

Using Data to Change Public Policy

Presented By: Ivory Gao, CAS '24

Advised by Dr. Judd Kessler, Associate Professor of Business Economics and Public Policy

Transitional Grants and Loans for Teachers

Introduction

Prior research conducted in 2015, 2016, and 2017 involved researchers randomizing the amount of transitional funding, which consisted of grants and no-interest loans, to Teach For America (TFA) participants. TFA is a prestigious teacher placement program. In the initial research study, 7,300 potential teacher applicants randomly had increased financial packages offered. While most applicants did not respond to a marginal \$600 of grants or loans, an additional \$600 in loans, \$600 in grants, and \$1200 in grants increased the likelihood of highest-need applicants joining. Since applicants were not impacted by whether the funding was a grant or a loan, this suggested many applicants faced liquidity constraints. Thus, applicants could not jumpstart their careers in education.

Currently, this study is focused on following-up with these individuals. TFA does not have data on applicants who rejected TFA or TFA alumni. Rather than analyzing survey data, which introduces bias as people who left the education sector are less likely to respond to a potential survey, we are using data scraping mechanisms to analyze how liquidity impacts career choices.

Research Questions

1. How does liquidity impact career choices?
2. What are the potential benefits of liquidity on career choices and how might this help the teacher shortage dilemma plaguing the US?
3. What do TFA participants go on to pursue after their 2-year commitment to TFA ends?
4. What are the long-term impacts of TFA on participants' career trajectories and career aspirations?

Data Scraping

By searching for people's LinkedIn profiles, which provided the highest success rate at providing necessary data, I was able to collect identifying data:

- First name, last name
- Year graduated
- College
- Year applied to TFA
- Jobs held/currently at



This information was compared with an automated web scraper to ensure that the right participant's profile was being data scraped. In total, I data scraped over 4,300 profiles.

Incentivized Resumé Rating

Introduction

Prior research involved the creation of a tool called Incentivized Resume Rating (IRR). IRR aims to elicit employer preferences without bias, allowing both the recruiter and candidates seeking for a job to acquire satisfaction. Employers can evaluate hypothetical resumes and rate them. Hypothetical resumes are randomized with differing demographics, experiences, leadership, activities, etc. These hypothetical resumes are then matched to real job seeker resumes, creating incentive for both parties. IRR found that females and minority candidates are not given positive preferences, female and minority candidates must outperform male candidates in STEM fields, female and minority candidates are given less credit than male candidates for prestigious internships, firms falsely believe females and minority candidates have lower callback rates, and firms believe work-for-money jobs to be worthless.

Literature Reviews

To discover current applications of IRR, I performed 20 literature reviews. Through literature reviews, I was able to discover other ways researchers utilized IRR to differentiate taste based versus statistical discrimination. From my research, I found IRR's applications in:

- Discrimination in the venture capital industry
- Preferential differences in organ donations
- Gender differences in higher education
- Benefits of obesity in low-income countries
- How language barriers impact knowledge transfer
- Gender differences in regrades in college
- Women's willingness to pay for job flexibility
- Organ transplantation...and more

Initial Findings

I was involved with building a new tool for IRR focused on analyzing whether recruiters can accurately identify candidate demographics based upon leadership and activities in the resume (without seeing the candidate's name). I data scraped 664 resumes identifying and analyzing initial data. This data indicated a strong suggestion that leadership and activities do reveal candidates' genders and races. The following were the biggest demographic signals:

- Cultural associations
- Greek Life
- Male/female sports teams
- Famous outside organizations (i.e. Girls Who Code, Boy Scouts, Girl Scouts)

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References

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