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DISCUSSION PAPER SERIES

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ABSTRACT

Inequality in the Economics Profession

This chapter presents evidence of the challenges faced by women and underrepresented minorities in Economics. It, first, examines the demographics of the economics profession, highlighting significant disparities in representation. Despite some progress, under representation remains prevalent at different educational levels and at higher academic positions, for the most part. Subsequently, the chapter reviews research on existing barriers and biases contributing to this under representation. Recent work has emphasized the crucial role of attitudes and institutional practices throughout the career pipeline. The chapter highlights evidence of these barriers across different stages of the academic journey, including research endeavors, publication processes, employment opportunities, and promotion and tenure considerations, as well as recent developments related to COVID-19 and the #MeToo movement, which have further influenced discussions on inclusivity and diversity in the field. This chapter underscores the continued need for collective efforts from the economics community to confront these barriers through targeted research and innovative interventions. By enhancing the experiences and opportunities for underrepresented academics, the field of economics could be enriched through fostering a broader range of perspectives, which could also facilitate a deeper understanding of complex societal issues. In line with this objective, the chapter also provides valuable data sources that researchers can utilize to investigate disparities and offer information about collectives and programs dedicated to promoting inclusivity and diversity through mentoring initiatives, research grants, and other forms of support.

JEL Classification: A11, A20, J15, J16
Keywords: gender, minorities, economics, tenure, promotion, COVID-19

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1 Introduction

The gap among professional women's and minority groups' wages, promotions and their representation in entrepreneurial and top positions remains significant (Bain&Company (2019); World Economic Forum (2020)). Despite some improvement in the recent past, this is principally also the case for jobs associated with the **STEM fields** (science, technology, engineering, and mathematics). In particular, women (Feld et al. (2022); Nadeem (2021)) are less likely than men to enter STEM-oriented industries and when they do enter these fields they have substantially lower wages (Buffington et al. (2016)). Among minority groups, women of color are the most underrepresented in those fields (Gabster et al., 2020).

These gaps are also prevalent in academia, a niche but highly skilled labor market. The representation of women in the sciences has improved substantially over the last decades from less than 12% of all active authors comprising women across academic disciplines in the 1950s to more than 30% in recent times (Long, 2001; Huang et al., 2020). Nevertheless, acute gender disparities remain, particularly in the hard sciences. Non-white women are less likely than other women or men to earn doctorates in life sciences, physical sciences, mathematics, computer science, and engineering (NSF, 2017). Although social sciences have been relatively more representative than STEM fields (Long, 2001; Huang et al., 2020), the field of Economics remains an exception. It is similar to STEM fields (and other math-intensive fields) in this respect and it is consistently one of the least representative fields in terms of the presence of women (Bertocchi et al., 2021; Lundberg, 2020) and underrepresented minority scholars (URM). The definition of what constitutes the underrepresented minority (URM) category might differ based on the region and context, but it broadly refers to Black, Hispanic, American Indian/Native Alaskan (or "AIAN") and other indigenous groups that are typically categorized as so in the American context (NSF, 2017). The American Economics Associations' Committee on the Status of Minority Groups in the Economics Profession (CSMGEP) follows a similar categorization (Bayer et al., 2020c). Lundberg (2020) notes that before it stagnated in the 1990s, the representation of women grew substantially in the 1970s and 1980s due to the surge of feminist activism and the drive to promote the inclusion of **women in academia**. The views of many influential economists in the past, biased against marginalized groups (broadly reflective of the culture and ethos of the time) may have shaped the discipline's culture and kept women and URM scholars away. For example, Alfred Marshall cautioned against increases in women's wages that might tempt wives and mothers to neglect their household duties (Pujol, 1984). Arthur Cecil Pigou expressed the belief that women possessed physical and intellectual inferiority compared to men and controversially advocated for maintaining lower wages for women, asserting that such an approach would lead to maximum societal well-being (Strober, 1994). Edgeworth (1922) claimed that males would earn more than females even if "all restrictions on the competition between male and female workers were removed." At the moment, the share of females in economics departments at universities is like those of mathematics and engineering, and at some levels of the professoriate, it is even worse (Lundberg and Stearns, 2019). At the undergraduate level, the gender gaps are closing, but in other sciences faster than in economics (Emerson et al., 2012).

There has been substantial work documenting different barriers faced by women and other **underrepresented minority scholars** across different stages of academia in Economics (from undergraduate students to representation on faculty and research). These include: the lack of resources or monetary factors (Webber and Burns, 2022); feeling of imposter syndrome among URMs (Chakraverty, 2020); discrimination and exclusion (Hofstra et al., 2022); stereotypes (Leslie et al., 2015); preferences and attitudes (Niederle and Vesterlund,

2011); lack of confidence (Ramirez-Espinoza, 2022), and skill gaps owing to differences in opportunities and resources (Alesina et al., 2019), among others. Given that discrimination and the lack of representation is bad for quality,in order to give more light to the topics, we provide an overview of the selected literature.

While there have been some round-ups or syntheses on these topics in the recent past, especially with respect to the "stalled progress" for women (see Lundberg and Stearns (2019) and Lundberg (2020)), the literature on this topic remains vast. It is moving both fast and wide – exploring and documenting newer barriers, covering the underrepresentation of different groups across different stages, utilizing newer datasets and methodologies to understand the barriers, and the impact of newer developments and challenges (such as more recent COVID-19-induced changes or the increasing discussions around **sexual harassment** significantly propelled by the **#MeToo movement**). The goal of this review is to synthesize this newer evidence.

This chapter provides critical insights into the patterns, barriers, and important questions that might be of interest to students, practitioners and researchers. The literature covered in the review focuses on women's disadvantages and on those that are underrepresented based on race, ethnicity, and region. There has been growing evidence on experiences based on race and ethnicity, but the identification and categorization of groups has been more challenging than gender-related identifications. This review list is not exhaustive and is limited by the focus on the underrepresentation of women and URM groups in the US and Europe that is more prevalent in the literature. It highlights the significance of country of origin and nationality as a critical dimension of inequality in economics, with notable implications for representation, research focus, and inclusivity but research on this aspect remains limited compared to studies on gender and racial disparities. There are several other groups pertinent to specific regions and geographies that also face inadequate representation in the field and that have not been explored in this review. For example, several **caste-based groups** are underrepresented in the Indian context. However, despite the lack of representation being documented at a larger scale or institutional level (e.g.- Joshi and Malgan (2017)), systematic evidence on their share as PhDs, faculty or in research within economics is not available (Dongre et al., 2024).

The chapter is structured as follows: Section 2 briefly summarizes and reemphasizes the need to study the lack of diversity in the field and to work towards making amends. Section 3 summarizes the evidence on the representation of women and minority scholars along career stages and fields of specialization in the Economics profession. Section 4 covers the literature on the biases and barriers faced by scholars entering and traversing the career pipeline. Finally, section 5 concludes and discusses the ongoing efforts to improve the representation and experiences of underrepresented scholars. It provides resources and information about data sources used in papers to serve as a repository for future researchers.

2 Why is it important to study the lack of diversity? 'Fairness' and beyond

A more diverse academia is better, not just because of "basic fairness." Diversity in the background influences how a discipline is shaped – through different research areas, questions and methods; reflecting society's priorities (Yellen 2019). The lack of representation of women and URM groups in Economics detrimentally affects academic scholarship, and public policy (Lundberg and Stearns, 2019; May et al., 2014; Mester, 2019) and is considered elitist (Fuentes et al., 2023). May et al. (2014) find differences in views among females and males

on important issues such as minimum wages, health, labor standards, what explains the gender wage gap and others. Uruguayan economists also find women economists to have less pro-market views than men, with gender differences in competitiveness explaining part of this gap (Amarante et al., 2024). This is an important point given the substantial influence of economics on public policy and the lack of female representation therein (Fourcade et al. (2015)).

Women compared to men want economics research to be more policy-relevant, "disruptive," more interdisciplinary and applied (Andre and Falk, 2022; Bayer and Rouse, 2016). Greater representation of groups will lead to newer perspectives (Nunn, 2019) and diversified collaborations from different regions and racial groups will lead to more impactful scholarship (Freeman and Huang, 2014; Bayer and Rouse, 2016) and wider set of research topcis. Further, the lived experience of individuals with differential backgrounds can be leveraged for deeper expertise in policy (Witteman et al., 2021). The presence of these individuals across various stages of the **academic pipeline** facilitates access to new ideas and may help the discipline to becomes more robust and relevant. This process starts with studying the drivers of under representation in undergraduate courses and continues with the analysis of outcomes of Ph.D. students, their sub-fields selection, their output as researchers, and progress at senior levels (including tenure and promotions). Yet, focusing on attrition at different stages may not be enough, as the desirable target is "not the current share of composition but what we aspire to achieve" (Doleac et al., 2021).The distinction between underrepresentation, discrimination, and bias needs to be recognized - as these are interconnected yet distinct challenges that shape diversity in economics. Underrepresentation may refer to statistical disparities in the presence of certain groups. Bias encompasses subconscious or conscious prejudices that often underlie discriminatory practices, while discrimination would involve active unfair treatment, though it may not always be explicitly recognized as such. Earlier literature often attributed inter group disparities to either preferences or discrimination, decomposing differences into components explained by observed characteristics and those left unexplained, which were attributed to discrimination or unobserved productivity factors. However, such dichotomies fail to account for systemic factors like socialization and institutional structures that shape both preferences and outcomes. These systemic dimensions are discussed further in Section 4.

As often discussed, quotas are advocated as a potential solution that could serve as an initial step to increase diversity and create role models for future generations. However, their implementation must be approached carefully to balance fairness with meritocracy and address deeper, systemic issues. The biases and barriers explored in later sections —such as institutional hurdles, implicit biases, and structural inequities cannot be resolved by quotas alone. They should function as part of a broader, sustained strategy which would include mentorship programs, increased funding for underrepresented groups, and institutional reforms designed to dismantle these barriers at their root. A holistic approach like this ensures that diversity initiatives not only improve representation but also foster an environment where underrepresented groups can thrive and contribute meaningfully to the discipline.

3 Diversity in the Economics profession: career ladder, fields of specialization and native researchers.

3.1 Representation in graduate and undergraduate programs

The under representation of women and URM can be observed in both graduate and undergraduate programs in the US, the UK, the EU, as well as in other countries. The share of women pursuing undergraduate economics majors in the US between 1970 to 2022 has remained stagnant at about 30-35% (Lundberg and Stearns, 2019; Blau and Lynch, 2024). The share is slightly higher in Europe and the UK at around 40% (Advani et al., 2020; Megalokonomou et al., 2021). The numbers are higher in countries such as India (close to 50%), where a much higher attrition rate is observed after the PhD (Dongre et al., 2024). Using the Research Papers in Economics (RePEc) database, Berland et al. (2022) find that the overall share of women graduating with PhDs globally was around 26% in 2021, a significant improvement from the 1970s to the 1990s when it was under 10%, but at the same time this number has stagnated at around 30% over the last few decades (Blau and Lynch, 2024). When it comes to completion rates, Stock et al. (2011) find a 15-percentage point predicted gender gap (within eight years since entry), favoring men. They find a similar predicted gap between US and non-US citizens, favoring the former.

American PhDs in Economics continue to be one of the least diverse groups and have one of the lowest shares of **URM** scholars compared to other fields (NSF, 2022). While the student body remains diverse in terms of citizenship (comprising less than 50% of US citizens), it does not in terms of ethnicity. Hispanics comprise less than 7% of recent PhDs and Black scholars only around 3% (their shares in the overall population are around 20% and 13%, respectively); less than 1% of Black women are present among recent cohorts of PhD. economists (Buckles, 2019). There has been a particularly stagnant share of **Black men** among economics PhD's, and **Black women** in undergraduate economics programs during 1996-2015, with Black representation in undergraduate mathematics programs (one of other top majors for the economics doctorate pipeline) on a decline in recent years (Sharpe, 2019).

The share of **Latin-a/o** (referring to people bearing a Latin American identity), **Native American**, and Black students at the undergraduate level stands at 17% (Bayer et al. 2020). In the UK, undergraduate Economics is relatively more popular among ethnic minorities (non-Whites) than in the US. In 2018, non-Whites comprised nearly 40% of Economics undergraduates. However, the willingness to pursue further studies is low, with Black students, especially Black females, significantly underrepresented relative to their population share (Advani et al., 2020). Fuentes et al. (2023) also highlight the "elitist" nature of the subject in the UK and find that top-ranked universities in the country tend to have a significant over representation of white male students from privileged economic backgrounds. Economics, even though it is the most internationally diverse field, it remains the least socioeconomically diverse (Stansbury and Schultz, 2022) with economics PhD recipients having highly educated parents. In other disciplines there is also a widening socioeconomic gap.

3.2 Representation in academia and as faculty (post-Ph.Ds.)

In economics academia, the representation of women and URM declines along the career ladder, which is known as the leaky pipeline and is also prevalent in other domains. The phenomenon is well-known in the US, but is also prevalent in the EU and other countries. Foster et al. (2023) find women comprise 33% of **economics academia** based on 2001-2017 data from the Survey of Earned Doctorates (SED) and Longitudinal Employer-Household Dynamics (LEHD) in the US. Among these individuals, less than 25% of tenure-track faculty are women and fewer than 15% are full-professors (Lundberg and Stearns, 2019). Based on institutional websites, Auriol et al. (2022) find a relatively higher share of women economists in top European institutions compared to the US. These institutions comprise of over 32% of academic departments and include almost 40% entry-level positions (such as assistant professor and postdoc) and about 27% senior level posts (full and associate professors). Similar shares are found in Australia and New Zealand (35% overall and about 27% for senior positions), although Cassells et al. (2023) find that only 12% of full professors are women. In India, the share of women as faculty in **elite institutions** remains at more than 30% overall (Dongre et al., 2024). Women in India make up over 50% of Bachelor's and Master's levels, but their representation decreases during the transition from Master's to PhD and from doctoral degrees to faculty positions, influenced by societal norms, post-marriage expectations, and challenges faced by marginalized individuals. In the US, women are overrepresented in lower-ranked institutions (Ghosh and Liu, 2020; Boustan and Langan, 2019), with their share as faculty in 'top' universities being less than 20% (Sturm et al., 2020).

The underrepresentation of minorities including Hispanic and Black scholars is even more severe than that of women. Despite comprising 30% of the overall population in the US, only a little over 6-7% are tenure-tracked faculties (Bayer and Rouse, 2016; Bayer et al., 2020a). Foster et al. (2023) find the share of Black economists to be less than 5%. Price (2009) refers to this persistent underrepresentation of Black economists in faculty positions as the **"color-line" problem** and finds less than 50 Black economists out of more than 100 Ph.D. granting institutions in 2006.

In contrast, minorities of **Asian origin** are relatively overrepresented among faculties in the US with a share of 13% (compared to less than 5% of their overall population share). The numbers were much lower a decade earlier, indicating substantial improvements in terms of representation for this group.

In the UK, Advani et al. (2020) find that minority scholars (i.e. of non-white ethnicity) are less likely to be in academic positions, especially senior positions, in the prestigious **Russell Group institutions**. More broadly, women, non-white, and URM scholars are much less likely to become elite research faculty (Hofstra et al., 2022). While ethnic diversity among academic economists in the UK is increasing, it is mostly driven by Asian minorities (Advani et al., 2021).

3.3 Representation in government and policy jobs (post-PhDs)

Another important avenue for postdoctoral placements for candidates in the US are jobs in government and in policy - making - particularly in **federal government** institutions. (Note: Almost 1/2 of PhD recent graduates in Economics find jobs outside of academia.) According to Foster et al. (2023), a higher share of women and minorities are employed in

the government or public sector compared to academia – women comprise 38% in the public sector and Black scholars about 5%. Wessel et al. (2021) find that in 2020, 29% of PhD economists employed in the federal government to be women. Women from top ten schools are also more likely to be in the public sector relative to men, and those in the top 11-20 category are more likely to take private sector jobs. When it comes to minorities, they find 26% of federal Ph.D. economists to identify as such (with only 1.3% Black scholars).

3.4 Representation in the private sector (post-PhDs)

There has also been an increase in post-PhD placements outside of traditional academic and policy institutions, especially in tech and finance corporations. This is especially the case for PhD students in the US, where companies like Meta (Facebook), Amazon, Uber, and others have been increasingly hiring economists, especially from top US PhD economics departments. Data from 2022 suggest that almost 1 in 7 PhD's from the top ten programs were hired by **tech firms** (Economist, 2022). These companies are more likely to have a relatively higher share of men, both in tech and in leadership jobs (Statista, 2021), and consequently are creating a new source of disparities (GlobalData, 2021; Liu, 2021).

These jobs offer a much higher pay compared to academic and policy jobs and many of the tech employers support academic research within the company (Chen, 2020). How these employment shifts translate into **career trajectories** across groups is an interesting topic for future research. In particular, gaining a better understanding of how differential attrition among women and men affects subsequent steps of their career ladder.

3.5 Representation of sub-fields and topics within Economics

Economics as a discipline is extremely vast and encompasses various topics and fields. Curiously, women and men tend to cluster in certain specialization encumbering diversity in the field. Research on sub-fields within economics is limited because it is difficult to conceptualize (Altonji et al., 2016) and data are often lacking or are difficult to collect. Despite these challenges, there is some work on the topic and an uneven distribution across fields based on gender has been noted for published work, dissertations, conferences, and seminars (e.g.- Dolado et al. (2012); Hale and Regev (2014); Hospido and Sanz (2020); Fortin et al. (2021); Sierminska and Oaxaca (2021); Chari and Goldsmith-Pinkham (2017)). Findings indicate that male authors are over-represented in microeconomics and macroeconomics, and female authors are over-represented in labor and development economics (Onder and Yilmazkuday, 2020). Specifically, there is a higher share of women in labor, health, and education compared to macro, monetary, and econometrics (Meade et al., 2021). A similar pattern is observed among fields represented by women and men at prestigious economics conferences (Chari and Goldsmith-Pinkham, 2017). However, more concerning is the fact that once social, economic, and institutional aspects are controlled for in regressions, women are less likely to specialize even in labor and health (Sierminska and Oaxaca, 2022). According to recent studies, non-pecuniary determinants and preferences play a major role (Beneito et al., 2021; Sierminska and Oaxaca, 2021) in determining field choice (See section 4 for a discussion on preferences). Studying field choice is important for understanding numerous differences noted in economics. Particularly, since differences in performance in different sub-fields emerge already at the undergraduate level - with females performing better in microeconomics and males performing better in macroeconomics (Beneito et al., 2021). In later

outcomes, differences in **field specializations** explain differences in placement outcomes, especially for those not from top-ranked schools (Fortin et al., 2021).

Recent research has shed light on the relationship between URMs and research topics in economics. Antman et al. (2024a) find no evidence that URM focus on research in more race-related topics once controls are included (but they are more likely to focus on unconventional sub-fields). They also find that women are more likely to work on inequality and gender issues and there is a rise in gender-related research over time, particularly among women. Women are increasingly pursuing topics related to gender across various sub-fields in economics (Antman et al., 2024b). This trend is also seen by rising interest in gender topics among men.

3.6 About Us, Without Us

Another key issue is the underrepresentation of voices from marginalized groups in published research. This section highlights the experiences of scholars from developing economies and Black economists studying race topics.

Authorship in academic journals often skews toward researchers from outside the regions they study. **Developing country** authors are underrepresented among all authors (Greenspon and Rodrik, 2021). Even within journals publishing on development issues, less than 15% of articles are by researchers from developing countries (Cummings and Hoebink, 2017). Whether this could be explained by quality is to be confirmed.

Similarly, researchers from Africa are severely underrepresented in publishing in development journals focused on Africa (Cummings and Hoebink 2016), and researchers from the ***global south*** are vastly underrepresented as presenters in prestigious conferences and authors of top development journals (Amarante et al., 2021). Chelwa (2021) finds that only a quarter of articles in leading economic journals that publish on Africa had African-based authors and a limited representation of African-based academics in their editorial board. Angus et al. (2021) find a positive correlation between the geographic diversity of a journal's editors and the diversity of its authors. At the same time, half of the editorial power in economics journals is concentrated in the USA.

The exclusion of researchers performing research on their region may lead to problems such as reliance on a narrow set of theories and research questions (Chelwa, 2021).

The concentration of researchers by country, on the one hand, and discrimination based on ethnicity on the other, has been highlighted when it comes to citations. Research (on race and crime) by Black scholars in a prominent outlet for the economics of race (Review of Black Political Economy), for example, has been found to be under-cited and "undervalued" (Gaule and Piacentini, 2018). This further points to the need for more diversity within the discipline and its sub-fields to broaden the discourse. Black authors are 13% more likely to report a finding of racial discrimination against Blacks (Mason et al., 2005). Economics, in general, produces far less race-related research than other social sciences. Since 1970, there are less than 2% of articles related to race in Economics, compared to 4% in political science (since the 1990s) and 12% in sociology (in recent times) (Advani et al., 2020, 2021).

Another concern highlighted, which potentially occurred because of the lack of adequate representation, is the treatment of the race and gender variable. Race as a topic is not just underrepresented (possibly due to fewer Black scholars studying it), but traditionally has

been studied within economics, divorced from more nuance. This has often led to the fallacious assumption of the inferiority of African Americans ("until proven otherwise"), most recently highlighted by William Springs in his open letter to Economists (Spriggs, 2020). Hu (2019) also shares concerns regarding assuming race as exogenous (i.e., not affected by other variables in the model) in a situation where the studied race "are carried forth via a longer chain of mediators". Hence, the issues around using an **'all-else equal' approach** by creating counterfactuals to study discrimination may provide limited insights. Lundberg (2022) warns of "analytical shortcuts" and "loose assertions of causality", and of using 'essentialist' arguments (e.g.- a dislike of math explaining lower representation of women in STEM). On a positive note, there has been increasing recognition and inclusion of social, cultural, and historical norms as factors when exploring group-based differences (e.g.- Bertrand (2020); Jayachandran (2021); Hu (2019); Foster et al. (2023)). See Lundberg (2022) for a more detailed discussion on these topics. Encouragingly, research papers on gender and race-related inequalities have seen a substantial increase in the last few decades (Horpedahl and Kling, 2020).

4 Biases, barriers and preferences along these stages

Much of the initial research on the under representation in the field has focused on the "supply-side" aspects which, although useful to leverage, are not sufficient to understand (and consequently address) the lack of diversity in the discipline (Lundberg, 2020). The literature about the "supply-side" factors on varying representation has often attributed differences to varying preferences among the groups. Meanwhile, understanding explicit and implicit barriers at the institutional level and other demand-side factors are, equally, if not more important. More recent research has highlighted the need to recognize preferences as endogenous (i.e. choices shaped by social norms, for example) or as an **omitted variable**. The attribution of choices to preferences incorrectly minimizes the role of **internalized norms** and constraints that shape preferences in the first place (Akerlof and Kranton, 2000; Nollenberger et al., 2016; Jayachandran, 2021; Lundberg, 2022). See Lundberg (2022) for a detailed discussion on the appeal to move away from a "reductive" dichotomy of *preferences* and *discrimination* (see Nelson (2015) for examples). It will be incomplete to see preferences disconnected from how they are shaped - through "cultural traits" (Bowles, 1998) or "internalized norms" (Akerlof and Kranton, 2000), "avoidance of penalties" and impacted and transmitted by social networks, family, and culture (Nollenberger et al. (2016); Jayachandran (2021); Lundberg (2022)).

Social identities can be quite rigid and overcoming them or deviating from what is expected from the identity (whether gender, race or ethnicity) can be difficult. Encouragingly, the variance across contexts and time indicates their malleability (Bertrand, 2020; Thaler, 2016; Dhar et al., 2022). This is true for economics academia as well, as elucidated in some of the examples of interventions that have improved women's participation. This disciplinary preference, of assuming preferences to be exogenous is what Lundberg (2022) notes as the "heavy price" paid that has led economics to be isolated from the other social sciences.

Economics academia has been often noted to be a "less welcoming" profession for women and minorities, with women from underrepresented groups facing a "double burden" due to race – and gender–based discrimination (Allgood et al., 2019) and has been found to have a "toxic culture" (Lundberg and Stearns, 2019; Wu, 2018). Bayer et al. (2020c) highlight how minorities are more likely to face a "**hostile climate**" (based on faculties reporting

often facing discrimination, subtle racism and disrespectful interactions with their peers and students), which affects representation and constrains the types of questions studied. Around 50% of Black economists among those who responded to a survey conducted by the American Economic Association reported facing unfair treatment due to their race (compared to less than 5% for White respondents, and around 20% for Latin-a/o and Asian economists) (Allgood et al., 2019). Similarly, more than 50% of Black, Asian and Latin-a/o economists reported feeling social exclusion, which was much higher than among White economists.

4.1 Publications and Research

Conducting research and publishing is the most relevant task for an academic career and strongly determines individual success - whether at the stage of hiring or for tenure and future development. When it comes to publishing in top economics journals, Hengel (2022) notes the dismal share of women, i.e. less than 10% authors per paper since the 1950s. One of the reasons for this could be the fact that women are held to higher editorial standards by being evaluated more critically, which results in them taking longer to publish (Hengel, 2022; Card et al., 2020). Although, Abrevaya and Hamermesh (2012) find no evidence of gender bias among referees when assessing authors, nor of an interaction between referee and author gender. When published in top journals, women's work is found to be less likely cited by top journals and by men (Koffi, 2021).

The output of women is similar to men at the initial stage of the career, then it is higher and then falls with academic age much sooner compared to men (Sturm et al., 2020). Despite the fact that women spend more time on administrative work and less time doing research, relative to men according to Link et al. (2008) and Baccini et al. (2014). These disparities may be due to factors such as differing preferences, teaching or service assignments, and the overall **institutional culture**. Men work in smaller teams and have more co-authors, which is indicative of gender sorting (Davies, 2022). Women, on the other hand, contrary to men get penalized for co-authoring contrary to men and receive less credit for their work (Sarsons et al., 2021). The cycle of disadvantage also perpetuates in other ways. Women are more likely to be in lower-ranked departments, are matched with less productive co-authors and have more concentrated co-authoring networks (Ghosh and Liu, 2020; Ductor et al., 2018). This can be detrimental for female PhD students and advisors in a situation where research in top economics journals is concentrated among men (Goyal et al., 2006) and in the job market, where students of "star" professors are likely to be seen as star candidates (Rivera, 2017). This mechanism leading to productivity differences is pervasive across other disciplines (Huang et al., 2020) – where factors like environment, rank, career absences, and family responsibilities among others are considered important in determining productivity. Yet, gender gaps conditional on productivity are larger in economics than in other academic disciplines (Lundberg and Stearns, 2019). Male applicants are more successful in getting grants, with differences being most prominent in Social Sciences compared to other fields (van der Lee and Ellemers, 2015). They find that gender disparities were evident in the evaluations conducted by the committee, specifically in terms of how they prioritized the quality of applicants as researchers (while overlooking the quality of their research proposals) and the language employed in instructions and evaluation sheets. Although, the higher engagement in **domestic responsibilities** such as childcare and housework are often used as explanations for productivity gaps – unlike in other fields, in economics, these gaps also exist among those without children (Lundberg and Stearns, 2019).

4.2 Seminars and Conferences

The under representation of women and URM persists when it comes to seminars and conferences. Doleac et al. (2021) find women and URM scholars to be less likely invited as seminar speakers. Based on data collected from seminars conducted across over 60 economics departments in the United States between 2014 and 2019, women account for only about 23% of speakers and URMs account for less than 1% of speakers. Researchers from the 'global south' are also vastly underrepresented as presenters at prestigious conferences (Amarante et al., 2021). Dupas et al. (2021) find that the environment in seminars and classrooms tends to be more hostile towards women, especially during job market talks. Handlan and Sheng (2023)), based on presentations made in the NBER Summer Institute in 2022, find female economists are less likely to receive positive treatment, even from other women. Based on in-depth interviews conducted with women economists in India, Dongre et al. (2024) find that particularly in sub-fields predominantly occupied by men, they frequently encounter patronizing questions and unsolicited advice from their male counterparts . Women also face much higher risks of sexual harassment and **unwelcoming environments** at professional forums such as conferences. This is discussed in more detail in section 4.5.

4.3 Peers, Role Models, and Mentorship

In economics, the problem of the lack of role models and subsequent **"path dependence"** (The tendency to base outcomes on prior habits, decisions, and actions rather than current circumstances.) has been identified as one of the reasons for a relative small share of women in the field, as there are few female professors that can attract female students. In other papers, an increase in female faculty in a department has been associated with an increase in female PhD students (Hale and Regev, 2014; Boustan and Langan, 2019). The lack of role models and networks is also one of the significant challenges faced by URM scholars in Economics (Bayer et al., 2020c).

More peers and role models can improve the experience of under represented groups (Bayer et al., 2020b). Students exposed to successful women majoring in economics in introductory classes are more likely to pursue additional economics courses (Porter and Serra, 2020). Avilova and Goldin (2018) find that providing more information and mentoring, combined with additional exposure to role models led to a substantial increase in female students taking economics as their major at the undergraduate level. Female economics majors assigned to female advisors are also less likely to drop out in their first year and are more likely to complete their degrees (Canaan and Mouganie, 2021). Role models matter especially when it comes to pursuing mathematics and statistics courses by women (Bettinger and Long, 2005; Mansour et al., 2022) – fields where women are also underrepresentaed.

Women are significantly less likely to be represented in introductory economics textbooks which may cause further alienation. Stevenson and Zlotnik (2018) find that men account for more than 90% of mentions of economists and policymakers in these textbooks, while women are more likely to be mentioned in relation to fashion and food, and in the examples given are shown to take fewer decisions.

Even in other disciplines, students working with the same gender are more successful. For example, Gaule and Piacentini (2018) find female students working with **female supervisors** in science to be more likely to become faculty in the future. Women and URM scholars in non-STEM fields have higher chances of becoming elite faculty when they are in departments with a higher proportion of women or URM faculty members (Hofstra et al.,

2022). On the other hand, women in the US that do not have **female peers** are less likely to finish their PhDs within 6 years (Bostwick and Weinberg, 2022). Being exposed to more female peers and professors is useful for yet another reason. Paredes et al. (2023) find that economics students with greater access to female peers and professors tend to have less gender bias compared to those in other fields.

The presence of female and URM peers is also important when it comes to mentorship and student outcomes. Rose and Shekhar (2023) find that student's advisor's connectedness in academic co-author networks significantly improves students' job market outcomes. When it comes to mentoring, Milkman et al. (2015) find that faculties are more likely to respond to email requests made by white males compared to other categories of students. This is based on an experiment of sharing similar profiles of prospective Ph.D. students with professors from almost 90 disciplines in the US.

4.4 Hiring, Tenure and Promotion and Pay

Biases also exist in the **academic job market** and can have long-lasting consequences on career development. The biases begin with for example, reference letters written by senior academics. Letters are an important part of the job market package providing signals regarding people's research and/or teaching abilities to the prospective employer. Eberhardt et al. (2022) analyze applications received by a prestigious research university in the UK from 2017-20 and find that "grindstone" terms like "determined" and "hardworking" are more likely to be used for women, while ability terms like "brilliant" and "creative" and standout terms like "rare" or "outstanding" are used for men. This has consequences for their career prospects. Baltrunaite et al. (2022) find similar results for ten cohorts of PhD students with differences in letters primarily being driven by male advisors. They also find that these letters negatively affect future career outcomes of women. Several other authors also find that women are more likely to face discrimination, differential treatment, and biases during the hiring process (Lundberg, 2022; Lundberg and Stearns, 2019; Auriol et al., 2022; Milkman et al., 2015) leading to more difficulties in obtaining jobs by women.

The **promotion gap**, which refers to the disparity between women and men in the rate at which they advance to higher positions within an organization, is one of the largest across disciplines in Economics (Ceci et al., 2014), and exists even among top economists (Zacchia, 2020). When it comes to tenure, findings indicate that women who finished their PhDs in the 1970s and 1980s in the US are almost 20 percentage points less likely to receive tenure than (similar) men (Ginther and Kahn, 2004; Lundberg, 2020). Over time, this gap has substantially declined, although female economists are still less likely to receive tenure and are more likely to opt-out of the tenure track. The gaps are more pronounced for those from foreign origins in the US (Chen et al., 2016, 2022). This can also be due to the fact that women get penalized during tenure consideration for co-authoring (Sarsons et al., 2021; Hussey et al., 2022).

There are also greater gaps in post- PhD salaries for women compared to men across all races and ethnic groups (Webber and Canché, 2015). This could be related to the lower mobility of women across jobs and regions due to gender norms, family constraints and others. These are constraints, which men are not as bound to. In federal jobs in the US, female economists earn 12% less than their male counterparts, while Black economists earn at least 15% less than white economists (Foster et al., 2023). —Dilmaghani and Hu (2024) find that in Canada, women economics faculty earn significantly less than men, with the gap being most pronounced at the full professor level. In this light, Obloj and Zenger (2022) find

that pay transparency could help reduce pay inequality in academia.

Some authors claim that broader social norms continue to reinforce the notion of women as primary caregivers for children and are likely to contribute to lower chances of academic success — for **tenure-track** jobs, tenure, and promotions (Wolfinger et al., 2009; Webber and Canché, 2015). Lassen and Ivandić (2024) reveal that while both men's and women's career trajectories in economics are affected by parenthood, women are more likely to leave research completely. The study also finds a gender gap in promotion to tenured faculty in the years following parenthood. No wonder that **gender-neutral policies** for pausing tenure clocks did not work and further reduced female tenure rates (Antecol et al., 2018).

Evidence from other disciplines suggests that women also face poorer evaluations and success rates in grant proposals as principal investigators (Witteman et al., 2019), and emails from URM scholars and women are more likely to be ignored (Trix and Psenka, 2003). Feld et al. (2022), in the context of jobs in tech and coders, find that despite having similar skills, employers believe women to be less skilled than men.

4.5 Sexual harassment and #MeToo

#MeToo has been a watershed moment for social change about sexual harassment and abuse regularly faced by women in both professional and personal spaces. While the origin of the hashtag phrase and the beginning of the social movement itself comes from activist Tanana Burke (Ohlheiser, 2017), the collective movement only gained virality in October 2017 when Hollywood producer Harvey Weinstein was accused of **sexual-abuse**.

Within a few days of the movement springing into action, millions of (mostly) women around the world shared and recounted their stories of sexual harassment and assault on social media, often naming their perpetrators. The movement gave momentum and courage to many other women to speak up, including women in academia and in economics which "has endured its own reckoning" for some time (Shinall, 2018).

Many women came forward recounting their experiences with sexual misconduct (from peers, seniors, advisors, and others) in the following weeks and months. This led to much-needed discussions on the safety of women and furthered the discourse around sexual harassment policies and conduct on university campuses, conferences, and job market interviews, among others.

Women economists have reported facing a higher degree of harassment and inappropriate behavior in professional environments like interviews and seminars (Shinall, 2018), and face derogatory language on an online job market forum (Wu, 2018). A 2018 survey conducted among UK students revealed that over 40% of respondents reported encountering **unwelcome language** and advances from university staff, while more than 10% experienced inappropriate touching, with women being twice as likely to face such incidents (Batty, 2018). These have the risk of further perpetuating disadvantages and inequalities within the profession.

However, despite the discussions being crucial for the discipline, these have also led to some undesirable outcomes. Since the #MeToo movement in 2017, females have started fewer projects due to a decrease in collaborations with males, especially with senior or tenured co-authors (Gertsberg, 2022). This is partially due to women being more risk-averse when it comes to collaborations and men reducing (the now) higher perceived risk regarding the

uncertainty of what constitutes acceptable behavior in the workplace. These negative effects are found to be lower in cases where policies on sexual harassment are less ambiguous in defining what behaviors are prohibited. This is similar to broader evidence among business leadership, which has seen men becoming more reluctant to mentor junior women (Cheng and Hsiaw, 2022).

The costs for women economists have not deterred them from speaking out - in the second half of 2022, a second "wave" of the #MeToo movement started within the field of Economics. This movement gained momentum on social media in 2022, when several women came forward recounting their bad experiences and many economists came forward in support of the victims(Triggs, 2022; Gerson, 2022). By opening up about their experiences, women, highlighted disturbing incidents of sexual harassment faced by other economists, and the **power imbalances** within their departments, making the lack of adequate institutional mechanisms and structures to prevent and resolve complaints more conspicuous. Cheng and Hsiaw (2022) find that under reporting of sexual harassment might occur due to the uncertainty and fear that other victims may not come forward to corroborate it. Some of the costs of outing the perpetrator and the risk of facing inaction and sometime retaliation have been discussed in a tweet thread by Claudia Sahm (see Sahm (2022)).

Justin Wolfer, an economist, in a Twitter thread in November 2022, points to an extremely grim arithmetic on how daunting it can be for women even in situations where most or almost all males in the profession are "good guys." In a situation where there is a small share of women in the field, even a few harassers could lead to a high probability of junior researchers facing uncomfortable situations of unwanted advances in professional settings (such as conferences). The fear itself might lead to young female economists being wary of attending these networking events or even being more suspicious when senior male economists "express enthusiasm" about their work (see Wolfers (2022)).

In response, many scholars, universities, and institutions have responded calling for the need to create a better environment and clear policies, where sexism and harassment of all types can be reported (see Bayer et al. (2020a)). The American Economic Association, for example, provides a list of best practices for scholars (especially for professors and senior administrators/department leaders) with tips and guidelines to ensure a more inclusive environment and one that firmly deals with instances of harassment and discrimination. For more details, please see the section - "Best Practices for Economists" on the American Economics Association website.

4.6 COVID-19 and the exacerbation of disadvantages

The recent **COVID-19 pandemic**, induced personal and professional disruptions, which have further exposed (and in many cases likely exacerbated) the existing inequalities and disparities in the field. The effects of the pandemic continue to be realized and its consequences may persist in the long-term. Early evidence on the impact of these disruptions suggests that there have been disproportionate burdens on women. Women have been more overworked at home and **racial differences** in economic and health outcomes have been observed during the pandemic (Sharma, 2020). The **economically disadvantaged**, Black and Latin-a/o students have faced more education loss (World Bank 2020), and women (relative to men) in academia published fewer articles and received fewer grants due to the higher burden of childcare (Alon et al., 2020; Deryugina et al., 2021). Further, female lecturers were evaluated more poorly during online classes; the lower evaluations were driven by males and low-performing students, particularly in the social sciences (Ayllón, 2022). This was worse for younger women who typically did not have permanent contracts.

5 What is being done and how to participate?

5.1 The role of collectives, associations, programs

Some of the findings from the papers discussed above provide insights into channels that can or need to be addressed. For example, Doleac et al. (2021) and Berland et al. (2022) recommend some changes in rules in the conduct of seminars that can help smooth interactions and improve the experiences of women presenters by not allowing for interruptions in the initial part of the presentation.

Providing mentorship to students and faculty and exposing students to role models (Blau et al., 2010; Avilova and Goldin, 2018; Lundberg, 2020; Porter and Serra, 2020); providing more information to undergraduate students, increasing the representation of females/URM scholars as students and faculty, and developing summer programs and **pre-doctoral programs** for underrepresented students are effective ways to tackle the problem (Bayer and Rouse, 2016; Avilova and Goldin, 2018; Bayer et al., 2019; Lundberg, 2020). Providing additional funding to underrepresented candidates (who are from more relatively disadvantaged backgrounds) could also make economics more accessible (Sharma, 2020). Further, the need to rethink pedagogy and curriculum to enable a more conducive environment for women and URM scholars has been noted (Bayer et al., 2020b, 2019).

Doctoral students in Economics also face a relatively higher incidence of mental health issues such as **depression and anxiety** than the US population, which is particularly higher among women and international students (Bolotnyy et al., 2022). Providing mentorship to students and faculty, exposing students to **role models**, offering additional support and resources for **mental health**, and implementing strategies to create a more inclusive and supportive environment are important steps toward addressing these challenges.

Fortunately, the lack of gender and ethnic diversity and the stagnant shares across various stages of the academic pipeline has been getting increasing recognition, pushing collectives and associations like the AEA (and its various committees within the association like CSWEP, CSQIE, and CSMGEP) to take actions, provide resources and mentorship, and encourage discourse. Similar examples exist across different contexts. While there is a growing body of literature on the inequality faced by women in economics academia and the barriers they encounter, there is limited evidence on the status of this issue outside U.S. and European economic departments and institutions. Ongoing projects initiated by the Women in Economics initiative at the International Economics Association are building evidence on the representation of women and interventions in countries across Africa, South America, and Asia.

A list of associations, committees and/or collectives that endeavor to provide support and resources to women and URM scholars is in Table 1a-1c.

Table 1: List of Collectives and Networks providing mentorship and financial support to marginalized scholars

(1A)

No	Name	Purpose/Objective	Ongoing Funding Opportunities (Grants/ Scholarships)	Eligibility/ details	Mentorship programmes	Eligibility/ details (for mentees)	Website
1	AEA Committee on the Status of Minority Groups in the Economics Profession (CSMGEP)	"increase the representation of minorities in the economics profession, primarily by broadening opportunities for the training of underrepresented minorities"	Yes; (Seed Grant, Professional Development Grant and Travel Grant)	Towards minorities in US-based economics departments	Yes	Minorities enrolled in PhD programs in economics	https://www.aeaweb.org/about-aea/committees/csmgep
2	AEA: Committee on the Status of Women in the Economics Profession (CSWEP)	"serves professional women economists by monitoring their progress and promoting their careers"	No	-	Yes	Provides professional development resources. Special interest to economists just establishing their careers, regardless of gender, race or ethnicity. Resources include professional development readings from the CeMENT Mentoring Workshops, links to organizations that mentor and support women at all levels of economics and business	https://www.aeaweb.org/about-aea/committees/cswep
3	AEA: Committee on the Status of LGBTQ+ Individuals in the Economics Profession	" provide support for LGBTQ+ economists and economic research relevant to LGBTQ+ populations"	No	-	Yes	Enrolled in a PhD program in economics or a related field at an institution in the United States or Canada	https://www.aeaweb.org/about-aea/committees/aealgbtq
4	American Society of Health Economists (ASHEcon)	"dedicated to promoting excellence in health economics research in the United States. ASHEcon provides a forum for emerging ideas and empirical results of health economics research"	Yes (Scholarship enabling participants to attend the ASHEcon conference)	"underrepresented minorities and/or individuals whose background or life circumstances indicate they have overcome substantial obstacles (e.g., first generation college student, disabled individuals, racial and ethnic minorities, LGBTQIA+ individuals)"	No	-	https://www.ashecon.org/
5	American Society of Hispanic Economists (ASHE)	"Promoting the vitality of Hispanics in the economics profession through education, service, and excellence; Promoting rigorous research on economic and policy issues affecting U.S. Hispanic communities and the nation as a whole; and Engaging more Hispanic Americans to effectively participate in the economics profession"	Yes (Annual Dissertation award to defray the costs of attending the ASSA meetings)	US Citizens or Legal Residences, and inviduals whose dissertation focuses on the Hispanic/Latinx community in the US	Yes	Hispanic/Latinx mid-career minority economists " purpose of this program is to help current faculty members advance to full professor and/or advance to an administrative role"	https://asheweb.org/
6	Association for Mentoring & Inclusion in Economics (AMIE)	"to identify and address group-based or other outcome disparities for junior scholars in the economics profession"	No	-	Yes	Anyone who is a Ph.D. student actively working on their dissertation (including students on the job market) in economics, especially those from underrepresented minorities (URM), LGBTQIA++ community (broadly defined), first-generation college, and international students.	https://econmentoring.org/
7	Economics PhD Applicant Mentoring Programme (AMP)	"to help applicants from underrepresented backgrounds prepare their applications to economics PhD programmes by matching applicants to mentors who are PhD students in the Departments of Economics at Cambridge, LSE, Oxford, UCL and Warwick"	No	-	Yes	All groups that are underrepresented in economics – applicants who identify as black, female, low-income, first generation (i.e. first in the family to attend university), LGTBQ+, and people with disabilities	https://sites.google.com/view/econphdamp/home

Notes: Updated till April/May 2023. The list may not be exhaustive and is mostly US centric. It does not include university or department-level initiatives that exclusively cater to their own students.

(1B) List of Collectives and Networks providing mentorship and financial support to marginalized scholars (cont'd)

No	Name	Purpose/Objective	Ongoing Funding Opportunities (Grants/ Scholarships)	Eligibility/ details	Mentorship programmes	Eligibility/ details (for mentees)	Website
8	Association for the Advancement of African Women Economists (AAAWE)	"focuses on building the capacity and skills of African women economists. AAAWE engages in several activities; creating opportunities for networking and mentoring, assisting members to obtaining grants, fellowships and internships, and facilitating the creation and sharing of knowledge among members"	Yes	African female economist who is enrolled in a PhD programme or recently completed their PhD	No	-	http://www.aaawe.org/
9	CEPR's Women in Economics Initiative	"aims to redress gender imbalances in the economic profession, partnering with CEPR member organisations to promote women within the field"	No	-	No	-	https://cepr.org/themes/women-economics
10	D-Econ: Diversifying and Decolonising Economics	"aims to decolonise and diversify the economics field, both in terms of its academic content and its institutional structures, in order to ultimately support movements and struggles for global justice and achieve a more just society"	No	-	No	-	https://d-econ.org/
11	Diversifying Economic Quality	"promotes inclusive, innovative, and evidence-based teaching practices in economics"	No	-	No	-	https://diversifyingecon.org/
12	EEA Women in Economics (WinE)	"support women in the economics profession by facilitating the formation of networks, by circulating information on, or relevant to, female economists, and by providing a forum for discussion of issues relevant to women in economics"	No	-	Yes (Mentoring and Networking retreat)	Young female and non-binary economists with positions (post-doctoral fellows, lecturers, researchers) at academic and research institutions, who obtained their PhDs less than five years prior to the retreat	https://www.eeassoc.org/committees/wine
13	European Committee for LGBTQ+ Economists	Provide support for LGBTQ+ economists and economic research relevant to LGBTQ+ populations	No	-	Yes	*Not available*	https://sites.google.com/view/ecqe
14	Graduate Applications International Network (GAIN)	"supports prospective graduate students from all countries across Africa applying for excellent programs (both Master and PhD) in economics and related fields (public policy, political science, etc.)"	Yes (towards costs incurred during the Master's/PhD application process - fees, standardized tests, submission of transcripts)	Student from any country in Africa	Yes	Student from any country in Africa	https://gain-network.net/
15	International Committee of Women in Agricultural Economics (ICWAE)	"to serve women economists in the agricultural economics profession by promoting their career development, furthering their status, and increasing gender diversity in the association"	No	-	Yes	Women who have a Ph.D in agricultural economics and are currently working as an agricultural economist Priority to those with 3-5 years of work/research experience, who are from or based in institutions in the Global South (Africa, Asia, Middle East, Latin America, the Caribbean and Pacific Islands)	https://iaae-agecon.org/page/icwae

Notes: Updated till April/May 2023. The list may not be exhaustive and is mostly US centric. It does not include university or department-level initiatives that exclusively cater to their own students.

(1C) List of Collectives and Networks providing mentorship and financial support to marginalized scholars (cont'd)

No	Name	Purpose/Objective	Ongoing Funding Opportunities (Grants/ Scholarships)	Eligibility/ details	Mentorship programmes	Eligibility/ details (for mentees)	Website
16	Research in Color Foundation	"dedicated to increasing the number (and improving the retention) of Ph.D. scholars of color in economics and economics-adjacent disciplines, and amplifying meaningful economic and policy research on communities of color"	No	-	Yes	Identify as a person of a color or an underrepresented minority, be interested in a PhD or professional career in Economics	https://www.researchincolor.org/
17	Royal Economic Society's Women's Committee	"promotes the status of women in economics by identifying and removing barriers to progress"	No	-	Yes	Early career female researchers (recently obtained their PhD or are close to completion) working in the UK or in countries with similar academic environments and career patterns	https://res.org.uk/committees/womens-committee
18	The Black Economist Network (TBEN)	"dedicated to providing a platform through which professionals and students of African and Caribbean descent in economics and related fields can connect, collaborate, share ideas and support each other"	No	-	No	-	https://www.tben.co.uk/
19	JPAL's Economics Transformation Project (ETP)	"a student-informed, full-pipeline program that aims to create a more diverse, equitable, and inclusive field of economics for scholars from backgrounds historically underrepresented in economics"	Yes (towards attending trainings where JPAL staff teach the technical and operational aspects of randomized evaluations)	Undergraduate/ Predoctoral students	No	-	https://www.povertyactionlab.org/page/economics-transformation-project-etp
20	The Sadie Collective	"aims bring together Black women at different stages in their academic and/or professional careers in the quantitative sciences to share resources, network, and advocate for broader visibility in the field"	No	-	Yes	Freshman and sophomore students who self-identify as Black or African American and a woman	https://www.sadiecollective.org/
21	The Women in Economics Initiative	"to encourage equal opportunity and balanced representation of genders in the economics profession across the academic, business and public sectors"	No	-	Yes	An economist background (or related) who identify as women, non-binary, gender non-conforming, queer or questioning	https://women-in-economics.com/
22	Women in Econ & Policy	"aim of creating a free and inclusive space for women interested in econ, policy & development to learn and grow together"	No	-	Yes	Women in a graduate economics programme	https://www.womenineconpolicy.com/
23	Women in Economics Network (WEN) - Economic Society of Australia	"to professionally connect and support the career development of women in economics, increase the representation of women at all levels of the economics profession, promote public contributions by female economists, encourage young women to study economics"	No	-	Yes	Female-identifying university students studying economics at both an undergraduate and Masters level	https://esawen.org.au/
24	Bahujan Economists	"a platform for researchers, aspirants, students, and professors from the historically marginalized caste, tribes, and religious communities in Economics"	No	-	Yes	Students from Scheduled Caste and Scheduled Tribe backgrounds in India	https://bahujanecon.org/

Notes: Updated till April/May 2023. The list may not be exhaustive and is mostly US centric. It does not include university or department-level initiatives that exclusively cater to their own students.

Regarding responding to complaints about sexual harassment, the special issue of AEA's Committee on the Status of Women in the Economics Profession (CSWEP), published right after the first #MeToo movement provides various perspectives and experiences from senior women economists on the way forward for institutions and economists to support victims of harassment and to create safer spaces in the future. See for example, Shinall (2018) and the Twitter (X) thread by Tim Bresnahan for practical information on approaching the **ombudsperson** at the National Bureau of Economic Research (NBER) and American Economic Association (AEA) for sharing complaints anonymously (Bresnahan, 2022).

Another initiative is Women in Leadership in Economics (IEA-WE) at the International Economics Association. A four-year initiative that aims to address gender disparities in the field of economics by promoting women's leadership and participation in economic research and policy-making.

Cheng and Hsiaw (2022) discuss the need for sanctions to be more responsive to sharing and reporting of harassment. They advocate for increased public awareness, and assessing damage awards, which could help more women come forward. There is evidence that active programs addressing disparities make a difference. At the European Central Bank (ECB), for example, despite having similar characteristics at entry-level position, a **wage gap** had emerged. Hospido et al. (2019) find that the promotion and salary gaps closed to a great degree since ECB took measures to address this disparity.

5.2 Resources for research

Another important way forward is to continue tracking the progress of women and underrepresented minorities across the different stages of representation and to conduct more research on this topic. More research and information can help uncover biases and under representation critical to making the profession more diverse and inclusive (and consequently better). More people can overcome their biases when they are made aware of it.

In order to facilitate more discourse and insights on this growing literature, in this section a list of data sources used in the cited papers is provided. This is contained in Tables 2a and 2b and includes the data source, key variables, periods and geographical coverage, type of data and the necessary links. Table 3 provides details of the supplementary data sources that are used in the estimation process of the cited papers. The authors hope this encourages more researchers and practitioners to explore this topic.

Table 2: Examples of data sources available to study in inequalities and disparities in economics academia

(2A)

No	Name	Examples of Key Measures/Variables	Methodology/ Coverage	Geographical Coverage	Coverage - period/years	Type of data (survey or administrative)	Accessibility Paid?	Level of data/ Microdata availability	Examples of papers/reports	Link (last accessed on 15th May 2023)
1	Academic Analytics	Book publications, journal article publications, journal article citations, published conference proceedings, federal research grants, professional honorific awards, U.S. patents, clinical trials	Direct university submissions of faculty rosters, and harvesting from online directories, graduate bulletins, and other resources available within an institution's website	USA (Primarily)	2004 onwards	Both	Y	Yes (Faculty/Researcher-level)	Rovito et al. 2021; Sierminska and Oaxaca 2022; Oboj and Zemger 2022	https://academicanalytics.com/
2	Survey of Doctoral Recipients	Demographics (e.g., age, race, sex, ethnicity, and citizenship), Education, History, Employment Status, Field of Degree, Occupation	Samples individuals who have earned an science, engineering or health research doctoral degree from a U.S. academic institution and are less than 76 years of age; collected biennialy	USA	1973 onwards	Survey	N	Yes (Researcher-level) Restricted use files containing identifiers are available through license obtained from the National Science Foundation	Ginther and Kahn 2009; Webber and Canche 2015; RissleR et al. 2020	https://www.nsf.gov/statistics/srvydoctoratework
3	Survey of Earned Doctorates	Academic institute of doctorate, demographic information (sex, race and ethnicity, citizenship, etc.), education history, parental education, postgraduation plans (e.g., work, postdoc etc.)	Conducted annually and consists of all individuals receiving a research doctorate from a U.S. academic institution in a given 12-month period.The sampling frame of doctorate recipients is created by first identifying all institutions that confer research doctorates and then identifying all individuals receiving a research doctorate from those institutions in the 12-month period	USA	1957 onwards	Survey (Census)	N	Data and trends across several variables in tabular form are available to download Student-level microdata part of restricted use files is available through license obtained from NSF	Foster et al. 2022; Kim et al. 2022	https://www.nsf.gov/statistics/srvydoctorates/
4	EconLit	Bibliographic information of economics literature including peer-reviewed journal articles, working papers, PhD dissertations, books and book reviews, Journal of Economic Literature (JEL) classification codes etc.	EconLit covers economics literature published from leading institutions in 74 countries. In combination with the optional full-text package of over 500 journals, it provides a comprehensive library of economics literature. It is updated weekly, and as of 2022 includes over 1.6 million records	Multiple countries	pre-1900 onwards	-	Y	Yes (Researcher-level) However, data needs to be identified through queries, extracted, and transformed to the researchers needs prior to use	Onder and Yilnazkuday, 2020; Rose 2021; Sierminska and Oaxaca 2021	https://www.aeaweb.org/econlit/
5	UMETRICS	University payroll, Financial Records, Career Outcomes, Research Funding details for federal grants (source, timing, duration)	University employee data are linked to internal Census Bureau data products, such as the Decennial Census, American Communities Survey, Longitudinal Employer-Household Dynamics database (LEHD), integrated Longitudinal Business Database, and other demographic information. Vendors paid by research grants are linked to the Business Register, Longitudinal Business Database, and the LEHD, providing researchers with a comprehensive view on the businesses associated with the production of scientific research	USA	2001 onwards (IRIS - UMETRICS data)	Administrative (Census)	N	Data and trends across several variables in tabular form are available to download Individual-level microdata part of restricted use files (permission required)	Pezzoni et al. 2016; Chang et al. 2019; Bostwick and Weinberg 2021	https://www.census.gov/programs-surveys/ces/data/restricted-use-data/umetrics-data.html https://iris.isr.umich.edu/wp-content/uploads/2022/04/Release22_Summary_Documentation.p
6	Ohio Longitudnal Data Archive (OLDA)	Student demographics, a doctoral program identifier, degree completions, and course-level data on enrollment and grades	Detailed information and administrative transcript records colelcted for all students attending public colleges in Ohio	Ohio (USA)	2005 onwards	Administrative	N	Microdata part of restricted use files (permission required)	Bostwick and Weinberg 2021	https://chrr.osu.edu/ohio-longitudinal-data-archive
7	Higher Education Statistics Agency (HESA)	Demographics information of students and staff in higher education institutions, finances of higher education providers, performance indicators	They work with higher education providers in each of the four nations, collaborating with them to collect and curate the data periodically	UK	1996 onwards	Both	N	Data and trends across several variables in tabular form are available to download	Advani et al. 2020; Fuentes et al. 2023	https://www.hesa.ac.uk/
8	Forschungmonitoring Database	Research Output, JEL codes, Demographic information, Author ranking, Young Economist Ranking, University and Institute Rankings	Based on inputs from individual researchers, their institutions and the administrators. The webportal is used to calculate the Handelsblatt rankings, the most visible evaluations of the research output of economists. The coverage of journals for rankings is based on Econlit and journal ranks are based on SCImago Journal Rank (SJR) values	Germany, Austria, Switzerland	2012 onwards	-	N	Yes (Researcher-level) However, data needs to be identified through queries, extracted, and transformed to the researchers needs prior to use	Hilber et al. 2021	https://www.forschungsmonitoring.org/
9	Longitudinal Employer Household Dynamics (LEHD)	Demographic information, Linked Employer-employee data, earnings and wages	Generated by merging previously collected survey and administrative data on jobs, businesses, and workers. It integrates administrative data with existing census and surveys. These data are the result of a partnership between the Census Bureau and U.S. states	USA	1985 onwards	Administrative (Census)	N	Data and trends across several variables in tabular form are available to download Microdata is available to qualified researchers in the Federal Statistical Research Data Center (FSRDC) network. In order to access LEHD microdata, researchers must have an approved project with authorization to use specific data sets.	Foster et al. 2020; Foster et al. 2022; Schultz and Stansbury 2022	https://lehd.ces.census.gov/

(2B) Examples of data sources available to study in inequalities and disparities in economics academia (cont'd)

No	Name	Examples of Key Measures/Variables	Methodology/ Coverage	Geographical Coverage	Coverage - period/years	Type of data (survey or administrative)	Accessibility Paid?	Level of data/ Microdata availability	Examples of papers/reports	Link (last accessed on 15th May 2023)
10	Integrated Postsecondary Education Data System (IPEDS)	Different university functions, including enrollment, finances, and degrees awarded	The completion of all IPEDS surveys is mandatory for all higher educational institutions that participate in or are applicants for participation in any Federal financial assistance program. Data is submitted only during the appropriate data collection period by institutions.	USA	1981 onwards	Survey	N	Data and trends across several variables in tabular form are available to download	Bound et al. 2020	https://nces.ed.gov/ipeds/
11	National Survey of Postsecondary Faculty (NSOPF)	Faculty hires and departures, tenure of faculty, tenure policies, sociodemographic characteristics of faculties, employment history, rank and tenure, publications, courses taught, job statisfaction and attitudes, career plans, compensation	Nationally representative sample of full-and part-time faculty and instructional staff at public and private not-for-profit 2- and 4-year institutions in the United States. The first cycle of NSOPF was conducted with a sample of 480 institutions, over 3,000 department chairpersons, and over 11,000 instructional faculty	USA	1988-2004	Survey	N	Data and trends across several variables in tabular form are available to download Individual-level microdata part of restricted use files (permission required)	Banbock et al. 2017	https://nces.ed.gov/surveys/nsopf/
12	American Community Survey (ACS)	Social Characteristics (including educational attainment), Economic Characteristics, Demographic information, Selected housing characteristics	Gathers information previously contained only in the long form of the decennial census and sent to approximately 295,000 addresses monthly. It is the largest household survey that the Census Bureau administers	USA	2005 onwards	Survey	N	Data and trends across several variables in tabular form are available to download Individual-level microdata part of restricted use files (permission required)	Porter 2007	https://www.census.gov/programs-surveys/acs
13	Higher Education Research and Development Survey (HERD)	R&D expenditures by field and source of funds, type of research, type of agency, Headcounts and full-time equivalents of R&D personnel functions (researchers, R&D technicians, and R&D support staff), Institutional characteristics	Primary source of information on research and development expenditures at U.S. colleges and universities that expended at least $150,000 in separately accounted for R&D in the fiscal year	USA	1972 onwards	Survey (Census)	N	Yes (Institution-level)	Roksa at al. 2018	https://www.nsf.gov/statistics/srvyherd/
14	Office of Personnel Management (OPM) (Federal Workforce data)	Federal employees' demographics (age, gender, race/ethnicity), job characteristics, hires, separations, educational level, field of degree, year of degree receipt, earnings, agency identifiers	All federal agencies (with exceptions such as White House staff) must periodically complete designated forms and update records in compliance with personnel data management standards prescribed by the agency	USA	2000 onwards	Administrative	N	Data and trends across several variables in tabular form are available to download Individual-level microdata (with personal identifiers that can be merged with other datasets) is part of restricted use files	Foster et al. 2020	https://www.opm.gov/data/datasets/
15	Women in European Economics: A Real-Time Monitoring Tool	Institution level - Number of researchers, share of females at different heirarchies in academia (such as Professor, Associate Professor, Assistant Professor, Lecturer, etc.)	Their web-scraper algorithm collects information on researchers in European Institutions (whose internet addresses could be identified) on a daily basis. For the top 300 European research institutions (in terms of research output), these algorithms are complemented by additional research classifying the obtained position titles into a generally accepted hierarchy of positions. Gender is determined through Genderize.io and a sample is cross-checked manually	Europe (primarily)	2018-2020	-	N	Institutional-level data available in tabular form	Auriol et al. 2022	https://www.women-economics.com/
16	Proquest (Dissertations and Theses)	Abstracts and full-texts of theses and dissertations along with details on the researcher (name, institution, year)	Information provided by universities and researchers. Covers almost 90% of total number of U.S. doctorates since 1980s.	USA (Primarily)	1861 onwards	Survey	Y	Yes (Researcher-level) However, data needs to be identified through queries, extracted, and transformed to the researchers needs prior to use	Chang et al. 2019; Hofstra et al. 2022; Kim et al. 2022	https://www.proquest.com/
17	Scopus	Author identifier and names, article's title, journal's name, the date of publication, and citations data from academic journals	It has a multidisciplinary coverage encompassing high impact journals and conference proceedings (240 disciplines). Content is curated and selected by an independent board, who are responsible for reviewing all new titles that are suggested to Scopus year round.	Multiple countries	1788 onwards (full database form 1966)	-	Y	Yes (Researcher-level) However, data needs to be identified through queries, extracted, and transformed to the researchers needs prior to use	Rose et al. 2021; Sherman and Tookes 2021; Davies et al. 2022	https://www.elsevier.com/solutions/scopus
18	Web of Science	Reference and citation data from academic journals, conference proceedings, topic title, subject keywords, abstract, periodical title, author's details, publication year	It has a multidisciplinary coverage encompassing high impact journals and conference proceedings. The selection is made on the basis of impact evaluations and comprise academic journals, spanning multiple academic disciplines. The coverage includes the sciences, social sciences, the arts, and humanities, and goes across disciplines (250+ disciplines)	Multiple countries	1900 onwards (full database from 1945)	-	Y	Yes (Researcher-level) However, data needs to be identified through queries, extracted, and transformed to the researchers needs prior to use	Corsi et al. 2019; Fontana et al. 2019; Greenspok and Rodrik 2021	https://clarivate.com/webofsciencegroup/solutions/web-of-science/

Table 3: Examples of other types of online data used by individual papers in addition to the main/organized sources

No.	Data Source (type)	Source (examples)	Examples of papers
1	Rankings of insitution	QS Rankings, US News Rankings, RePec	Angrist et al. 2017; Foster et al. 2022; Sierminska and Oaxaca 2022
2	Salary data	Glassdoor, Official state websites, Freedom of Information Requests,	Sierminska and Oaxaca 2021; Sherman and Tookes 2021; Dongre et al. 2024; Obloj and Zenger 2022
3	Demographic info and employment history of researchers	CVs, Personal Website, LinkedIn, Institutional websites, Genderize.io and Gender API (for Gender using names), Forebears.io (for ethnicity/country of origin using names)	Gaule and Piacentini 2018; Kerr and Kerr 2018; Chen et al. 2022; Sierminska and Oxaca 2022
4	Outcomes of research activities and representation across different groups (such as gender)	Conference schedules/agendas	Chari and Goldsmith-Pinkham 2017; Chari RissleR et al. 2020
5	Topic/Theme of research work	Extracting text from abstract and full papers	Gaule and Piacentini 2018; Fontana et al. 2019; Kim et al. 2022
6	Tone of voice	Audio recordings of presentations	Handlan and Sheng 2023
7	Collaboration and networking	Social media activity (such as analysis of Twitter activity)	Ajzenman et al. 2023

6 Summary

While progress has been made in certain areas, significant challenges continue to persist in the economics profession. This chapter provides the latest overview of the literature on various issues that may be plaguing the profession and keeping women and URM away at the cost of the profession. It emphasizes the importance of identifying and dismantling the barriers that hinder the representation and advancement of underrepresented groups in economics across various stages of the academic pipeline, from representation at various levels to the evidence of barriers and biases that several groups continue to face.

The findings presented underscore the continued urgency of addressing inequality in economics. The chapter also highlights the significance of data sources in advancing the understanding of inequality in the economics profession. By providing information on the sources utilized in different studies, the chapter aims to encourage other researchers to build upon this work and contribute to the growing body of evidence. Collaborative efforts that utilize diverse data sources will enhance collective knowledge and facilitate evidence-based interventions to promote diversity, equity, and inclusion in economics.

By promoting diversity and inclusivity, the benefits of multiple perspectives, which in turn influence research questions, teaching approaches, and policy discussions can be harnessed. Efforts to enhance representation and provide support mechanisms for underrepresented minorities are crucial steps toward creating an environment where equal opportunities are available to all. By recognizing the distinct challenges faced by marginalized groups, more targeted strategies can be developed to foster more inclusiveness and create a more equitable profession.

While there is still a long way to go, findings indicate that efforts of organizations and its members in espousing fair representation through establishing relevant programs and committees (such as the Committee on the Status of Women in the Economics Profession (CSWEP) established in 1971) more recently have some effect. For example, there has been no gender bias found in memberships at the National Bureau of Economic Research (Kleemans and Thornton, 2021) and the board of American Economic Association (Donald and Hamermesh, 2006). In the future, the expectation is to find more evidence pointing to these positive effects. No, we do not argue for a quota system, but this is related to quality, which is beyond the scope of this chapter. The emphasis of the chapter is to increase representation when the quality of research reaches a certain threshold.

References

Abrevaya, Jason and Daniel S. Hamermesh (2012) "Charity and Favoritism in the Field: Are Female Economists Nicer (to Each Other)?" *The Review of Economics and Statistics*, 94 (1), 202–207, https://www.jstor.org/stable/41349169, Publisher: The MIT Press.

Advani, Arun, Elliott Ash, David Cai, and Imran Rasul (2021) "Economics and the study of race," VOXeu.org, May, https://voxeu.org/article/economics-and-study-race.

Advani, Arun, Sonkurt Sen, and Ross Warwick (2020) "Ethnic diversity in UK economics,"Technical Report 15133, 10.1920/BN.IFS.2020.BN0307.

Akerlof, George and Rachel E. Kranton (2000) "Economics and Identity," *The Quarterly Journal of Economics*, 115 (3), 715–753, https://econpapers.repec.org/article/oupqjecon/v_3a115_3ay_3a2000_3ai_3a3_3ap_3a715-753..htm, Publisher: Oxford University Press.

Alesina, Alberto, Michela Carlana, Eliana La Ferrara, and Paolo Pinotti (2019) "Revealing implicit stereotypes," February, https://voxeu.org/article/revealing-implicit-stereotypes.

Allgood, Sam, Lee Badgett, Amanda Bayer, Marianne Bertrand, Sandra Black, Nick Bloom, and Lisa Cook (2019) "AEA Professional Climate Survey: Final Report,"Technical report, https://www.aeaweb.org/resources/member-docs/final-climate-survey-results-sept-2019.

Alon, Titan, Matthias Doepke, Jane Olmstead-Rumsey, and Michèle Tertilt (2020) "The Impact of COVID-19 on Gender Equality,"Technical Report w26947, 10.3386/w26947.

Altonji, J. G., P. Arcidiacono, and A. Maurel (2016) "Chapter 7 - The Analysis of Field Choice in College and Graduate School: Determinants and Wage Effects," in Hanushek, Eric A., Stephen Machin, and Ludger Woessmann eds. *Handbook of the Economics of Education*, 5, 305–396: Elsevier, 10.1016/B978-0-444-63459-7.00007-5.

Amarante, Verónica, Marisa Bucheli, and Tatiana Pérez (2024) "Gender Differences in Opinions about Market Solutions and Government Interventions: The Case Of Uruguayan Economists," *Feminist Economics*, 30 (1), 211–243, 10.1080/13545701.2023.2262486, Publisher: Routledge _eprint: https://doi.org/10.1080/13545701.2023.2262486.

Amarante, Verónica, Ronelle Burger, Grieve Chelwa, John Cockburn, Ana Kassouf, Andrew McKay, and Julieta Zurbrigg (2021) "Underrepresentation of developing country researchers in development research," *Applied Economics Letters*, 29 (17), 1659–1664, 10.1080/13504851.2021.1965528.

Andre, Peter and Armin Falk (2022) "What's worth knowing in economics? A global survey among economists," *VoxEU*, https://voxeu.org/article/what-s-worth-knowing-economics-global-survey-among-economists.

Angus, Simon D., Kadir Atalay, Jonathan Newton, and David Ubilava (2021) "Geographic diversity in economic publishing," *Journal of Economic Behavior & Organization*, 190, 255–262, 10.1016/j.jebo.2021.08.005, Publisher: North-Holland.

Antecol, Heather, Kelly Bedard, and Jenna Stearns (2018) "Equal but Inequitable: Who Benefits from Gender-Neutral Tenure Clock Stopping Policies?" *American Economic Review*, 108 (9), 2420–2441, 10.1257/aer.20160613.

Antman, Francisca M., Kirk B. Doran, Xuechao Qian, and Bruce A. Weinberg (2024a) "Demographic Diversity and Economic Research: Fields of Specialization and Research on Race, Ethnicity, and Inequality," *National Bureau of Economic Research*, 10.3386/w32437.

——— (2024b) "Half Empty and Half Full? Women in Economics and the Rise in Gender-Related Research," *AEA Papers and Proceedings*, 114, 226–231, 10.1257/pandp.20241116.

Auriol, Emmanuelle, Guido Friebel, Alisa Weinberger, and Sascha Wilhelm (2022) "Underrepresentation of women in the economics profession more pronounced in the United States compared to heterogeneous Europe," *Proceedings of the National Academy of Sciences*, 119 (16), e2118853119, 10.1073/pnas.2118853119, Publisher: Proceedings of the National Academy of Sciences.

Avilova, Tatyana and Claudia Goldin (2018) "What Can UWE Do for Economics?" Working Paper 24189, 10.3386/w24189, Series: Working Paper Series.

Ayllón, Sara (2022) "Online teaching and gender bias," *Economics of Education Review*, 89, https://ideas.repec.org//a/eee/ecoedu/v89y2022ics0272775722000565.html, Publisher: Elsevier.

Baccini, A., L. Barabesi, M. Cioni, and C. Pisani (2014) "Crossing the hurdle: the determinants of individual scientific performance," *Scientometrics*, 101 (3), 2035–2062, https://ideas.repec.org//a/spr/scient/v101y2014i3d10.1007_s11192-014-1395-3.html, Publisher: Springer & Akadémiai Kiadó.

Bain&Company (2019) "Powering the Economy with Her: Women Entrepreneurship in India," https://www.bain.com/insights/powering-the-economy-with-her-women-entrepreneurship-in-india/, Section: Report.

Baltrunaite, Audinga, Alessandra Casarico, and Lucia Rizzica (2022) "Women in economics: the role of gendered references at entry in the profession,"Technical report.

Batty, David (2018) "Sexual misconduct by UK university staff is rife, research finds," *The Guardian*, https://www.theguardian.com/world/2018/apr/03/sexual-misconduct-by-uk-university-staff-is-rife-research-finds.

Bayer, Amanda, Syon P. Bhanot, Erin T. Bronchetti, and Stephen A. O'Connell (2020a) "Diagnosing the Learning Environment for Diverse Students in Introductory Economics: An Analysis of Relevance, Belonging, and Growth Mindsets," *AEA Papers and Proceedings*, 110, 294–298, 10.1257/pandp.20201051.

Bayer, Amanda, Syon P. Bhanot, and Fernando Lozano (2019) "Does Simple Information Provision Lead to More Diverse Classrooms? Evidence from a Field Experiment on Undergraduate Economics," *AEA Papers and Proceedings*, 109, 110–114, 10.1257/pandp.20191097.

Bayer, Amanda, Gregory Bruich, Raj Chetty, and Andrew Housiaux (2020b) "Expanding and Diversifying the Pool of Undergraduates who Study Economics: Insights from a New Introductory Course at Harvard,"Technical Report 26961, 10.3386/w26961.

Bayer, Amanda, Gary A. Hoover, and Ebonya Washington (2020c) "How You Can Work to Increase the Presence and Improve the Experience of Black, Latinx, and Native American People in the Economics Profession," *Journal of Economic Perspectives*, 34 (3), 193–219, 10.1257/jep.34.3.193.

Bayer, Amanda and Cecilia Elena Rouse (2016) "Diversity in the Economics Profession: A New Attack on an Old Problem," *Journal of Economic Perspectives*, 30 (4), 221–242, 10.1257/jep.30.4.221.

Beneito, Pilar, José E. Boscá, Javier Ferri, and Manu García (2021) "Gender Imbalance across Subfields in Economics: When Does It Start?" *Journal of Human Capital*, 15 (3), 469–511, 10.1086/715581.

Berland, Ondine, Oliver Harman, and Ninon Moreau-Kasler (2022) "Barriers for women in economics: A review of recent findings," *IGC*, https://www.theigc.org/blog/barriers-for-women-in-economics-a-review-of-recent-findings/.

Bertocchi, Graziella, Luca Bonacini, and Marina Murat (2021) "Adams and Eves: The Gender Gap in Economics Majors,"Technical report, https://glabor.org/adams-and-eves-the-gender-gap-in-economics-majors-a-new-glo-discussion-paper-by-glo-f

Bertrand, Marianne (2020) "Gender in the Twenty-First Century," *AEA Papers and Proceedings*, 110, 1–24, 10.1257/pandp.20201126.

Bettinger, Eric P. and Bridget Terry Long (2005) "Do Faculty Serve as Role Models? The Impact of Instructor Gender on Female Students," *American Economic Review*, 95 (2), 152–157, 10.1257/000282805774670149.

Blau, Francine D., Janet M. Currie, Rachel T. A. Croson, and Donna K. Ginther (2010) "Can Mentoring Help Female Assistant Professors? Interim Results from a Randomized Trial," *American Economic Review*, 100 (2), 348–352, 10.1257/aer.100.2.348.

Blau, Francine D. and Lisa M. Lynch (2024) "50 Years of Breakthroughs and Barriers: Women in Economics, Policy, and Leadership," *National Bureau of Economic Research*, 10.3386/w32820.

Bolotnyy, Valentin, Matthew Basilico, and Paul Barreira (2022) "Graduate Student Mental Health: Lessons from American Economics Departments," *Journal of Economic Literature*, 60 (4), 1188–1222, 10.1257/jel.20201555.

Bostwick, Valerie K. and Bruce A. Weinberg (2022) "Nevertheless She Persisted? Gender Peer Effects in Doctoral STEM Programs," *Journal of Labor Economics*, 40 (2), 397–436, 10.1086/714921, Publisher: The University of Chicago Press.

Boustan, Leah and Andrew Langan (2019) "Variation in Women's Success across PhD Programs in Economics," *Journal of Economic Perspectives*, 33 (1), 23–42, 10.1257/jep.33.1.23.

Bowles, Samuel (1998) "Endogenous Preferences: The Cultural Consequences of Markets and Other Economic Institutions," *Journal of Economic Literature*, 36 (1), 75–111, https://www.jstor.org/stable/2564952, Publisher: American Economic Association.

Bresnahan, Tim (2022) "https://twitter.com/timobres/status/1583562828094414848,"Technical report.

Buckles, Kasey (2019) "Fixing the Leaky Pipeline: Strategies for Making Economics Work for Women at Every Stage," *Journal of Economic Perspectives*, 33 (1), 43–60, 10.1257/jep.33.1.43.

Buffington, Catherine, Benjamin Cerf, Christina Jones, and Bruce A. Weinberg (2016) "STEM Training and Early Career Outcomes of Female and Male Graduate Students: Evidence from UMETRICS Data Linked to the 2010 Census," *American Economic Review*, 106 (5), 333–338, 10.1257/aer.p20161124.

Canaan, Serena and Pierre Mouganie (2021) "Does Advisor Gender Affect Women's Persistence in Economics?" *AEA Papers and Proceedings*, 111, 112–116, 10.1257/pandp.20211122.

Card, David, Stefano DellaVigna, Patricia Funk, and Nagore Iriberri (2020) "Are Referees and Editors in Economics Gender Neutral?*," *The Quarterly Journal of Economics*, 135 (1), 269–327, 10.1093/qje/qjz035.

Cassells, Rebecca, Leonora Risse, Danielle Wood, and Duygu Yengin (2023) "Lifting Diversity and Inclusion in Economics: How the Australian Women in Economics Network Put the Evidence into Action*," *Economic Papers: A journal of applied economics and policy*, 42 (1), 1–29, 10.1111/1759-3441.12367.

Ceci, Stephen J., Donna K. Ginther, Shulamit Kahn, and Wendy M. Williams (2014) "Women in Academic Science: A Changing Landscape," *Psychological Science in the Public Interest*, 15 (3), 75–141, 10.1177/1529100614541236.

Chakraverty, Devasmita (2020) "The Impostor Phenomenon Among Black Doctoral and Postdoctoral Scholars in STEM," *International Journal of Doctoral Studies*, 15, 433–460, https://www.informingscience.org/Publications/4613?Source=%2FJournals%2FIJDS%2FArticles%3FVolume%3D0-0.

Chari, Anusha and Paul Goldsmith-Pinkham (2017) "Gender Representation in Economics Across Topics and Time: Evidence from the NBER Summer Institute,"Technical Report 23953, 10.3386/w23953.

Chelwa, Grieve (2021) "Does economics have an 'Africa problem'?" *Economy and Society*, 50 (1), 78–99, 10.1080/03085147.2021.1841933.

Chen, Jihui, Myongjin Kim, and Qihong Liu (2016) "Do Female Professors Survive the 19th-Century Tenure System?: Evidence from the Economics Ph.D. Class of 2008," *SSRN Electronic Journal*, 10.2139/ssrn.2885951.

Chen, Jihui, Qihong Liu, and Myongjin Kim (2022) "Gender gap in tenure and promotion: Evidence from the economics Ph.D. class of 2008," *Southern Economic Journal*, 88 (4), 1277–1312, 10.1002/soej.12567, _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1002/soej.12567.

Chen, Scarlet (2020) "Tech industry jobs for Econ PhDs," *Medium*, https://scarlet-chen.medium.com/tech-industry-jobs-for-econ-phds-54a276dda80b.

Cheng, Ing-Haw and Alice Hsiaw (2022) "Reporting Sexual Misconduct in the #MeToo Era," *American Economic Journal: Microeconomics*, 14 (4), 761–803, 10.1257/mic.20200218.

Cummings, Sarah and Paul Hoebink (2017) "Representation of Academics from Developing Countries as Authors and Editorial Board Members in Scientific Journals: Does this Matter to the Field of Development Studies?" *The European Journal of Development Research*.

Davies, Benjamin (2022) "Gender sorting among economists: Evidence from the NBER," *Economics Letters*, 110640, 10.1016/j.econlet.2022.110640.

Deryugina, Tatyana, Olga Shurchkov, and Jenna Stearns (2021) "COVID-19 Disruptions Disproportionately Affect Female Academics," *AEA Papers and Proceedings*, 111, 164–168, 10.1257/pandp.20211017.

Dhar, Diva, Tarun Jain, and Seema Jayachandran (2022) "Reshaping Adolescents' Gender Attitudes: Evidence from a School-Based Experiment in India," *American Economic Review*, 112 (3), 899–927, 10.1257/aer.20201112.

Dilmaghani, Maryam and Min Hu (2024) "Gender earnings gap in Canadian economics departments," *Applied Economics Letters*, 31 (11), 1059–1066, 10.1080/13504851.2023.2174494, Publisher: Routledge _eprint: https://doi.org/10.1080/13504851.2023.2174494.

Dolado, Juan J., Florentino Felgueroso, and Miguel Almunia (2012) "Are men and women-economists evenly distributed across research fields? Some new empirical evidence," *SERIEs*, 3 (3), 367–393, 10.1007/s13209-011-0065-4.

Doleac, Jennifer L., Erin Hengel, and Elizabeth Pancotti (2021) "Diversity in Economics Seminars: Who Gives Invited Talks?" *AEA Papers and Proceedings*, 111, 55–59, 10.1257/pandp.20211084.

Donald, Stephen G and Daniel S Hamermesh (2006) "What Is Discrimination? Gender in the American Economic Association, 1935–2004," *American Economic Review*, 96 (4), 1283–1292, 10.1257/aer.96.4.1283.

Dongre, Ambrish, Karan Singhal, and Upasak Das (2024) ""Missing" Women in Economics Academia in India," *Feminist Economics*, 30 (2), 89–122, 10.1080/13545701.2024.2322951, Publisher: Routledge _eprint: https://doi.org/10.1080/13545701.2024.2322951.

Ductor, L., S. Goyal, and A. Prummer (2018) "Gender & Collaboration," working paper, 10.17863/CAM.21796, Accepted: 2018-04-06T13:28:49Z.

Dupas, Pascaline, Alicia Sasser Modestino, Muriel Niederle, Justin Wolfers, and The Seminar Dynamics Collective (2021) "Gender and the Dynamics of Economics Seminars," Working Paper 28494, 10.3386/w28494, Series: Working Paper Series.

Eberhardt, Markus, Giovanni Facchini, and Valeria Rueda (2022) "Gender Differences in Reference Letters: Evidence from the Economics Job Market,"Technical Report 4114599, Rochester, NY, 10.2139/ssrn.4114599.

Economist, The (2022) "Why economists are flocking to Silicon Valley," *The Economist*, https://www.economist.com/business/2022/09/07/why-economists-are-flocking-to-silicon-valley.

Edgeworth, F. Y. (1922) "Equal Pay to Men and Women for Equal Work," *The Economic Journal*, 32 (128), 431–457, 10.2307/2223426.

Emerson, Tisha L. N., KimMarie McGoldrick, and Kevin J. Mumford (2012) "Women and the Choice to Study Economics," *The Journal of Economic Education*, 43 (4), 349–362, 10.1080/00220485.2012.714306.

Feld, Jan, Edwin Ip, Andreas Leibbrandt, and Joseph Vecci (2022) "Identifying and Overcoming Gender Barriers in Tech: A Field Experiment on Inaccurate Statistical Discrimination,"Technical Report 2205, https://ideas.repec.org//p/exe/wpaper/2205.html.

Fortin, Nicole, Thomas Lemieux, and Marit Rehavi (2021) "Gender Differences in Fields of Specialization and Placement Outcomes among PhDs in Economics," *AEA Papers and Proceedings*, 111, 74–79, 10.1257/pandp.20211028.

Foster, Lucia, Erika McEntarfer, and Danielle H. Sandler (2023) "Diversity and Equity in Labor Market Outcomes for Economists," *Journal of Economics, Race, and Policy*, 10.1007/s41996-023-00117-z.

Fourcade, Marion, Etienne Ollion, and Yann Algan (2015) "The Superiority of Economists," *Journal of Economic Perspectives*, 29 (1), 89–114, 10.1257/jep.29.1.89.

Freeman, Richard B. and Wei Huang (2014) "Collaborating With People Like Me: Ethnic co-authorship within the US,"Technical Report w19905, 10.3386/w19905.

Fuentes, Stefania, Tim Burnett, Gabriella Cagliesi, Parama Chaudhry, and Denise Hawkes (2023) "Who Studies Economics? An Analysis of Diversity in the UK Economics Pipeline,"Technical report, https://res.org.uk/who-studies-economics-an-analysis-of-diversity-in-the-uk-economics-pipeline/.

Gabster, Brooke Peterson, Kim van Daalen, Roopa Dhatt, and Michele Barry (2020) "Challenges for the female academic during the COVID-19 pandemic," *The Lancet*, 395 (10242), 1968–1970, 10.1016/S0140-6736(20)31412-4, Publisher: Elsevier.

Gaule, Patrick and Mario Piacentini (2018) "An advisor like me? Advisor gender and postgraduate careers in science," *Research Policy*, 47 (4), 805–813, 10.1016/j.respol.2018.02.011.

Gerson, Jennifer (2022) "On EconTwitter, MeToo anger is boiling over," *19th News*, https://19thnews.org/2022/10/me-too-movement-economics-twitter-misconduct/.

Gertsberg, Marina (2022) "The Unintended Consequences of #MeToo: Evidence from Research Collaborations,"Technical Report 4105976, Rochester, NY, 10.2139/ssrn.4105976.

Ghosh, Pallab and Zexuan Liu (2020) "Coauthorship and the gender gap in top economics journal publications," *Applied Economics Letters*, 27 (7), 580–590, 10.1080/13504851.2019.1644420.

Ginther, Donna K and Shulamit Kahn (2004) "Women in Economics: Moving Up or Falling Off the Academic Career Ladder?" *Journal of Economic Perspectives*, 18 (3), 193–214, 10.1257/0895330042162386.

GlobalData, Global Data (2021) "Women Representation in Big Tech Companies in 2021,"Technical report, https://www.globaldata.com/data-insights/technology--media-and-telecom/women-representation-in-big-tech-companies-in-2091371/.

Goyal, Sanjeev, Marco J. van der Leij, and José Luis Moraga-González (2006) "Economics: An Emerging Small World," *Journal of Political Economy*, 114 (2), 403–412, 10.1086/500990, Publisher: The University of Chicago Press.

Greenspon, Jacob and Dani Rodrik (2021) "A Note on the Global Distribution of Authorship in Economics Journals," Working Paper 29435, 10.3386/w29435, Series: Working Paper Series.

Hale, Galina and Tali Regev (2014) "Gender ratios at top PhD programs in economics," *Economics of Education Review*, 41, 55–70, 10.1016/j.econedurev.2014.03.007.

Handlan, Amy and Haoyu Sheng (2023) "Gender and Tone in Recorded Economics Presentations: Audio Analysis with Machine Learning,"Technical Report 4316513, Rochester, NY, 10.2139/ssrn.4316513.

Hengel, Erin (2022) "Publishing While Female: are Women Held to Higher Standards? Evidence from Peer Review," *The Economic Journal*, 132 (648), 2951–2991, 10.1093/ej/ueac032.

Hofstra, Bas, Daniel A. McFarland, Sanne Smith, and David Jurgens (2022) "Diversifying the Professoriate," *Socius*, 8, 10.1177/23780231221085118.

Horpedahl, Jeremy and Arnold Kling (2020) "Gender, Race and Ethnicity, and Inequality Research in the American Economic Review and the American Economic Associationâ€™s Conference Papers," *Econ Journal Watch*, 17 (2), 338â€“349–338â€“349, https://ideas.repec.org//a/ejw/journl/v17y2020i2p338-349.html.

Hospido, Laura, Luc Laeven, and Ana Lamo (2019) "The gender promotion gap: evidence from central banking,"Technical Report 2265, https://ideas.repec.org/p/ecb/ecbwps/20192265.html, Working Paper Series.

Hospido, Laura and Carlos Sanz (2020) "Gender Gaps in the Evaluation of Research: Evidence from Submissions to Economics Conferences," SSRN Scholarly Paper 3422016, Rochester, NY, 10.2139/ssrn.3422016.

Hu, Lily (2019) "Disparate Causes, pt. I," October, https://www.phenomenalworld.org/analysis/disparate-causes-i/.

Huang, Junming, Alexander J. Gates, Roberta Sinatra, and Albert-László Barabási (2020) "Historical comparison of gender inequality in scientific careers across countries and disciplines," *Proceedings of the National Academy of Sciences*, 117 (9), 4609–4616, 10.1073/pnas.1914221117, Publisher: Proceedings of the National Academy of Sciences.

Hussey, Andrew, Sheena Murray, and Wendy Stock (2022) "Gender, coauthorship, and academic outcomes in economics," *Economic Inquiry*, 60, 465–484, https://onlinelibrary.wiley.com/doi/abs/10.1111/ecin.13047.

Jayachandran, Seema (2021) "Social Norms as a Barrier to Women's Employment in Developing Countries," *IMF Economic Review*, 69 (3), 576–595, 10.1057/s41308-021-00140-w.

Joshi, Siddharth and Deepak Malgan (2017) "Missing Scholars: Social Exclusion at the Indian Institutes of Management,"Technical Report 3015212, Rochester, NY, 10.2139/ssrn.3015212.

Kleemans, Marieke and Rebecca L. Thornton (2021) "Who Belongs? The Determinants of Selective Membership into the National Bureau of Economic Research," *AEA Papers and Proceedings*, 111, 117–122, 10.1257/pandp.20211123.

Koffi, Marlène (2021) "Gendered Citations at Top Economic Journals," *AEA Papers and Proceedings*, 111, 60–64, 10.1257/pandp.20211085.

Lassen, Anne Sophie and Ria Ivandić (2024) "Parenthood and Academic Career Trajectories," *AEA Papers and Proceedings*, 114, 238–242, 10.1257/pandp.20241118.

van der Lee, Romy and Naomi Ellemers (2015) "Gender contributes to personal research funding success in The Netherlands," *Proceedings of the National Academy of Sciences*, 112 (40), 12349–12353, 10.1073/pnas.1510159112, Publisher: Proceedings of the National Academy of Sciences.

Leslie, Sarah-Jane, Andrei Cimpian, Meredith Meyer, and Edward Freeland (2015) "Expectations of brilliance underlie gender distributions across academic disciplines," *Science*, 347 (6219), 262–265, 10.1126/science.1261375.

Link, Albert N., Christopher A. Swann, and Barry Bozeman (2008) "A time allocation study of university faculty," *Economics of Education Review*, 27 (4), 363–374, 10.1016/j.econedurev.2007.04.002.

Liu, Jennifer (2021) "15 of the top companies for women working in tech,"Technical report.

Long, J. Scott (2001) *From Scarcity to Visibility: Gender Differences in the Careers of Doctoral Scientists and Engineers*: National Academy Press, Washington, DC.

Lundberg, Shelly (2020) *Women in the economics profession: A new eBook*: CEPR, https://voxeu.org/article/women-economics-profession-new-ebook.

Lundberg, Shelly J. (2022) "Gender Economics: Dead-Ends and New Opportunities,"Technical Report 4114792, Rochester, NY, 10.2139/ssrn.4114792.

Lundberg, Shelly and Jenna Stearns (2019) "Women in Economics: Stalled Progress," *Journal of Economic Perspectives*, 33 (1), 3–22, 10.1257/jep.33.1.3.

Mansour, Hani, Daniel I. Rees, Bryson M. Rintala, and Nathan N. Wozny (2022) "The Effects of Professor Gender on the Postgraduation Outcomes of Female Students," *ILR Review*, 75 (3), 693–715, 10.1177/0019793921994832, Publisher: SAGE Publications Inc.

Mason, Patrick L., Samuel L. Myers, and William A. Darity (2005) "Is there racism in economic research?" *European Journal of Political Economy*, 21 (3), 755–761, 10.1016/j.ejpoleco.2004.07.005.

May, Ann Mari, Mary G. Mcgarvey, and Robert Whaples (2014) "Are Disagreements among Male and Female economists marginal at best?: A survey of AEA members and their views on economics and economic policy.," *Contemporary Economic Policy*, 32 (1), 111–132, 10.1111/coep.12004.

Meade, Ellen E., Martha Starr, and Cynthia Bansak (2021) "Changes in Women's Representation in Economics: New Data from the AEA Papers and Proceedings,"Technical Report 3908313, Rochester, NY, 10.17016/2380-7172.2975.

Megalokonomou, Rigissa, Marian Vidal-Fernandez, and Duygu Yengin (2021) "Why having more women/diverse economists benefits us all," *VoxEU*, https://voxeu.org/article/why-having-more-womendiverse-economists-benefits-us-all.

Mester, Loretta J. (2019) "Increasing Diversity, Inclusion, and Opportunity in Economics: Perspectives of a Brown-Eyed Economist: Second Annual Women in Economics Symposium, Federal Reserve Bank of St. Louis, St. Louis, MO,"Technical Report 107, https://ideas.repec.org/p/fip/fedcsp/107.html.

Milkman, Katherine L., Modupe Akinola, and Dolly Chugh (2015) "What happens before? A field experiment exploring how pay and representation differentially shape bias on the pathway into organizations," *The Journal of Applied Psychology*, 100 (6), 1678–1712, 10.1037/apl0000022.

Nadeem, Reem (2021) "STEM Jobs See Uneven Progress in Increasing Gender, Racial and Ethnic Diversity," *Pew Research*, https://www.pewresearch.org/science/2021/04/01/stem-jobs-see-uneven-progress-in-increasing-gender-racial-and-ethnic-diversity/.

Nelson, Julie A. (2015) "Are Women Really More Risk-Averse Than Men? A Re-Analysis of the Literature Using Expanded Methods," *Journal of Economic Surveys*, 29 (3), 566–585, 10.1111/joes.12069.

Niederle, Muriel and Lise Vesterlund (2011) "Gender and Competition," *Annual Review of Economics*, 3 (1), 601–630, 10.1146/annurev-economics-111809-125122.

Nollenberger, Natalia, Núria Rodríguez-Planas, and Almudena Sevilla (2016) "The Math Gender Gap: The Role of Culture," *American Economic Review*, 106 (5), 257–261, 10.1257/aer.p20161121.

NSF, National Science Foundation (2017) "Women, Minorities, and Persons with Disabilities in Science and Engineering,"Technical report, Arlington, https://www.nsf.gov/statistics/2017/nsf17310/digest/about-this-report/.

——— (2022) "Doctorate Recipients from U.S. Universities,"Technical report, Arlington, https://ncses.nsf.gov/pubs/nsf23300/report/about-this-report.

Nunn, Nathan (2019) "Rethinking economic development," *Canadian Journal of Economics/Revue canadienne d'économique*, 52 (4), 1349–1373, 10.1111/caje.12406.

Obloj, Tomasz and Todd Zenger (2022) "The influence of pay transparency on (gender) inequity, inequality and the performance basis of pay," *Nature Human Behaviour*, 1–10, 10.1038/s41562-022-01288-9.

Ohlheiser, Abby (2017) "The woman behind 'Me Too' knew the power of the phrase when she created it — 10 years ago,"Technical report, https://www.washingtonpost.com/news/the-intersect/wp/2017/10/19/the-woman-behind-me-too-knew-the-power-of-the-phrase-when-she-created-it-10-years-ago

Onder, Ali and Hakan Yilmazkuday (2020) "Thirty-Five Years of Peer-Reviewed Publishing by North American Economics PhDs: Quantity, Quality, and Beyond," *Open Economics*, 3 (1), 70–85, https://econpapers.repec.org/article/vrsopenec/v_3a3_3ay_3a2020_3ai_3a1_3ap_3a70-85_3an_3a4.htm.

Paredes, Valentina, M. Daniele Paserman, and Francisco J. Pino (2023) "Does Economics Make You Sexist?" *The Review of Economics and Statistics*, 1–47, 10.1162/rest_a_01356.

Porter, Catherine and Danila Serra (2020) "Gender Differences in the Choice of Major: The Importance of Female Role Models," *American Economic Journal: Applied Economics*, 12 (3), 226–254, 10.1257/app.20180426.

Price, Gregory N. (2009) "The problem of the 21st century: Economics faculty and the color line," *Journal of Behavioral and Experimental Economics (formerly The Journal of Socio-Economics)*, 38 (2), 331–343, https://ideas.repec.org/a/eee/soceco/v38y2009i2p331-343.html, Publisher: Elsevier.

Pujol, Michèle (1984) "Gender and class in Marshall's "Principles of Economics"," *Cambridge Journal of Economics*, 8 (3), 217–234, https://www.jstor.org/stable/23596623, Publisher: Oxford University Press.

Ramirez-Espinoza, Fernanda (2022) "Essays on the Economics of Education and Gender," *PhD thesis, Harvard University*.

Rivera, Lauren A. (2017) "When Two Bodies Are (Not) a Problem: Gender and Relationship Status Discrimination in Academic Hiring," *American Sociological Review*, 82 (6), 1111–1138, 10.1177/0003122417739294, Publisher: SAGE Publications Inc.

Rose, Michael E. and Suraj Shekhar (2023) "Adviser connectedness and placement outcomes in the economics job market," *Labour Economics*, 84, 102397, 10.1016/j.labeco.2023.102397, Publisher: North-Holland.

Sahm, Claudia (2022) https://twitter.com/Claudia_Sahm/status/1583177933920690176, Accessed: 2022.

Sarsons, Heather, Klarita Gërxhani, Ernesto Reuben, and Arthur Schram (2021) "Gender Differences in Recognition for Group Work," *Journal of Political Economy*, 129 (1), 101–147, 10.1086/711401.

Sharma, Nikita (2020) "Diversifying economics: Resources for Black and other underrepresented minorities," *IGC*, https://www.theigc.org/blog/diversifying-economics-resources-for-black-and-other-racial-minorities/.

Sharpe, Rhonda Vonshay (2019) "We've to Build the Pipeline. What's the Problem? What's Next? The Remix," *The Review of Black Political Economy*, 45 (3), 191–215, 10.1177/0034644618822500, Publisher: SAGE Publications Inc.

Shinall, Jennifer Bennett (2018) "Dealing with Sexual Harassment," in *Committee on the Status of Women in the Economics Profession (American Economic Association)*, 30.

Sierminska, Eva and Ronald L. Oaxaca (2021) "Field Specializations among Beginning Economists: Are There Gender Differences?" *AEA Papers and Proceedings*, 111, 86–91, 10.1257/pandp.20211030.

——— (2022) "Gender differences in economics PhD field specializations with correlated choices," *Labour Economics*, 79, 102289, 10.1016/j.labeco.2022.102289.

Spriggs, William (2020) "Is now a teachable moment for economists?," https://www.minneapolisfed.org/~/media/assets/people/william-spriggs/spriggs-letter_0609_b.pdf.

Stansbury, Anna and Robert Schultz (2022) "Socioeconomic Diversity of Economics Phds,"Technical Report 4068831, Rochester, NY, 10.2139/ssrn.4068831.

Statista (2021) "Women's Representation in Big Tech," July, https://www.statista.com/chart/4467/female-employees-at-tech-companies.

Stevenson, Betsey and Hanna Zlotnik (2018) "Representations of Men and Women in Introductory Economics Textbooks," *AEA Papers and Proceedings*, 108, 180–185, 10.1257/pandp.20181102.

Stock, Wendy A., John J. Siegfried, and T. Aldrich Finegan (2011) "Completion Rates and Time-to-Degree in Economics PhD Programs (with comments by David Colander, N. Gregory Mankiw, Melissa P. McInerney, James M. Poterba)," *American Economic Review*, 101 (3), 176–188, 10.1257/aer.101.3.176.

Strober, Myra H. (1994) "Rethinking Economics Through a Feminist Lens," *The American Economic Review*, 84 (2), 143–147, https://www.jstor.org/stable/2117818.

Sturm, Jan-Egbert, Heinrich Ursprung, and Simon Hilber (2020) "Share of women and the gender productivity gap in economic research,"Technical report, 10.3929/ethz-b-000465772.

Thaler, Richard H. (2016) "Behavioral Economics: Past, Present and Future,"Technical Report 2790606, Rochester, NY, 10.2139/ssrn.2790606.

Triggs, Adam (2022) "Economics is having its MeToo moment,"Technical report, https://www.canberratimes.com.au/story/7964451/economics-is-having-its-metoo-moment-time-to-clean-up-the-dismal-science/.

Trix, Frances and Carolyn Psenka (2003) "Exploring the Color of Glass: Letters of Recommendation for Female and Male Medical Faculty," *Discourse & Society*, 14 (2), 191–220, 10.1177/0957926503014002277, Publisher: SAGE Publications Ltd.

Webber, Karen L. and Rachel A. Burns (2022) "The Price of Access: Graduate Student Debt for Students of Color 2000 to 2016," *The Journal of Higher Education*, 93 (6), 1–28, 10.1080/00221546.2022.2044976.

Webber, Karen L. and Manuel González Canché (2015) "Not Equal for All: Gender and Race Differences in Salary for Doctoral Degree Recipients," *Research in Higher Education*, 56 (7), 645–672, 10.1007/s11162-015-9369-8.

Wessel, David, Lorena Hernandez Barcena, and Nasiha Salwati (2021) "Gender and racial diversity of federal government economists: 2020 data,"Technical report, https://www.brookings.edu/research/gender-and-racial-diversity-of-federal-government-economists-2020-data/.

Witteman, Holly O., Jenna Haverfield, and Cara Tannenbaum (2021) "COVID-19 gender policy changes support female scientists and improve research quality," *Proceedings of the National Academy of Sciences*, 118 (6), e2023476118, 10.1073/pnas.2023476118.

Witteman, Holly O, Michael Hendricks, Sharon Straus, and Cara Tannenbaum (2019) "Are gender gaps due to evaluations of the applicant or the science? A natural experiment at a national funding agency," *The Lancet*, 393 (10171), 531–540, 10.1016/S0140-6736(18)32611-4.

Wolfers, Justin (2022) "https://twitter.com/JustinWolfers/status/1584557428082778113,"Technical report.

Wolfinger, Nicholas H., Mary Ann Mason, and Marc Goulden (2009) "Stay in the Game: Gender, Family Formation and Alternative Trajectories in the Academic Life Course," *Social Forces*, 87 (3), 1591–1621, https://www.jstor.org/stable/40345173.

World Economic Forum (2020) "Global Gender Gap Report 2020," https://www.weforum.org/reports/gender-gap-2020-report-100-years-pay-equality/.

Wu, Alice H. (2018) "Gendered Language on the Economics Job Market Rumors Forum," *AEA Papers and Proceedings*, 108, 175–179, 10.1257/pandp.20181101.

Zacchia, Giulia (2020) "What Does It Take to Be Top Women Economists? An Analysis Using Rankings in RePEc," *Review of Political Economy*, 33 (2), 170–193, 10.1080/09538259.2020.1848624.