Investigating the Relationship Between Social and Sustainable Bonds and Homelessness

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College of Business | College of Engineering
Understanding Homelessness

- Homelessness: Complex issue worldwide, lacking adequate housing
- Factors: Affordability, poverty, unemployment, mental health, substance abuse, family breakdown
- Challenges: Limited access to healthcare, education, employment
- Addressing homelessness: Collaborative approach involving government, nonprofits, communities
Exploring Social and Sustainable Bonds

Social Bonds
- Funds projects with positive social outcomes (e.g., affordable housing, community development)

Sustainable Bonds
- Finance environmentally sustainable projects (e.g., climate change, sustainable infrastructure)
Exploring Social and Sustainable Bonds

- Issued by governments, corporations, and entities aligning investments with social and environmental goals.
- Growing trend in responsible finance, promoting positive change through impact investing.
- Aim to address societal challenges, including homelessness, through measurable social and environmental benefits.
Why this Project?

- As the founder of a nonprofit dedicated to fighting homelessness, I wanted to see what we were already doing and if it was helping.
Data Collection

- Bond Data
  - 270,000+ bond issuances
    - State
    - Year
    - Total Offering Amount
    - Social, Sustainable, or neither

- Homeless Data
  - Housing and Urban Development (HUD) point-in-time (PIT) count

- Population Data
  - All 50 states from US Census Bureau
Analysis: Statistical Regressions in Python
Homeless Data as Independent Variable
*Dependent Variables have a 1 year lag

**Sustainable Bonds**

- Homelessness per capita vs. sustainable bond issuance per capita
  - 1.282e-05 coefficient
  - 0.060 p-value

- % change in homelessness vs. sustainable bond issuance per capita
  - 0.0012 coefficient
  - 0.232 p-value

**Social Bonds**

- Homelessness per capita vs. social bond issuance per capita
  - -2.202e-07 coefficient
  - 0.965 p-value  (*Insignificant*)

- % change in homelessness vs. social bond issuance per capita
  - 0.0018 coefficient
  - 0.012 p-value

*Insignificant*
**Bond Data as Independent Variable**
*Dependent Variables have a 1 year lag*

**Sustainable Bonds**
- Sustainable bond issuance per capita vs. homelessness per capita
  - 3610.4110 coefficient
  - 0.084 p-value
- Sustainable bond issuance per capita vs. % change in homelessness
  - -14.5239 coefficient
  - 0.716 p-value

**Social Bonds**
- Social bond issuance per capita vs. homelessness per capita
  - -4801.5817 coefficient
  - 0.486 p-value **Insignificant**
- Social bond issuance per capita vs. % change in homelessness
  - -125.5505 coefficient
  - 0.350 p-value **Insignificant**
Conclusion

There is significant evidence that a relationship exists between the past year’s homelessness per capita and sustainable bond issuance.

There is evidence of a relationship between the past year’s social issuance per capita and the percent change in homelessness.
Conclusion

Social and sustainable bonds are a relatively new industry

Other remedies will be needed regardless
**Future Research**

Does the issuance of social and sustainable bonds have a significant impact on reducing homelessness rates?

Are there specific characteristics or factors associated with social and sustainable bond issuances that lead to a stronger correlation with homelessness rates?


THANK YOU

Especially for the support and guidance of my mentor, Brian Gibbons!