



# DETERMINANTS OF SOCIAL AND ECONOMIC WELL-BEING IN THE US: MINIMUM WAGE, COST OF LIVING, AND WELFARE GENEROSITY

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# OVERVIEW

- Objective: design a study of minimum wages in US cities and counties that incorporates local cost of living differences
- How?
  - Using The Council for Community and Economic Research's (C2ER) cost of living index and an equivalent minimum wage index, measure the “gap” between the minimum wage and cost of living
  - Use fixed effects regression analysis to examine relationships with unemployment, food insecurity, and jail admissions
- Two-Part Analysis
  - Nominal Minimum Wage
  - The “Gap”

**Table 1. Unemployment City and County Case Selection, 2005-2016**

**Cities**

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Albuquerque NM, Berkeley CA, Chicago IL, Lexington KY, Long Beach CA, Los Angeles CA, Louisville KY, Minneapolis MN, Oakland CA, Portland ME, Portland OR, Sacramento CA, San Diego CA, San Francisco CA, San Jose CA, Santa Clara CA, Seattle WA, Sunnyvale CA, Tacoma WA, Washington DC

**Counties**

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Bernalillo NM, Cook IL, Kings NY, Los Angeles CA, Montgomery MD, Nassau NY, New York NY, Queens NY, Suffolk NY, Westchester NY

**Table 2. Food Insecurity City and County Case Selection, 2005-2016**

**Cities**

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Lexington KY, Louisville KY, San Francisco CA, Washington DC

**Counties**

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Bernalillo NM, Cook IL, Kings NY, Los Angeles CA, Montgomery MD, Nassau NY, New York NY, Queens NY, Suffolk NY, Westchester NY

**Table 3. Jail Admissions City and County Case Selection, 2005-2016**

**Cities**

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Lexington KY, Louisville KY, San Francisco CA, Washington DC

**Counties**

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Bernalillo NM, Cook IL, Los Angeles CA, Montgomery MD, Nassau NY, New York NY, Suffolk NY, Westchester NY

Table 5. Minimum Wage - Unemployment Models, Fixed Effects				
	Unemployment			
	Model 1	Model 2	Model 3	Model 4
Minimum Wage	-.001	.024	.295 **	.298 *
GDP Growth		-.196 ***	-.111 ***	-.174 ***
Public Welfare Generosity			-.483 ***	-.525 ***
% Black or African American				-.153
% Hispanic or Latino				.144
Constant	6.438 ***	6.719 ***	13.155 ***	12.887 ***
R <sup>2</sup> Within	.00	.08	.27	.27
R <sup>2</sup> Between	.06	.01	.18	.11
R <sup>2</sup>	.00	.04	.16	.08
Observations	360	360	360	330

\* significant at .05; \*\*significant at .01; \*\*\*significant at .001; ^ significant opposite hypothesized direction.

Table 6. Minimum Wage - Food Insecurity Models, Fixed Effects				
	Food Insecurity			
	Model 1	Model 2	Model 3	Model 4
Minimum Wage	-1.03 ***	-.489 **	-.483 *	-.364 *
Unemployment Rate		.295 ***	.261 **	.202 *
Public Welfare Generosity			-.058	-.090
% Black or African American				.280 *
% Hispanic or Latino				-.193
Constant	21.739 ***	15.266 ***	16.562 ***	16.117 ***
R <sup>2</sup> Within	.38	.44	.45	.48
R <sup>2</sup> Between	.01	.12	.07	.03
R <sup>2</sup>	.00	.11	.08	.04
Observations	112	112	112	112
* significant at .05; **significant at .01; ***significant at .001; ^ significant opposite hypothesized direction.				

Table 7. Minimum Wage - Jail Admissions Models, Fixed Effects				
	Jail Admissions			
	Model 1	Model 2	Model 3	Model 4
Minimum Wage	-540.204 ***	-554.480 ***	-546.567 ***	-536.624 ***
Unemployment Rate		28.191	16.263	-8.270
Public Welfare Generosity			-24.302	-81.827
% Black or African American				120.067
% Hispanic or Latino				120.733
Constant	7353.980 ***	7279.782 ***	7758.424 ***	4501.659 ***
R <sup>2</sup> Within	.26	.26	.26	.26
R <sup>2</sup> Between	.08	.08	.06	.01
R <sup>2</sup>	.09	.09	.07	.01
Observations	120	120	120	108
* significant at .05; **significant at .01; ***significant at .001; ^ significant opposite hypothesized direction.				

Table 8. Minimum Wage to Cost of Living Gap - Unemployment Models, Fixed Effects				
	Unemployment			
	Model 1	Model 2	Model 3	Model 4
MWCOL Gap	.058 ***	.055 ***	.035 *	.054 ***
GDP Growth		-.174 ***	-.110 **	-.178 ***
Public Welfare Generosity			-.392 ***	-.431 ***
% Black or African American				-.129
% Hispanic or Latino				.481 ***
Constant	4.872 ***	5.358 ***	12.778 ***	4.852
R <sup>2</sup> Within	.04	.12	.23	.27
R <sup>2</sup> Between	.05	.04	.27	.08
R <sup>2</sup>	.01	.03	.16	.08
Observations	319	319	319	293

\* significant at .05; \*\*significant at .01; \*\*\*significant at .001; ^ significant opposite hypothesized direction.

Table 9. Minimum Wage to Cost of Living Gap - Food Insecurity Models, Fixed Effects				
	Food Insecurity			
	Model 1	Model 2	Model 3	Model 4
MWCOL Gap	.053 **	.025	.031 *	.026
Unemployment Rate		.388 ***	.304 ***	.188 *
Public Welfare Generosity			-.118	-.161 *
% Black or African American				.362 **
% Hispanic or Latino				-.237
Constant	11.506 ***	9.841 ***	12.414 ***	12.348 **
R <sup>2</sup> Within	.09	.36	.37	.43
R <sup>2</sup> Between	.01	.01	.00	.03
R <sup>2</sup>	.01	.04	.01	.07
Observations	96	96	96	96

\* significant at .05; \*\*significant at .01; \*\*\*significant at .001; ^ significant opposite hypothesized direction.



Table 10. Minimum Wage to Cost of Living Gap - Jail Admissions Models, Fixed Effects				
	Jail Admissions			
	Model 1	Model 2	Model 3	Model 4
MWCOL Gap	-7.537	-6.563	-7.721	-3.885
Unemployment Rate		-46.658	-102.345	-37.293
Public Welfare Generosity			-112.762	-183.594 *
% Black or African American				218.629 *
% Hispanic or Latino				-212.466
Constant	3389.842 ***	3660.723 ***	6186.967 **	7090.410
R <sup>2</sup> Within	.00	.01	.03	.20
R <sup>2</sup> Between	.06	.09	.01	.00
R <sup>2</sup>	.03	.04	.02	.04
Observations	106	106	106	94
* significant at .05; **significant at .01; ***significant at .001; ^ significant opposite hypothesized direction.				

# POLICY IMPLICATIONS

- If unemployment is high, avoid large minimum wage increases unless there are accompanying policies to offset further employment losses.
- Close the “gap” between minimum wage and cost of living to prevent negative effects on employment
  - Administer household surveys to gauge the degree of hardship and cost burdens faced by low-income earners
- Increase spending on welfare programs that work
  - Prioritize workforce development