**Diversity and Faculty Recruitment**

A report to the Economics department by the EDI committee

January 2023

## 1. Introduction

There is increasing awareness around the lack of diversity in academia in terms of gender, race, ethnicity, and various other social dimensions, which is, of course, a reflection of this phenomenon in society more broadly. This occurs at the level of hiring as well as promotion, and the gaps are particularly large at higher and more senior positions. The flagship associations of the academic economics profession such as the AEA and the RES are increasingly recognizing the problem and publishing statistics on it in regular basis, as well as taking various measures to promote diversity and combat explicit and implicit bias.

To the extent biases exist against under-represented groups (URG) that limit diversity and make the body of academic economists not representative of society at large, there are many downsides to that. First, this is undesirable from the point of view of fairness or equal treatment of equals. Second, it also leads to inefficient outcomes as there is insufficient tapping of the potential talent pool. Third, a diverse and societally representative student and faculty body creates a better learning environment, fosters creativity and innovation in research as well as creating a positive campus environment by drawing in different perspectives and life experiences in the curriculum and research agenda, with resulting impact on policy. Finally, through role model effects and breaking down of negative stereotypes it can have a continuing positive effect by attracting a better and more diverse pool of talent in the student and faculty body.

The plan of this paper is as follows. In section 2 we discuss some broad summary statistics about the representation of women and minorities among academic economists, as well as in the student body. In section 3.1 we summarise the theoretical literature on discrimination that leads to inefficiencies and henceforth the benefits from diversity. In section 3.2 we review the empirical literature on discrimination in the Economics profession and other related professions, highlighting the possibility of the URG candidate group representing a higher quality, which either arises passively or actively by positive selection into the pool. In section 4 we provide a summary of a first look at the data on our hiring practices in the last 7 years. In section 5 we discuss policies to increase diversity, looking at quotas and alternatives. In section 5.1 we provide a discussion of the theoretical literature of the benefits of quotas or policies that seem to positively discriminate in favour of URG. In section 5.2 we provide a discussion of the

empirical literature on the usefulness of quotas in the short and long term, as well as a discussion of alternatives to quotas. Finally, in Section 6 we provide some recommendations.

## 2. A S

that Black, Hispanic, and female faculty are underrepresented relative to their population shares in the US, whereas White, Asian, and male faculty are overrepresented, and when broken down by field the gap is largely coming from underrepresentation in STEM fields (which in this study includes biology, chemistry, and economics). Looking at faculty rank, the study finds that Assistant Professors are less likely to be White and more likely to be Asian and Hispanic, and less likely to be male than Associate and Full professors, which suggests a potentially positive trend for the future, with the exception of Black faculty

Clearly, the status of women and minorities in the faculty of Economics departments is a reflection of the pipeline of students who enter graduate school in Economics, and indeed, even at an earlier stage, namely, at the undergraduate

Looking at our own Department, the percentage of women by rank is as follows, 11% for Full Professors, 23% for Associate Professors, 41% for Assistant Professors, and 43% for Teaching Track faculty. Overall, for All Research Faculty 14 out of 64 or 22% are women. Comparing with the UK average 11(a)12(nt)31.6

Let us henceforth refer to a worker of type A as a privileged type in society (we will define privilege depending on the environment we consider) and a type B a disadvantaged type.

### 3.1.2 Classic Statistical discrimination models

two papers highlight issues relating to the academic profession, including co-authorship and the refereeing process:

Onuchic and Ray (2022) study signalling through team formation and find that discriminatory outcomes may arise where team members that belong to different identities may systematically receive different credit for team outcomes (e.g., in the case of co-authors). One implication of their work is that type B workers will keep the best ideas for their own work or co-authored with other type B workers.

Siniscalchi and Veronesi (2021) analyze a model in which male referees have a self-image bias and appreciate the research more when it is conducted by a male researcher, while research characteristics across the two populations can be different (creativity, technical ability) but of the same total quality. They show that if initially the population of referees is very unbalanced and mostly male, the long-term equilibrium in society may become extreme with almost only male remaining the profession following successful evaluations, which implies a large loss of talent. As they show, researchers' career concerns and institutions' practices can exacerbate such talent loss.

We have provided only a partial review of recent literature on statistical discrimination; for more, see an excellent review in Onuchic (2022).

### **3.1.6** Benefits of diversity given initial different characteristics:

Above we focused on a literature that indicates that the main benefit of "diversity" in the sense of the reversal of wrong discrimination is **a more efficient talent pool**. Mainly, inefficient discrimination implies that: (i) in the case of equally talented types A and B, firms/organisations do not tap into the full talent pool and may draw upon weaker A types compared with better B types, due to wrong beliefs or different signalling technologies. (ii) unequal quality distribution of types A and B may arise partly due to statistical discrimination providing weaker incentives for type B to invest and so fixing this will potentially create more efficient incentives. This is naturally harder for one firm to fix given equilibrium considerations.

There are reasons however for benefits from diversity even when there are initially different characteristics, as described below:

**Production considerations:** Prior discrimination may potentially lead to different characteristics developed by individuals that are not directly summarised by "quality" as above, or potentially to situations in which type B has lower quality, as in the original literature on statistical discrimination. In some environments,

may yield more efficient production. Some examples can be team production where outputs can be all additive or alternatively strongly complementary. While people who have similar background may be able to work better together (assortative matching), negative sorting can also be efficient when output/ability is not a scalar (quick problem solving vs creativity, driven but self-centred vs those with social skills who can make a team work, people with very different backgrounds may teach each other softer skills and knowledge). Such latter environments may be more pronounced in the classroom or in the academic world.

A particularly interesting recent contribution is Sethi and Somanathan (2022) who consider an environment in which production is a function of ability and training. Due to less privilege, type B individuals have less training compared with type A. If production is higher for <high ability, low training> compared with <low ability, high training>, then diversity according to training level (which is what firms observe) can be more efficient. This indicates that **reducing entry requirements for type B is efficient.** See more in Section 5.1.

Two papers consider the idea of the role of **role models** (that is, the benefit of diversity at the "top" where diversity exists at the "bottom") and their ability to increase the quality of type B workers**.** Athey, Avery and Zamsky (2000) consider a production environment in which to utilize talent efficiently for employees at a lower level, the firm needs a diverse set of top-level employees. This is derived with an assumption that mentoring is done by type and there are decreasing returns of having many mentors of the same type. Multiple steady states are possible in the long run -if mentoring is very important in total production, then firms may become homogeneous (with type A if this is the starting point). Chung (2000) also considers a role model environment in which individuals of type B provide a signal to type B workers that they can be successful. See more in Section 5.1.

**3.2 Discrimination in the Economics Profession and similar ones: Empirical**

The representation of women and minorities in faculty groups in economics has increased since the 90s but, contrary to popular belief, has not been incrementally improving over the past 10 years (CSMGEP 2017 Report). There is empirical evidence from our own field suggesting that unequal treatment of female scholars is a likely contributing factor. Among other studies, Heather Sarsons' work on coauthorship in economics suggests that female economists are implicitly given less credit for co-authored papers relative to male economists and, accordingly,

unable to perform the same analysis for racial minorities in economics because there are simply too few racial minorities in top departments to analyse with classical statistical methods. Relatedly, Koffi (2021) uses machine learning algorithms to identify similarity across papers and establish which papers should be cited; She shows that papers omitted from references are 15% more likely to be female-authored than male-authored.

Even in cases where women are tenured, unequal treatment permeates economics culture. In a

the lower female labour force participation is in a given country, and the higher the barriers to entry for women are as measured by gender norms. Using structural estimation, they find that equalizing these barriers to labour force participation by women would increase productivity on average by 32%. The main insight of this paper is that the observed minorities in an applicant pool are likely positively

environments in which this was not facilitated due to wrong priors or different

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highlight are also beneficial given the other motivations to increase efficiency mentioned in the introduction, such as fairness, role models for students, direct benefits from diversity, and others.

We therefore recommend that the department continues in its previous effort to increase diversity by employing a target for URG at every stage of the junior hiring process. We see no reason to use different targets than we had used before and therefore recommend a target of 2/3 at each stage of the process.

Transcending the exact quota numbers, or even of a quota per se, is the logic of making precise the benefits that diversity can bring for the productivity of the Department, and for each sub-field: due to positive selection, due to role model effects, and due to valued inputs in the academic research and teaching production function. Internalizing this logic could help guide discussions within fields as well.

Importantly, we recommend looking into supplementing

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