.17	0.14	0.20	0.19	0.17	0.18	0.21	0.15	0.20	3.29	0.07	0.00	0.99
	Hospitality	0.13	0.09	0.06	0.09	0.06	0.05	0.09	0.04	0.05	26.30	0.00	1.77	0.18
	Services	0.07	0.07	0.13	0.07	0.06	0.14	0.05	0.06	0.16	3.00	0.08	0.74	0.39
	Other	0.11	0.08	0.08	0.11	0.05	0.08	0.10	0.03	0.08	17.07	0.00	3.51	0.06
	TT 1	17.60	24.65	50.47	02.50	22.46	70.00	07.04	27.76	01.00	50.07	0.00	40.52	0.00
	Hourly wage	17.60	24.65	58.17	23.58	33.46	72.92	27.94	37.79	81.00	-58.87	0.00	-48.53	0.00
	Weekly hours	55.33	52.90	49.04	53.48	50.02	48.26	51.05	50.58	47.93	8.72	0.00	16.67	0.00
	Ln MW	3.16	3.19	3.21	3.46	3.50	3.53	3.62	3.62	3.62	-198.42	0.00	-207.31	0.00
	Ln GPPpc	11.33	11.61	11.79	11.29	11.65	11.95	11.17	11.72	11.99	3.07	0.00	10.16	0.00
	Obs.	5524	2605	22752	10397	3131	19364	9767	2952	17634	15921		20164	

⁻ How non-compliance affects the model estimation?

Table 5: Resume of Minimum Wage Policies in Thailand, 1973-2013.

Law	Years of implementation	Institutions *	Coverage	Minimum wage type
Revolutionary Party Decree No. 103	1973/4 – 1998	NWC	Bangkok, and three provinces** (1973), Whole kingdom (1974)	Minimum wage bands by geographic region
Labor Protection Act B.E. 2541 (1998)	1998-2008 (with effective wage change since 2001)	NWC PSMWs STAR	Whole kingdom (2001)	Province- specific
Labor Protection Act B.E. 2551 (2008)	2008-2012	NWC PSMWs STAR	Whole kingdom (2008)	Province- specific
Notification of the Wage Committee on the Minimum Wage Rate (No. 6)	2012/3- today	NWC PSMWs STAR	Bangkok and six provinces*** (2012) Whole kingdom (2013)	Province- specific (2012) Single statutory wage (2013)

^{*} Note: NWC stands for National Wage Committee, which includes government, employer, and employee representatives, it recommends minimum wage adjustments; PSMWs stand for Provincial Subcommittees on Minimum Wages, which are tripartite subcommittees composed of government, employer, and employee representatives at provincial level, which recommend minimum wage adjustments; STAR stands for Subcommittee on Technical Affairs and Review, the body submitting technical reviews of the recommendations. Final recommendations are handed over the deciding authority that is the Ministry of Labor that announces the law on the Royal Gazette (source: Ministry of Labor (2008), Del Carpio et al., (2014)).

^{**} Nonthaburi, Pathum Thani and Samut Prakan

^{***} Nakhon Pathom, Nonthaburi, Pathum Thani, Phuket, Samut Prakan, Samut Sakhon.

Further discussions

- With Bangkok and other six provinces started 300 baht first, do we need special treatment for these provinces?
 - There is robustness check for RIF/wage distribution analysis, but not sure about the employment model?
- In the Dynamic employment model, including leads and lags, do we need to take care of possible error terms' correlation?
- The results show that Thai labor market seems to be flexible across sectors (non-agriculture and agriculture sectors). How about flexibility across provinces? How do labor movements across provinces affect provincial distribution/RIF-OLS regression model? Any effect from the provinces with special industrial zones (Chonburi, Rayong, etc.)?



Further discussions

- Any effects on other compensations/employment benefits? With increasing in minimum wage, employers might instead reduce some benefits, e.g., no housing or transportation benefits anymore
- The effect of minimum wage on migrant workers? This would be another study.

