

## Background

Social capital—the networks, norms, and trust that strengthen social ties—has long been linked to economic performance, health outcomes, and community resilience.

America's population is aging rapidly, yet most social-capital metrics are designed for all ages. Recent indices, such as the Joint Economic Committee's (JEC) general social capital measure, capture broad civic and social engagement but are not tailored to age-specific behaviors

I build a state-level Elderly Social Capital (ESC) index using CPS Civic Engagement and ATUS time-use data for adults 60+, combining (i) an equal-weighted additive measure and (ii) a PCA-based index that reveals distinct dimensions of engagement. Understanding these patterns is essential for policymakers in an aging society.

## Research Goals

- (1) Construct a **novel elderly social capital (ESC) indicator** for policymakers to target as the US population ages;
- (2) Assess how **heterogeneity in state tax policy** might affect the social capital of Americans over the age of 60;
- (3) Investigate how more **granular types of public spending** can change elderly social capital.

## Methods

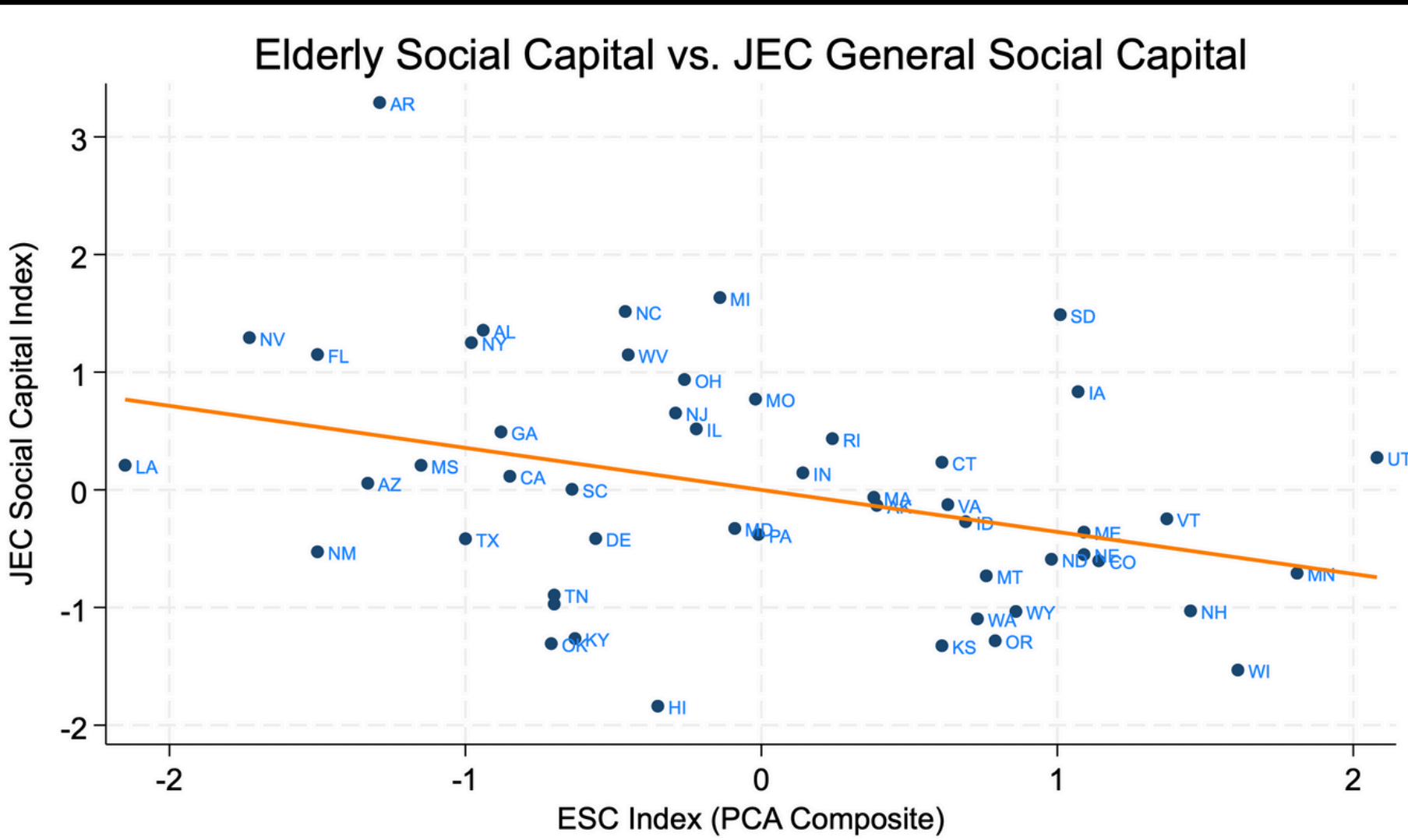
- Data Integration:** Combined Bureau of Labor Statistics data from **CPS Civic Engagement Supplement** (formal civic/political activities) and **ATUS** (informal social/community activities) from for U.S. residents aged 60+, aggregated at the state level.
- Index Construction:** Built two elderly social capital measures — an equal-weighted additive index and a PCA-weighted index using principal component loadings.
- Dimensional Analysis:** Used principle component analysis (PCA) to reduce dimensionality + identify core civic-social engagement (PC1), religious/caregiving participation (PC2), and social activity focus (PC3).
- Linear Regression & Correlation:** Linked indices and components to state policy and socioeconomic variables and compared with the JEC Social Capital Index.

## Finding #1: Elderly vs General Social Capital

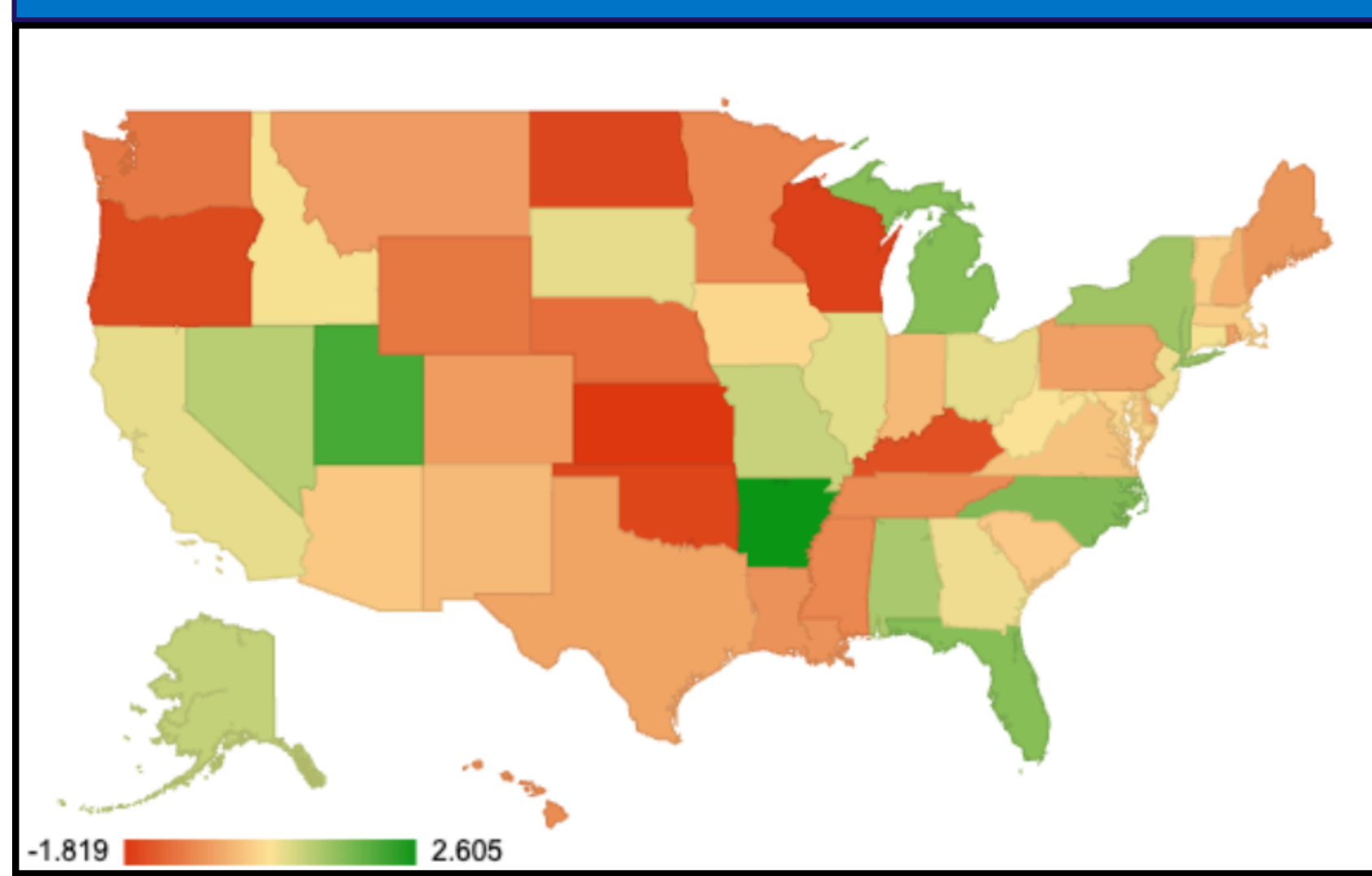
PCA reveals at least **three dimensions** of ESC:

- PC1:** Core civic-social engagement (socializing, political discussion, contacting officials, volunteering)
- PC2:** Religion and caregiving-based engagement
- PC3:** Social leisure activities

ESC correlates **negatively** with recent measures of general social capital, including a recent Congressional social capital index. ESC contains **unique dimensions**.



## State Geography of ESC (Additive Index)



### INPUTS

- Time Use Activities**
- Religious
  - Socialization
  - Caregiving
  - Volunteering
  - Leisure (sports, travel, etc)

- CPS Civic Survey**
- Political Conversation
  - Contacting officials
  - Family and friends
  - Government service

MEASURE ELDERLY SOCIAL CAPITAL

Principal Component Analysis

### OUTPUTS

Orthogonal Dimensions: (PC1, PC2, PC3...)

Composite Index

## Top 3 States: Overall ESC

- (1) Arkansas
- (2) Utah
- (3) North Carolina

## Bottom 3 States: Overall ESC

- (50) Kansas
- (49) Wisconsin
- (48) Oklahoma

## Top 3 States: Civic Engagement Dimension (PC1)

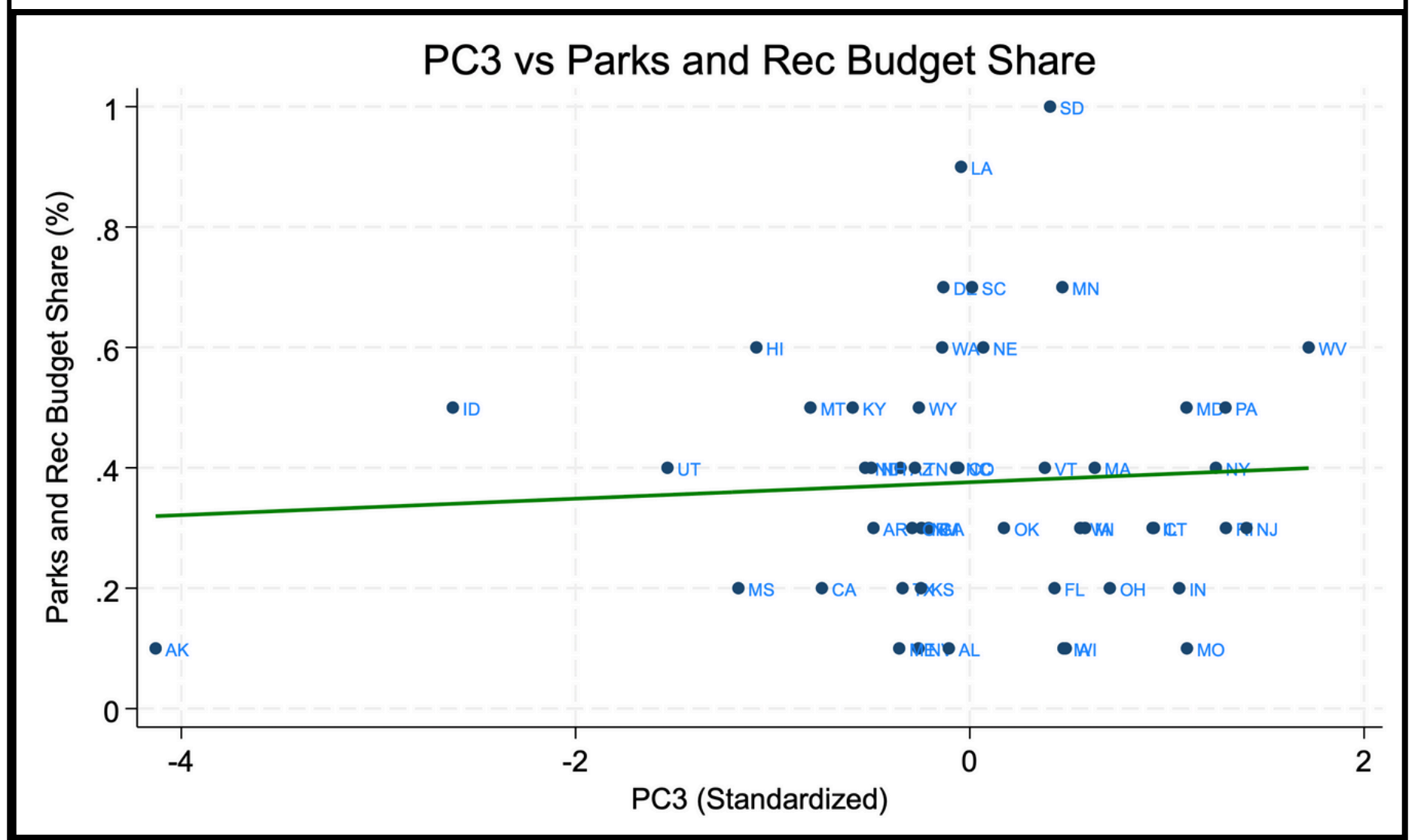
Arkansas, South Dakota, Michigan

## Top 3 States: Religious and Personal Dimension (PC2)

Mississippi, Louisiana, Alabama

## Finding #3: Public Spending

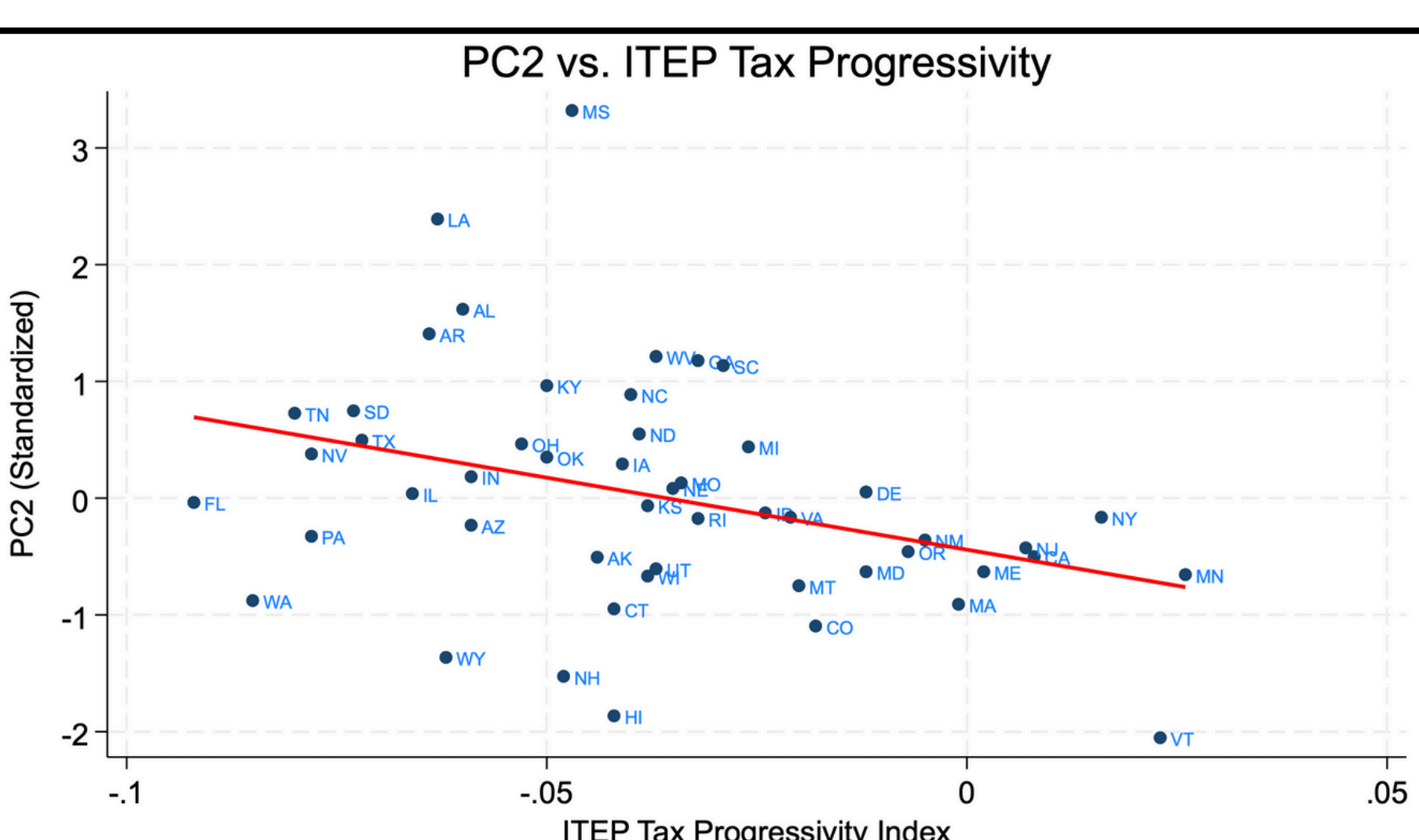
**Parks and recreation funding supports social leisure capital.** Parks budget share is positively associated with PC3 ( $\beta = 0.31$ ), indicating investment in parks correlates with higher participation in informal social activities among the elderly.



## Finding #2: Tax Progressivity

Tax progressivity is **negatively** associated with **private/religious social capital**, but not strongly associated with other social capital dimensions.

Higher ITEP tax progressivity is significantly associated with lower PC2 scores ( $\beta = -11.11$ ,  $p = 0.007$ ), suggesting fiscal structure shapes informal and faith-based engagement differently than civic engagement.



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## Selected References

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