

**Slide 1:**

Hello, my name is Joshua Spisak, I'm currently studying business administration and computer science, and I recently investigated the relationship social and sustainable bonds and homelessness.

**Slide 2:**

Homelessness is a complex social issue that affects individuals and communities worldwide, and it refers to the condition of individuals or families lacking a fixed, regular, and adequate nighttime residence.

Factors contributing to homelessness include:

- Lack of affordable housing
- Poverty and income inequality
- Unemployment or underemployment
- Mental health issues
- Substance abuse problems
- Domestic violence and family breakdown

Homelessness is not limited to one demographic group; it affects people of all ages, genders, races, and backgrounds.

Homeless individuals often face significant challenges, such as limited access to healthcare, education, and employment opportunities.

Addressing homelessness requires a comprehensive approach involving collaboration between government agencies, nonprofit organizations, and communities.

**Slide 3:**

The two different types of bonds I investigated are social and sustainable bonds.

Social Bonds are financial instruments specifically designed to fund projects with positive social outcomes, such as affordable housing, community development, and social services.

Sustainable Bonds are instruments that finance environmentally sustainable projects, addressing climate change, resource management, and sustainable infrastructure.

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Both social and sustainable bonds are issued by governments, corporations, and other entities seeking to align financial investments with social and environmental objectives, and they represent a growing trend in responsible finance, emphasizing the importance of impact investing and promoting positive change.

These bonds aim to tackle societal challenges, including homelessness, by channeling capital into projects with measurable social or environmental benefits.

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So why did I choose 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

**Slide 6:**

With the help of my mentor, I filtered through more than 270,000 bond issuances to find social and sustainable bonds, along with the state and year they were issued in, and the amount that was issued.

I found homeless and population data through the US Census Bureau and the Housing and Urban Development point-in-time count respectively.

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I then analyzed the data using least square statistical regressions in Python.

**Slide 8:**

Before I talk about the results, I want to emphasize that the regressions I performed all had a 1 year lag for the dependent variables, which means that data from the previous year was associated to the current year's independent variable.

When using homeless data as the independent variable, I found two potentially significant regressions.

When analyzing homelessness per capita vs. sustainable bond issuance per capita, there was a p-value of 0.06, which is significant if we use a significance level of 0.1. However, the coefficient was practically 0, so that provided evidence against a significant relationship.

When analyzing the percent change in homelessness vs. social bond issuance per capita, there was a p-value of 0.012, and a coefficient of 0.0018.

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Again, keep in mind that the dependent variables have a 1 year lag.

Moving on to the regressions where the bond data was the independent variable, only one potentially significant result appeared.

When analyzing sustainable bond issuance per capita vs. homelessness per capita, there was a p-value of 0.084 and a coefficient of 3,610. In combination with the regression on the previous slide, there is evidence that a relationship between sustainable bond issuance per capita and homelessness does exist.

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To conclude:

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.

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Also, keep in mind that social and sustainable bonds are a relatively new industry and other remedies will be needed to combat homelessness in any case.

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Two possible questions for future research could be as follows:

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

We found a correlation, but a causal relationship can be researched in the future.

And

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

**Slide 13:**

The references I used for my data were the US Census Bureau and the Housing and Urban Development point-in-time count.

**Slide 14:**

With that, I want to say thank you for listening to my presentation, and especially for the support and guidance of my mentor, Brian Gibbons!