

# Do Research Universities Recession Proof Their Regions? Evidence from State Flagship College Towns

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## Abstract

Universities

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# 1 Introduction

Resilient regions are able to absorb destabilizing economic shocks without suffering persistent distress (Martin, 2012). This characteristic of local economies became increasingly important in policy discussions after the Great Recession, as a self-evidently desirable outcome of place-based policies (Martin & Sunley, 2015). Regional scholars and economic geographers have continued to explore the determinants of regional resilience after the Covid-19 pandemic (Kim et al., 2023).

Are there certain features of regional economies that make them more resilient? - - - - -  
- - - - - Recently, Howard et al. (2022) and Gagliardi et al. (2023) suggest that higher shares of college graduates and universities provided resiliency for manufacturing-dependent ‘rust belt’ regions during manufacturing’s secular decline in the richest industrialized nations over the latter half of the twentieth century. The mechanism is . . .

Is it possible that universities have provided a cushion against more recent destabilizing events, such as the Great Recession or Covid-19 pandemic? Industry mix has historically been predictive of a region’s sensitivity to negative shifts in the business cycle (Domazlicky, 1980; Owyang et al., 2005) in that manufacturing-heavy areas tend to suffer more severe recessions than local economies dominated by education or healthcare (Scavette, 2019). But we do not know whether the presence of universities *per se* make regions resilient to recessionary shocks, despite the enduring negative impacts that recessions can wreak on regional labor markets (Hershbein & Stuart, 2022).

In this paper, we examine the resilience of local economies to the last three US recessions: the Dot-Com Recession, the Great Recession, and the Covid-19 Recession. Specifically, we examine whether the presence of a flagship research university makes a county more or less resilient to these events, where resilience is measured by the . . .

The mechanisms by which universities affect their local economies are hypothesized to operate through changes in human capital, innovation, and local demand. Universities raise the regional stock of human capital by producing graduates and employing faculty engaged

in research and development activity (Abel & Deitz, 2011; Amendola et al., 2020; Cantoni & Yuchtman, 2014). Research universities tend to result in higher levels of regional innovation (e.g., productivity, patenting) through their own research and development activities, industry agglomeration, and local knowledge spillovers (Andersson et al., 2009; Kantor & Whalley, 2014; Hausman, 2022). Lastly, consumption by students and faculty raises the demand for local nontradable goods and services (Felsenstein, 1996; Lee, 2019).

Of these mechanisms, the stability of consumption by the university population (faculty, students, staff) may offer a short-term recession buffer for their surrounding local economy. Faculty and staff employment are highly dependent on both government funding and tuition from student enrollment. While government funding is sensitive to the business cycle (cite needed, especially great recession), student enrollment at universities tends to be countercyclical, with more students enrolling during recessions than expansions (especially in graduate degree programs). Therefore, much of the local demand by students and faculty may be driven by income derived outside of the regional economy likely to insensitive to fluctuations in the national economy, thus increasing resilience.

In this paper, we demonstrate that counties with universities are, indeed, more resilient in the face of economic downturns than counties without universities. By using a sequence of difference-in-difference models, we show that . . .

However, we also demonstrate that this result is *not* robust to controlling for industrial composition. In other words, the relevant factor leading to local resilience is the importance of stable jobs, particularly in sectors such as education and healthcare, rather than higher education *per se*. Universities are just one way to achieve this industry mix, and equally resilient counties have other ways of achieving it . . .

The policy conclusions are straightforward . . .

The rest of the paper is organised as follows . . .

## 2 Research Universities in the United States

History of U.S. Research Universities. U.S. followed the German model and began establishing research universities after the Civil War in the nineteenth century ([Atkinson & Blanpied, 2008](#)). The Morrill Act and Land Grant system pushed this ahead ([Croft, 2019](#)).

Explain difference between R1, R2, and Flagship with Carnegie definitions.

Why focus on State Flagship Universities? Likeliest to be exogenously selected compared to other major research universities which tend to be located in the largest cities to serve local industry? Based on available land.

### 2.1 Geography of U.S. Flagship Universities

Where are they located? County map of flagship universities, R1s, R2s

Table of 50 Flagship University Counties with descriptive statistics: demographics, population, RUCC, University population as a percentage of county population

### 2.2 “College Town” Economies over the Business Cycle

Briefly explain regional business cycle lit in that eds and meds are less sensitive to the business cycle than manufacturing.

Show percentile map of county unemployment rates from 1998 through 2022.

Show scatterplot of County Unemployment Rates During Post-Recessions peaks for U.S. in 2003, 2010, 2020. Shade Flagship Universities, R1, R2.

Identify flagship universities’ encompassing counties as “college towns.”

## 3 Data

Unemployment rate data from BLS University data

## **4 Methods**

## **5 Results**

If results suggest that the students are recession proofing the economy, not the faculty/research and development, then lower-tiered colleges without substantial r and d spending should have the same effect on their economies.

### **5.1 Main Results: Unemployment Rates**

### **5.2 Industry Composition of Payroll Employment Declines**

Should have seen larger decrease in nontradable industries during covid recession compared to 2001 and 2008 recessions ([Lee, 2019](#)).

## **6 Discussion and Conclusion**

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# Appendix