Minimum Wages & Employment

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Overview

- Minimum wages globally
- Debate & evidence on minimum wage impacts
- Minimum wages in South Africa
 - Structure, coverage, trends
- Evidence on impacts in South Africa

Minimum Wages Globally

- MW systems are common
 - Exist in about 90% of the ILO's 193 member states
- Variety of systems: national, regional/sectoral, hybrid
 - 50% global split between national and more complex
- Usually overseen by Government, tripartite forum, or independent body
- Generally have several stated aims
 - Prevent low pay, reduce inequality/poverty, encourage productivity etc.
- Middle-income countries have increasingly turned to the use of MW as an active policy intervention
 - (Brazil, Russia, China, SA, Kenya, Honduras, Costa Rica...)

Variations in African Minimum Wage Schedules: A Regional Comparison

Region	National (%)	Sectoral or Regional (%)
Africa	30	61
Asia & Pacific	48	48
Europe & CIS	64	33
Americas & Caribbean	59	38
Middle East	40	20

Source: ILO (2013)

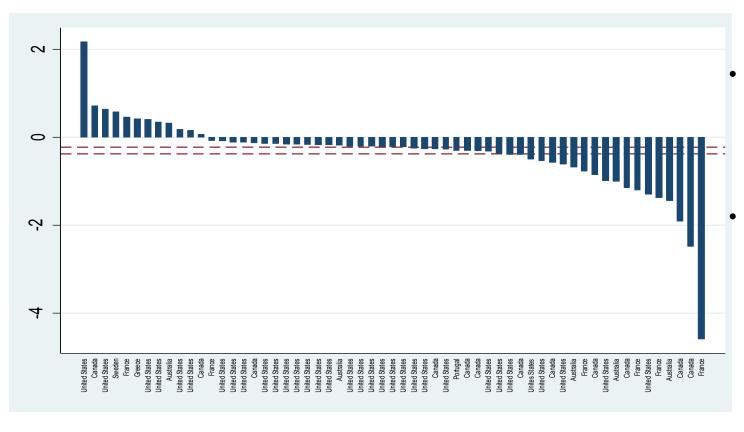
The Employment Impact of Minimum Wages

- "Just as no physicist would claim that 'water runs uphill', no self-respecting economist would claim that increases in the minimum wage increase employment."
 - James Buchanan, Nobel Laureate in Economics.
- "If you raise the minimum wage a little not a huge amount, but a little you won't necessarily cause a big employment reduction. In some cases you could get an employment increase."
 - David Card, UC Berkeley.
- The Empirical Impact Debate
 - Neumark & Wascher | Card & Krueger
 - Now a large body of empirical literature focused on USA and Europe
 - Growing LMI-country literature, often specific to a sector or cohort (data limitations are often prohibitive)
 - Literature on Africa is small: Published empirical work existing only for 4 countries
 - Ghana (Jones, 1997); Kenya (Andalon & Pages, 2008); Malawi (Livingstone, 1995) and South Africa (Hertz, 2005; Dinkelman & Ranchhod, 2013; Bhorat et al., 2013, 2014; Nattrass & Seekings, 2014; Garbers, 2015)

The Employment Impact of Minimum Wages

- So what does the (largely high-income) international evidence suggest?
- "the weight of [...] evidence points to little or no employment response to modest increases in the minimum wage" - Schmitt (2013)
- "On balance, the impact of these [minimum wage] regulations tends to be either insignificant or modestly negative [on employment]." Betcherman (2014)

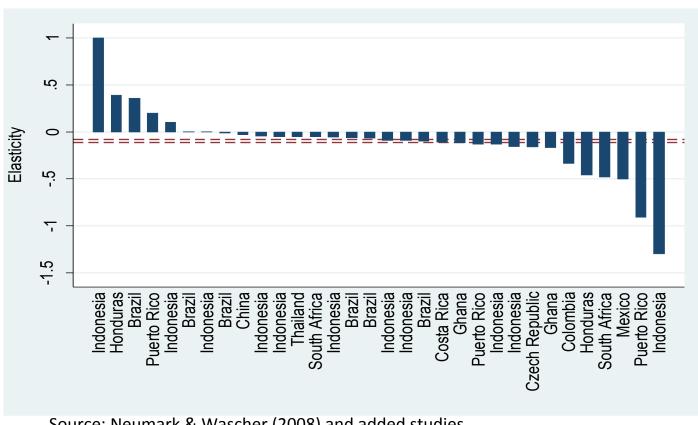
Wage-Employment Results for HI Countries



- The median elasticity is -0.225 (upper dotted line)
- The mean is elasticity is -0.37 (lower dotted line)

Source: Neumark & Wascher (2008)

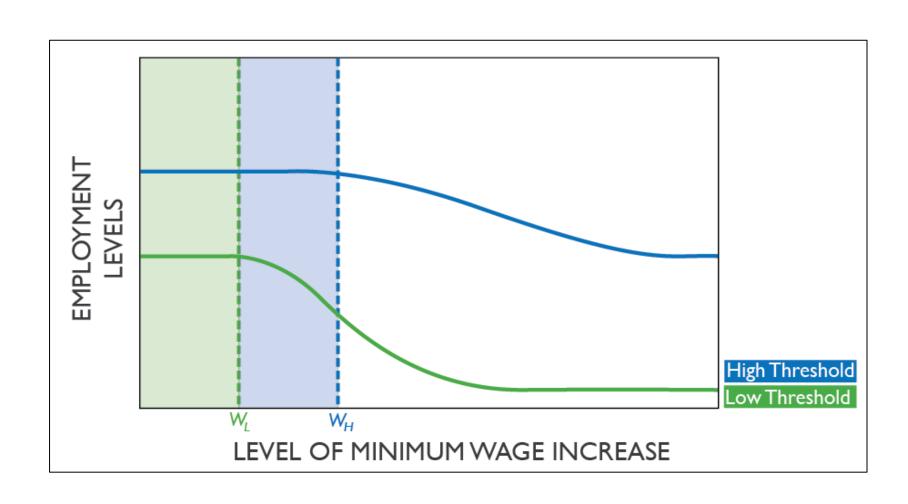
Wage-Employment Results for LMI Countries



- The median elasticity is -0.225 (upper dotted line)
- The mean is elasticity is -0.37 (lower dotted line)

Source: Neumark & Wascher (2008) and added studies

Minimum Wages and Employment A Basic Theoretical Construct



Minimum Wages in South Africa

- Sectoral/Occupational/Geographic system
 - Collective Bargaining (Labour Relations Act of 1995)
 - 47 Bargaining Councils in South Africa
 - Covering approx. 20 % of 'vulnerable' workers
 - Sectoral Determinations (Basic Conditions of Employment Act of 1997)
 - 11 Sectoral Determinations in South Africa
 - Covering approx. 45 % of 'vulnerable' workers
- Approximately 20% of 'vulnerable' workers not covered

Sectoral Determinations in South Africa

Sector	Occupation/Other Classification	Geographical Areas	Year and Month Introduced	Schedules Within		
Domestic Workers	All	A and B	August 2002	2		
Private Security	Occupations: Artisan, Clerical Assistant (4 grades), Clerk (4 grades), Driver (3 grades), General Worker (2 grades), Security Officer (4 grades), Other	I, 2 and 3	November 2001	57		
Taxi	Occupations: Taxi Drivers. Admin, Rank Marshalls and Other	All	July 2005	4		
Whole sale & Retail	Occupations: Assistant Manager, Cashier, Clerk, Displayer, Driver (4 grades), Forklift operator, General Assistant, Manager, Merchandiser, Security Guard, Sales Assistant, Sales Person, Shop Assistant, Supervisor, Trainee Manager		February 2003	36		
Forestry	All	All	March 2003			
Contract Cleaning	All	A, B, and C	May 1999	3		
Farm Workers	All	All	December 2002	I		
Hospitality Workers	Less than 10 employees, and more than ten employees	All	May 2007	2		
Learnerships		All	June 2001	14		
Expanded Public Works Programme	All	All	November 2010	I		
Small Business Sector	All	All	November 1999	I		
Children in the Performance of Advertising, Artistic, and Cultural Activities	All	All	August 2004	I		
Civil Engineering (Discontinued)		All	March 2001	9		
Source: Information collected from ECC reports, and Sectoral Determinations available at: www.labour.gov.za						

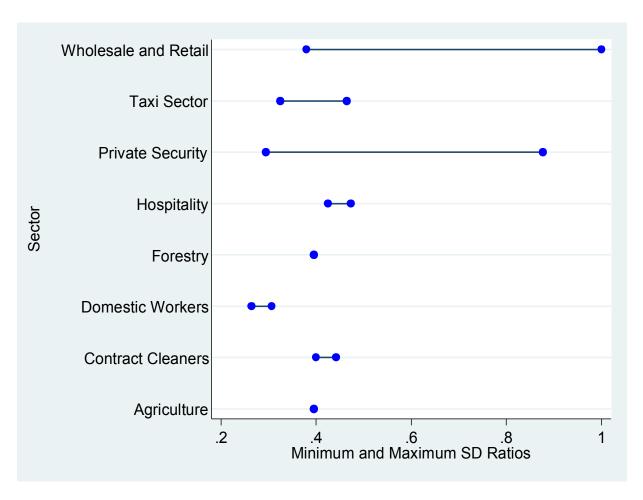
Source: Information collected from ECC reports, and Sectoral Determinations available at: www.labour.gov.za

Number Minimum Wage Schedules, by Country

Country	Number of Wage Schedules		
Uganda	I		
Mali	I		
Ghana	Ī		
Malawi	I		
Nigeria	2		
Botswana	10		
Zambia	10		
Tanzania	29		
Namibia (collective bargaining)	32		
Kenya	55		
Ethiopia (public sector)	57		
South Africa (SDs only)	124		
Average	27		

Source: ILO Databases (2012 and 2013), DoL (2015)

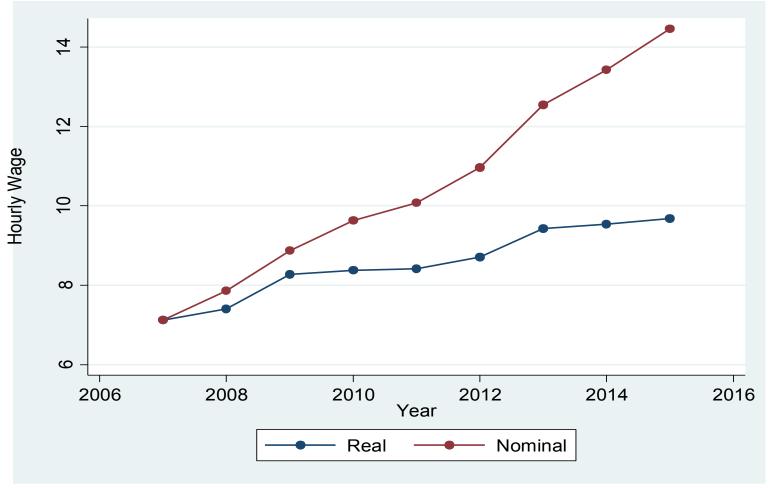
Ratio of lowest and highest SD (relative to highest SD)



- Highest SD is R6506/m (190% of the median wage)
- Lowest SD is R1813/m (50% of the median wage)

Source: DoL (2015)

SD Minimum Wages in South Africa



Source: Department of Labour, Legislated Sectoral Determinations, own calculations.

Note: Real and nominal trend lines represent the average of all SD wage rates.

South African MW Impact Work: Data

- The data used by most researchers is a pooled dataset of the South African Labour Force Survey (LFS), which ran twice a year from 2000 to 2007.
- The LFS is a national household survey conducted by Statistics South Africa, with a sample of around 30 000 households.
- It has relatively detailed labour market information.
- The separate waves of the LFS are pooled and treated as repeated cross sections across time – covers the period in which many of the SDs were introduced.

Methods (I)

 Method I - Difference-in-differences using a constructed comparison group:

$$Y_{ijkt} = \theta_0 + \theta_1 POST_t + \theta_2 Treatment_k + \theta_3 POST_t *Treatment_k + \phi_j + \varepsilon_{ijkt}$$
 (1)

- where Y_{ijkt} is the outcome variable of interest (employment, wages, hours of work) for individual i in group k in period t.
- $POST_t$ refers to the time dummy, capturing the period before (0) and after (1) the minimum wage is introduced.
- Treatment_k captures whether the individual is in the treatment or comparison group
- POST_t *Treatment_k is the difference-in-difference term, which captures the impact of the minimum wage as a consequence of being in the treatment group, during the treatment period.
- ϕ_i are district council effects.

Methods (II)

 Method II - Difference-in-differences exploiting geographical variation in wage levels in the pre-law period

$$Y_{ijkt} = \alpha_0 + \alpha_1 Post_t + \alpha_2 Gap_{jk} + \alpha_3 Post_t *Gap_{jk} + \chi_{ijkt} + \gamma_{ijkt}$$
 (II)

• Where Gap_{jk} is a constructed variable measuring the proportional increase in the pre-law wage $w_{jk}^{(t-1)}$ necessary to meet the initial introduced minimum $w_{mjk}^{(t)}$

$$Gap_{jk}=[w_{mjk}^{(t)}-w_{jk}^{(t-1)}]/w_{jk}^{(t-1)}$$
 where $Gap_{jk}\geq 0$ (III)

• χ_{ijkt} controls for various worker characteristics.

Impact of Minimum Wages: South African Evidence

Domestic Workers	Retail, Private Security, Forestry and Taxi	Agriculture	Clothing and Textile
 Hertz (2005) finds disemployment effects after the introduction of the SD between 2001/04 Dinkelman & Ranchhod (2012) and Bhorat et. al (2012) find no disemployment effects 	Bhorat et. al. (2012) find no disemployment effects – hours of work reduced	Bhorat et. al. (2014), Garbers (2015), find –ve employment effects after MW intro,, and Levine (2014) finds evidence (qualitative) of gendered disemployment after SD increases	Nattrass & Seekings (2014) estimate that 20,000 jobs were threatened due to increased enforcement measures in the sector

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