Employment and Entrepreneurial Activity

An Instrumental Variables Approach

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The Research Question

Do stronger local labor markets lead to more entrepreneurial activity and higher success rates on crowdfunding platforms like Kickstarter?

Theoretical Framework: Push vs. Pull

↓ Unemployment "Push"

When local labor markets are weak and unemployment is high, individuals may be forced into entrepreneurship as a fallback option.

Prediction: Weak Economy → Higher Project Volume (but potentially lower quality).

↑ Demand "Pull"

Strong labor markets raise incomes and local demand, creating attractive opportunities for new ventures and increasing backer willingness.

Prediction: Strong Economy → Higher Success Rates & More Viable Projects.

Methodological Challenge & Strategy

The Challenge

Employment is likely endogenous. Local entrepreneurial activity can influence employment, and unobserved shocks can affect both simultaneously.

The Solution

Use an Instrumental Variable (IV) approach to isolate causal effects, moving beyond simple OLS correlations.

Bartik Instrument

Shift-Share Instrument: Interacts pre-determined 2018 state industry shares with national industry employment shocks.

Data Sources

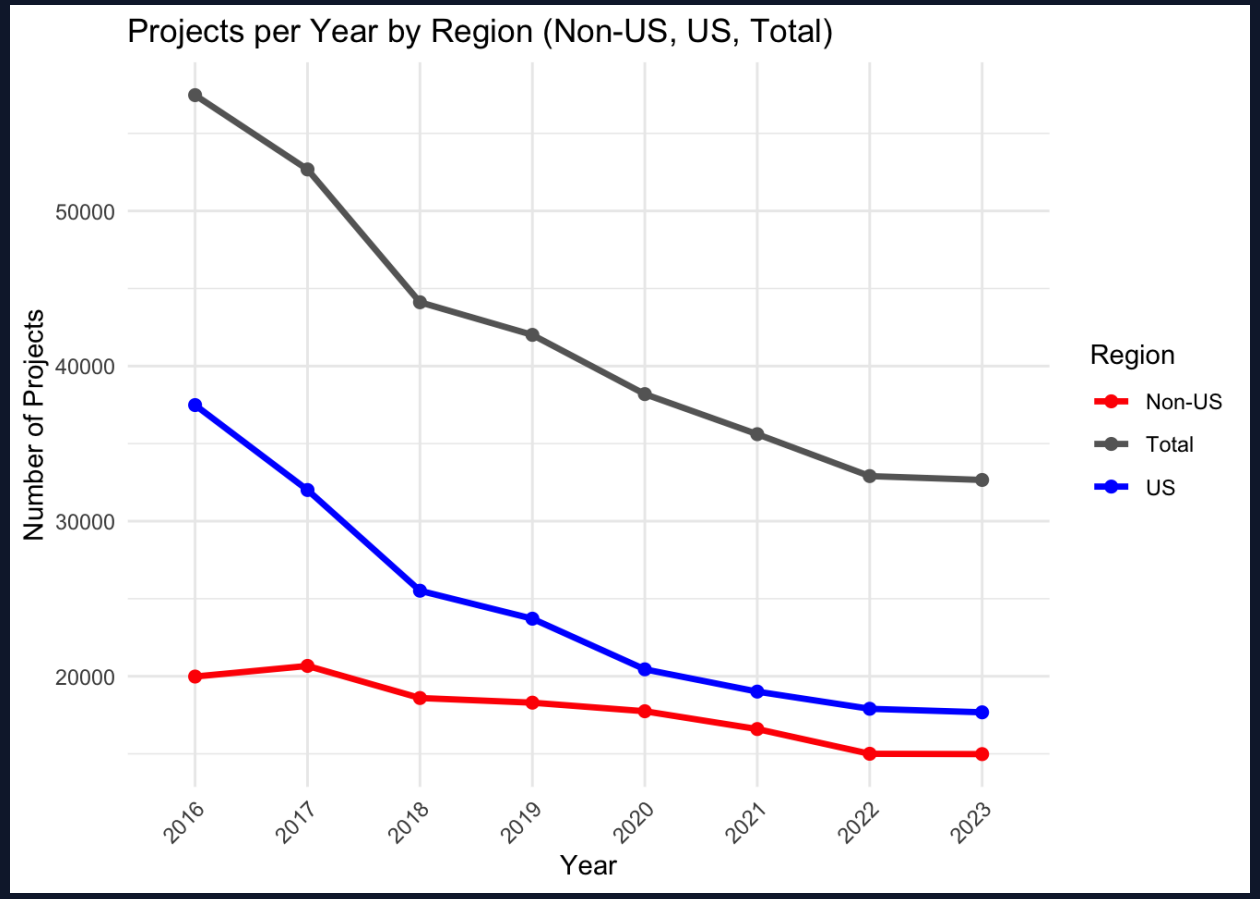
1. Kickstarter Data (ICPSR)

Over 330,000 projects worldwide (2016–2023). Variables include launch dates, funding goals, pledged amounts, and success outcomes.

2. BLS CES Employment

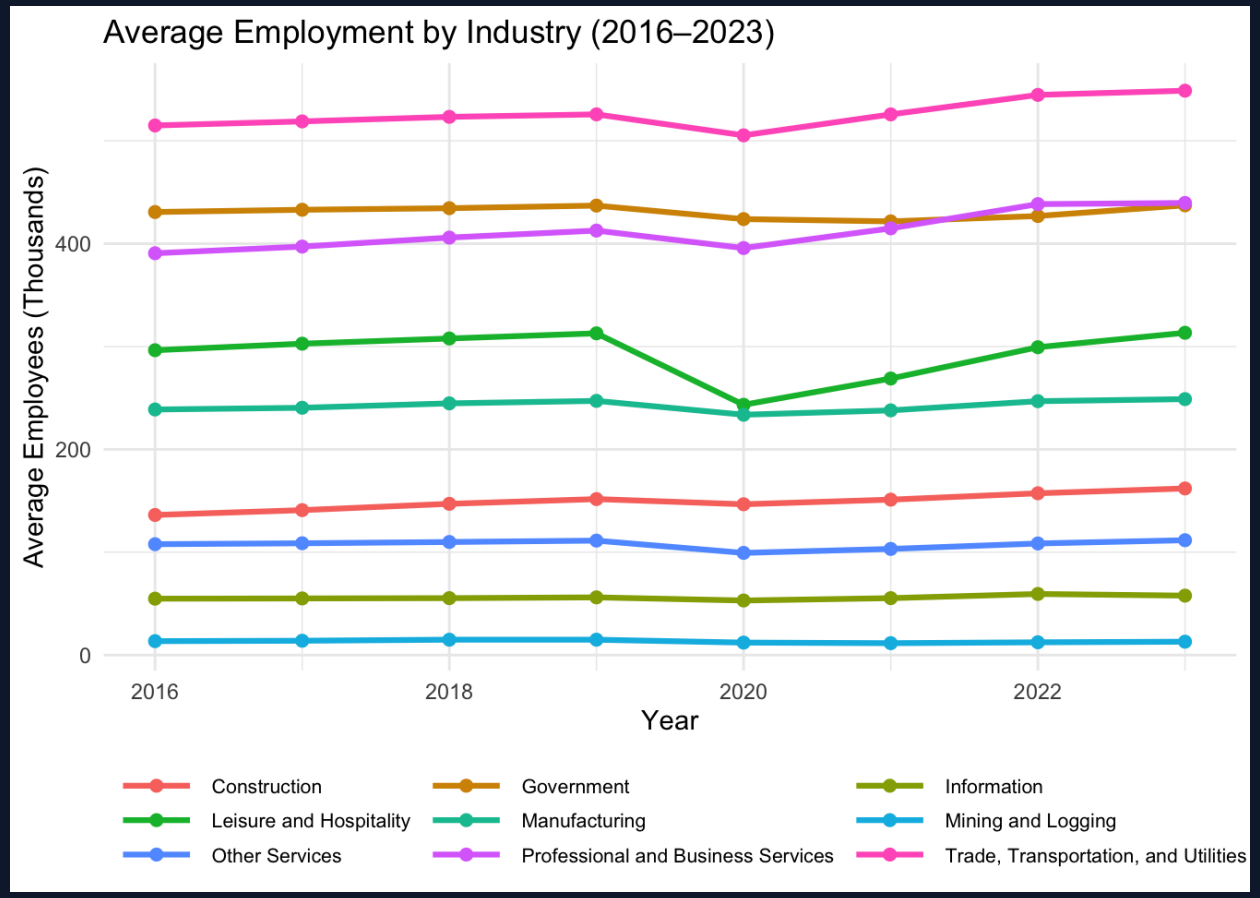
Current Employment Statistics (2016–2023). Monthly employment levels for states and major industries, aggregated to annual state-year panels.

Kickstarter Project Volume (Trend)



Number of projects decreased since 2016

Average Employment by Industry (Share)



The composition of employment varies significantly by sector, crucial for the Shift-Share instrument construction.

Empirical Strategy: 2SLS Framework

First Stage

Predicting employment growth using the Bartik instrument.

$$D_{s,t} = \alpha_F + \pi_F Z_{s,t} + \delta_F X_{s,t} + \eta_s + \tau_t + v_{s,t},$$

Second Stage

Estimating the causal effect on crowdfunding outcomes.

$$Y_{s,t} = \alpha_{IV} + \beta_{IV} \widehat{D}_{s,t} + \gamma_{IV} X_{s,t} + \eta_s + \tau_t + e_{s,t},$$

Results: Employment Growth on Crowdfunding

Specification	Outcome: Δ Projects	Outcome: Δ Success Rate
OLS (Naïve) Controls: State & Year FE	-0.416 *(SE: 0.674)*	0.918 *(SE: 0.715)*
Reduced Form Bartik on Outcome	-0.110 *(SE: 2.769)*	1.805 *(SE: 2.941)*
IV (2SLS) Instrumented Emp. Growth	**-0.045** *(SE: 1.135)*	**0.740** *(SE: 1.203)*

Finding: Coefficients are statistically insignificant across all specifications. There is no clear causal evidence that local employment growth drives crowdfunding activity.

Instrument Strength Validity

159.77

First-Stage F-Statistic

Exceptionally Strong Instrument

The Bartik instrument provides substantial predictive power for employment growth. The F-statistic far exceeds the conventional threshold of 10 (Staiger & Stock, 1997), confirming that the results are not subject to weak-instrument bias.

Conclusion

No Causal Link Detected

Despite using a robust identification strategy with a strong instrument, this study finds **no statistically significant evidence** that aggregate state-level employment growth drives the number of Kickstarter projects or their success rates.

Implications

Crowdfunding activity appears distinct from traditional local labor market dynamics. It may be driven more by non-local factors (digital networks) or specific sub-sector trends not captured by aggregate employment.

Thank you for your attention.

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