If You Build It, They Will Come: Indiana's Labor Response to Changing Employment Opportunities

Methodology and Results

An ordinary least squares model (OLS) was used to determine correlation between housing permits and employment. Two sources of county employment data were used (LAUS and QCEW employment) and correlated yearly with the housing permit data. The county employment numbers were also lagged two periods both to test for lingering influence and to help verify the direction of influence. The results shown use the LAUS data.

$$Q_{i,t} = \beta_0 + \beta_{i,t}\, \text{Employ} + \beta_{i,(t-1)}\, \text{Employ} + \beta_{i,(t-2)}\, \text{Employ} + \varepsilon$$

Where: Q is quantity of single home building permits
  Employ is employment
  i = county, t = time (year)

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Single Family Home Permits	
OLS	
# of Obs.	920
F(3,916)	22.34
Prob>F	0.0000
R-Sqr	0.0682
Adj. R-Sqr.	0.0651

Variable	Coef.	Std Error	t	p value
County Employment	0.06315	0.01075	5.87	0.000 *
County Employment Lagged 1	0.00418	0.01129	0.37	0.711
County Employment Lagged 2	0.05622	0.01065	5.28	0.000 *
Intercept	249.397			

Statistical Significance: 1% *

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