

# The Value of Postsecondary Credentials in the Labor Market

**Researchers:** 

Amira Abulafi

**David Deming** 

Claudia Goldin

Lawrence Katz

Noam Yuchtman

Sector(s): Education, Firms, Gender, Labor Markets

**Location:** United States of America **Sample:** 10,492 fictitious resumes

Target group: Higher education and universities Small and medium enterprises Large enterprises Multi-national companies

(MNCs)

**Outcome of interest:** Employment Attitudes and norms **Intervention type:** Information Recruitment and hiring

**AEA RCT registration number:** AEARCTR-0000262

Data: Download data from the AEA

**Partner organization(s):** Center for Analysis of Postsecondary Education and Employment (CAPSEE), U.S. Department of Education

For-profit (and often online) universities account for nearly half of all postsecondary growth over the last decade, yet relatively little is known about how employers value and compare these education types. To test this, researchers randomly submitted resumes with different characteristics and post-secondary credentials to measure the impact of education type on prospective employer interest. For jobs that did not require a degree, there was no advantage to having a postsecondary credential from a for-profit institution. However, resumes with for-profit postsecondary credentials were over 20 percent less likely to receive callbacks for jobs that did require a degree.

## **Policy issue**

Employers make hiring decisions based on imperfect information often gleaned from resumes. For entry-level professions, an applicant's postsecondary education can be an important signal to a potential employer. However, both the type and cost of postsecondary education in the United States have undergone significant changes. Since the mid-1990s, public funding for postsecondary education has declined, leading to a rise in tuition prices and a coinciding increase in for-profit and online postsecondary education. In the last decade, 42 percent of postsecondary growth has come from for-profit colleges and nearly 20 percent from online education. Despite their growth, relatively little is known about how employers value and compare these emerging education types. Are employers more or less likely to express interest in a job applicant when the credential is from a particular institution?

#### **Context of the evaluation**

In the United States, job openings are increasingly publicized and responded to via job search websites. For research purposes, the name of the website used in this study remains anonymous, but it is reported to have listed around 32,000 vacancies per day, capturing approximately 20 percent of all job openings in the United States during the study period.

This study focused on the two largest occupational categories in the United States: business and health. Applicants had post-secondary credentials ranging from short, industry-relevant certificates to bachelor's degrees. Researchers further isolated the study sample to entry-level and early career positions in five of the nation's largest job markets: Chicago, Los Angeles, Miami, New York City, and the San Francisco Bay Area.



Person reviews printed resume in front of a computer in the United States,

Photo: Shutterstock.com

## **Details of the intervention**

Researchers conducted a randomized evaluation to test whether varying applicants' postsecondary credentials affected the likelihood of receiving a personalized response (e-mail or phone) from an employer, a proxy for how much employers value the credential. To evaluate this, researchers generated fictitious resumes varying applicants' credentials along several dimensions, including: institution type (public, for-profit, or online for-profit), certification type (high school diplomas, certificate, or bachelor's degree), and university selectivity based on a nationally recognized ranking. All resumes included four to six years of work experience, using real data from an online resume pool.

Between April and July 2014, researchers submitted 10,492 fictitious resumes to approximately 2,623 job openings. Four resumes were submitted per job opening, each with a different randomly assigned educational characteristic. To further evaluate the importance of demographics, researchers also varied applicant characteristics by race (white or non-white) and gender (male or female).

## **Results and policy lessons**

Out of all resumes submitted, 8.2 percent received a response. However, callback rates varied by circumstance, with the most stark effects emerging for business vacancies requiring a bachelor's degree.

No degree/certificate required: For business job vacancies that did not require a degree or certificate, there was little difference in callback rates by postsecondary type and certification. Business employers did discriminate by work history and skill, as well as by gender, with men less likely to receive a callback than women. For health job vacancies, applicants with only a high school degree were about 3.5 percentage points less likely to receive a callback than those with a certificate from a public institution. Applicants with a for-profit certification were 5 percentage points less likely to receive a callback than their public institution counterparts.

*Degree/Certificate required:* For business vacancies requiring a bachelor's degree, education type did matter. Resumes with a bachelor's degree from a for-profit institution were about 2 percentage points less likely to receive a callback than otherwise-identical resumes with a degree from a public institution. This represents a 22 percent decrease in the probability of callback from a mean of 9.1 percent for public institutions.

Resumes with degrees from selective public institutions were 4 percentage points more likely to receive a callback for high salary (above \$65,000) business positions, suggesting that employers may consider applicants from selective institutions to be a more likely match for well-paying jobs.

Online versus local degrees: Across all job opportunities, resumes with for-profit online degrees were 1.5 percentage points less likely to receive a callback than comparable for-profit resumes with local (brick-and-mortar) institutions listed. More generally, evidence suggests that resumes with bachelor's degrees from online for-profit institutions received fewer callbacks than resumes with bachelor's degrees from public institutions, regardless of selectivity.

*Employer response by race*: In contrast to past research, this study found no overarching employer discrimination by race. For jobs requiring a degree or certificate, for-profit degrees generated lower call-back rates for both whites and non-whites. However, for jobs not requiring any education credentials, nonwhite degree-holding applicants were no more likely to receive a callback than nonwhite high school graduates. These findings support previous research suggesting that race can play a role in employers' perception of the value of an applicant's education.

Deming, David, Noam Yuchtman, Amira Abulafi, Claudia Goldin, and Lawrence Katz. "The Value of Postsecondary Credentials in the Labor Market: An Experimental Study." NBER Working Paper No., September 2014.