THE PROFESSION The Leaky Pipeline in Economics

BY HAILEY PHELPS

In 2019, Esther Duflo became only the second woman to win the Nobel Memorial Prize in Economic Sciences among the 84 laureates since the prize was instituted in 1969. Duflo shared the prize with her husband, Abhijit Banerjee of the Massachusetts Institute of Technology, and Michael Kremer of Harvard University for their work on global poverty. In her banquet speech in Stockholm, she said, "I cannot help but hope that this prize ... with one woman among the laureates, will encourage many others to come join us." Will her wish come true?

For decades, starting in the 1960s, the percentage of women studying economics and the number of professional female economists in the United States was increasing. But since 2000, that trend has stalled. The supply of women economists has been characterized as a "leaky pipeline," meaning the fraction of women in economics decreases at nearly every step along the way. According to the American Economic Association's (AEA) Committee on the Status of Women in the Economics Profession, in economics departments with doctoral programs, there are about two males for every female undergraduate economics major, two males for every female first-year graduate student, four males for every female associate professor, and six males for every female full professor. These ratios have remained stagnant over the past 10 years. (See "Where Are the Women?" Econ Focus, Second Quarter 2013.)

The leaky pipeline of women economists begins at the undergraduate level. Over the past 30 years, the fraction of women majoring in economics has not increased. There have been several theories to try to explain why women do not do so in greater numbers. One is that women, on average, simply don't like math as much as men or don't perceive math as their comparative advantage. Yet female enrollment in other math-intensive STEM fields has increased more than enrollment in economics, implying that math is not the answer.

Another explanation is that undergraduate women are dissuaded by low grades in introductory economics classes. During the Women in Economics: Progress and Challenges conference held at the University of Chicago in 2019, Claudia Goldin of Harvard University argued, "If they get below an A-, woman are less likely to pursue economics, and the fraction who eventually major in economics drops. The guys, you could hit them over the head with a baseball bat, and they would still stay in economics."

At both the graduate and undergraduate level, there are few female role models and mentors for female students which many believe help to pique the interest of women students. One proposed strategy to increase the number of women in economics is to hire more female professors to encourage mentoring relationships.

Sarah Stafford, chair of the economics department and former director of the public policy program at the College of William & Mary, agrees that increasing the number of female professors at universities would encourage more women to study economics. "I would love to get more female faculty teaching. Right now, we have four women and 20-plus men [in the economics department]."

Women also seem to face systemic barriers in attitudes within the profession. In 2017, Alice Wu, then an undergraduate at the University of California, Berkeley, wrote a senior thesis quantifying the atmosphere of the economics profession. Using text mining, natural language processing, and machine learning, Wu analyzed over one million anonymous posts on Economics Job Market Rumors, a web forum that serves as a "virtual water cooler" for discussing economics jobs. While access to the forum is not limited to economists and economics students, those who post there are believed to come mostly from economics, given its function. She found that nine of the top 10 words most associated with posts about women contained explicit sexual references. Additionally, relative to men, posts about women had 43 percent fewer academic and professional terms and 192 percent more terms related to physical attributes or personal information.

Following the release of Wu's thesis, more than a thousand economics professors across the country signed a petition urging the AEA to produce its own job discussion forum. The AEA responded by announcing that a moderated discussion forum and a new draft code of conduct were in the works. Since then, the AEA has encouraged its members to use EconTrack, its job market information board, and EconSpark, its economics discussion forum.

Increasing gender diversity in economics could influence policy discussions. For example, on average, women historically have gravitated more than men toward labor economics, education, health, and industrial organization. A 2014 study of AEA members revealed stark differences between male and female economists' views on issues such as the minimum wage, labor standards, health insurance, and the gender wage gap.

"The economics profession can be a powerful platform to have your perspective on social issues heard," says Arantxa Jarque, a senior policy economist at the Richmond Fed. "We need to ensure that more women and underrepresented minorities are aware of this path and feel welcome to bring their voices and talents into our profession and into policymaking. We all stand to benefit."