

Can Education Protect Employment during Times of Economic Disruption?



Women with test scores above a secondary school admission threshold for preferred schools increase their years of education and entrance to university. Men increase neither years of schooling nor university attendance.



Females with scores just above an admission threshold are significantly less likely to experience a job loss during the recession than those just below. Moreover, each year of education reduces the probability of job loss.



The protective effects of education are related to worker's attributes and not to job characteristics or access to childcare. Education, in and of itself, has a protective role during downturns.

CONTEXT

In Barbados, a centralized system allocates students to each of the 24 available public secondary schools based on the Barbados Secondary School Entrance Examination (BSSEE) and families' submission of a list of ranked school choices. Students are subsequently assigned schools using the BSSEE scores and the student's gender. Higher-ranking students are more likely to be assigned to their first-ranking school.

While Barbados experienced significant declines in employment due to the COVID-19 pandemic beginning in February 2020, the country returned to nearly pre-pandemic levels of employment by November 2020.

PROJECT

The project exploits Barbados' secondary school assignment mechanism and the COVID-19 shock to determine whether education protects workers from job loss during a recession. The authors' estimates rely on rich administrative data from the BSSEE between 1987 and 2002 paired at the individual level with three survey data sources. The survey data include the 2016 *Barbados Survey of Living Conditions* and two waves of a telephone survey focused on the same sample. The first wave, held in May 2020, captured labor market outcomes before and after the pandemic's onset. The second wave, in November 2020, captured labor market conditions during the recovery.

RESULTS

As shown in Figure 1, female students attending a preferred school increased their schooling by 2.9 years, which coincides with a 24.5-percentage point increase in the likelihood of completing a university degree. For men, however, there is no impact on either years of schooling or higher education attendance.

Moreover, education protected women from job loss. Women attending preferred schools were significantly more likely to be employed during May 2020, when the economy was weak. Moreover, women who went to a preferred school and already held a job in February 2020 were 35.9 percentage points less likely to have lost a job during the pandemic (between February and May 2020). Notably, this effect is not related to fertility, childcare or women's selection into different sectors and occupations. Likewise, the effect is not related to seniority or tenure. Furthermore, as the authors compare women around the threshold of admission, their findings do not support the idea that education is a mere signal of productivity (signaling); instead, they suggest that human capital accumulation occurs through education. In contrast, as shown in Figure 2, women with fewer years of formal education were more likely to lose their employment during the COVID-19 pandemic.

POLICY IMPLICATIONS

This work showcases the importance of education for women during periods of economic crises. In particular, the accumulation of human capital through schooling can protect females from jobs losses during harsh economic times. Even though less educated workers who lost their jobs during the onset of the COVID-19 pandemic eventually recovered their jobs, their incomes did not fully bounce back. Thus, policies to increase female schooling may reduce gender gaps in labor markets in terms of both employment and income.

In addition, although several policies may attenuate the impacts of job displacements, investments in human capital may protect individuals from job displacements. These labor market effects during crises should be considered, as they may prevent the need for more expensive policies to attenuate the effects of job losses during crises.

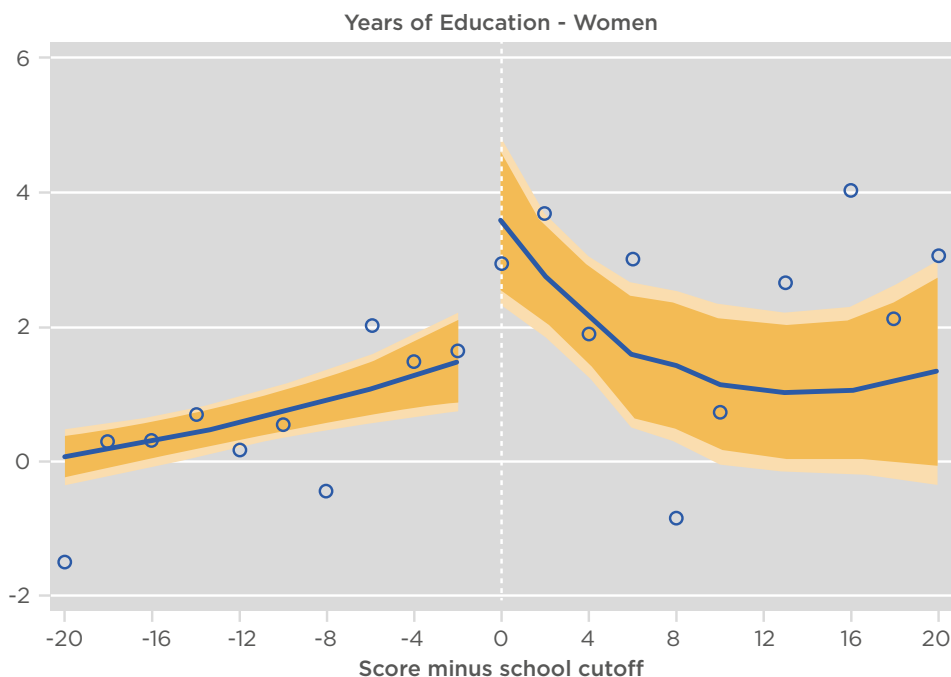
Key Concept



HUMAN CAPITAL

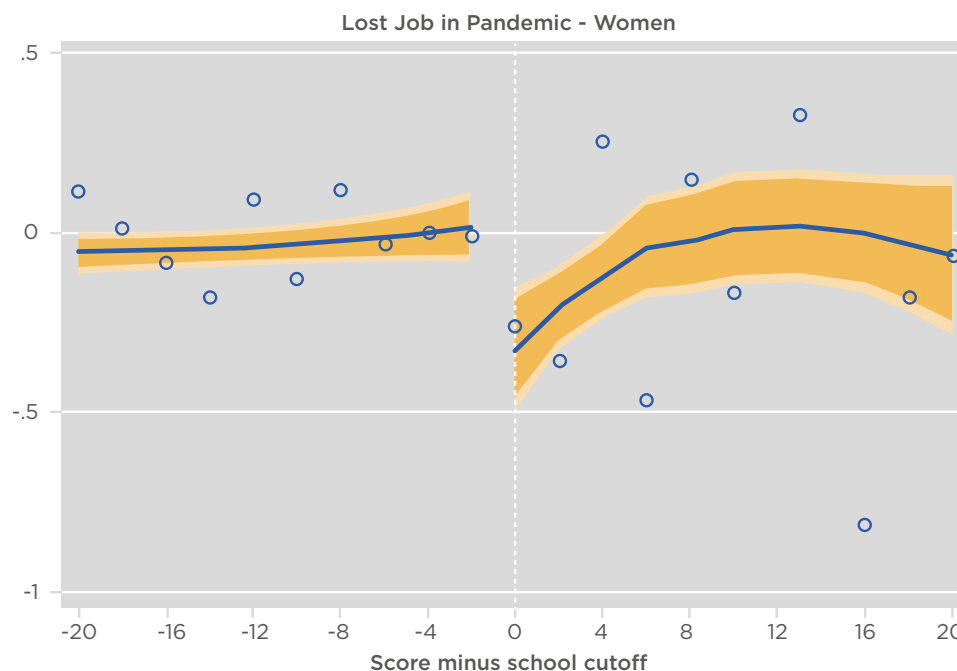
Intangible resources possessed by individuals. These include knowledge, skills, talents, and experience.

Figure 1. Years of Education around Assignment Thresholds



Note: The figure depicts the relationship between years of schooling and BSSE scores (normalized with respect to the school assignment threshold), among females. The 90 (95) per cent confidence interval of the fitted polynomial is presented in dark (light) yellow.

Figure 2. Probability of Lost Job in Pandemic around Assignment Thresholds - Women



Note: The figure depicts the relationship between the probability of losing a job during the pandemic and BSSE scores (normalized with respect to the school assignment threshold), among females. The 90 (95) per cent confidence interval of the fitted polynomial is presented in dark (light) yellow.

Key Concept



SIGNALING

Signaling occurs when one party signals to another to reveal some relevant insider information. Education and academic degrees can be seen as signals of productivity sent by candidates to employers.



FULL STUDY

[Beuermann, D., N. L. Bottan, B. Hoffmann, C. K. Jackson, and D. A. Vera-Cossio. 2021. "Does Education Prevent Job Loss during Downturns?: Evidence from Exogenous Schools Assignments and COVID-19 in Barbados."](#)

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