

How You Can Work to Increase the Presence and Improve the Experience of Black, Latinx and Native American People in the Economics Profession

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ABSTRACT

Recently in economics there has been discussion of how to increase diversity in the profession and how to improve the work life of diverse peoples. We conducted surveys and interviews with Black, Latinx and Native American people, groups long underrepresented in the economics profession. Participants, at various stages along the economics career trajectory or on the trajectory no longer, used their lived experience to reflect on what helps and hurts underrepresented minorities in economics. We heard a few consistent themes, bias, hostile climate, and the lack of information and good mentoring among them. Respondents' insights and experience point toward action steps that you can take today to increase the presence and improve the work life of underrepresented minorities in the economics profession.

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Section I Introduction

The numbers are dismal. Blacks, Latinx and Native American¹ people earn under 10 percent of economics PhD degrees each year. The groups comprise over 30 percent of the population. And while the numbers of Latinx degree earners have increased over recent years, when normalized by their increasing share in the population, the trend is flat. More striking, the share of Black economics doctorates has actually fallen since the start of the millennium. At the same time the share of Black STEM degree earners has been rising.²

The experiences are perhaps even more troubling. Twenty-eight percent of Black, Latinx and Native American respondents to the AEA Climate Survey report having personally been discriminated against or treated unfairly, on the basis of race/ethnicity, by someone in the field of economics. Blacks and women of color, both students and professionals, are the most likely to report having experienced discrimination and are the most likely to have taken costly actions, such as leaving a job, to avoid bias.³

This article is about how you can work to improve this situation. Having very little literature to inform the discussion, we collected new data. We targeted Black, Latinx and Native American⁴ individuals who are at various positions in the economics career trajectory as well as those who were on the trajectory but are no longer. The latter group's views have been much less present in discussions of race and economics. (For example, this group was not reached by the AEA Climate Survey.) We conducted 75 surveys, followed by open-ended interviews with more than half of the participants, on the question of what helps and hurts minority group members to succeed in economics. While respondents' age⁵ and relationship to economics were quite varied, we heard a few consistent themes, bias, hostile climate and the lack of information and good

¹ We refer to those identifying as Native American, Indigenous, American Indian, Alaskan Native and Pacific Islander as Native American recognizing that there is no consensus on what is the most respectful term. Respondents used the first three, with some respondents using more than one term in the course of the interview. Similarly, the terms Black and Latinx refer to individuals who identify as African American and, respectively, Hispanic as well.

² Authors' calculations using Survey of Earned Doctorates (SED) and Integrated Post-Secondary Data System (IPEDS) data (National Center for Science and Engineering Statistics 2018; National Center for Education Statistics 2019). The numerator and denominators only include US citizens and permanent residents. In the most recent years for which data are available Black non-Hispanic, Latinx and Native American non-Hispanic scholars earned 9.9% in 2018 (9.5% in 2017) of degrees in the IPEDS (SED). The Black share of degree recipients fell from 3.7% in the years 1999-2001 to 3.4% in the three most recent years of data, 2016-8 in the IPEDS. In the SED the share Black of economics PhD recipients dropped from 3.7% (1999-2001) to 3.2% in 2015-7. Black STEM recipients increased from 3.3% to 4.6% in the SEDS and from 2.9% to 4.3% in the IPEDS. STEM fields include Life Science, Physical/Earth sciences, Math/Computer sciences, and Engineering. There are too few Native American recipients to calculate meaningful trends for this group alone. Population data acquired from the U.S. Census Bureau (Population Division 2000, 2003, 2011, 2019; Gibson and Jung 2005).

³ We do not know if the same is true for Native American respondents, as the survey does not report results for this group alone due to small sample sizes. A majority of women of color report experiencing either racial discrimination or gender discrimination or both, despite taking many types of actions to avoid possible harassment, discrimination, or unfair or disrespectful treatment. "Black respondents more frequently report having experienced discrimination with respect to access to research assistantships, advisors, quality advising and while on the job market" (Allgood et al. 2019).

⁴ Our focus on these three groups is because they are now, and have been historically, underrepresented in the economics profession. This is not a comment on whether those who identify as Asian experience discrimination. The AEA Climate Survey results demonstrate that they do (Allgood et al 2019).

⁵ Proxied by date of college graduation.

mentoring among them. Respondents' reflections and experiences, coupled with our own, point to a variety of actions that you can take today to improve the representation and the experience of Blacks, Latinx and Native American individuals in the economics profession.

Section II Data

We sought to hear from Black, Latinx and Native American respondents with a great range of experiences with the field of economics.⁶ We collected two types of data. In the first, the survey⁷, we began by asking respondents to choose the response that best describes their location on, and satisfaction with, their economics trajectory. See Table 1 for possible responses. Because we are particularly interested in the factors that lead to a more versus less positive experience with economics, we use this question to divide the sample into two groups for comparison in analysis: The first group we term the *nondisrupted* respondents. These respondents' careers are progressing along. If they have completed the PhD, they are satisfied with their employment. The *disrupted* respondents, on the other hand, had started on the economics pathway but then left economics, started on the academic pathway and then left academic economics or are unsatisfied in their current position.⁸

The key question for analysis in the survey, the *most important question (miq)*, asked for open-ended responses to "What is the most important thing we should know about what helps and hurts minorities' progress in an economics career?" The 67 eligible respondents who answered the question constitute the *miq sample*.⁹ We also collected demographic data including race/ethnicity, which we use to determine eligibility for the sample, which was based on identification as Black, Latinx and/or Native American and at least a previous interest or consideration of economics as a career.

In contacting survey respondents for our second data collection effort, open-ended interviews, we privileged *disrupted* respondents. Many are no longer in the profession; their opinions are not generally incorporated into discussions on race and economics. Given their original interest in economics, the *disrupted* respondents represent the kind of minority student who could be persuaded to pursue, and could be satisfied in, a career in economics provided we make some changes to the field. In fact, a majority of *disrupted* survey respondents including all four who began an economics PhD program but did not complete it would pursue economics if they had it to do again. (The fact that they did not have the support, information or resources to

⁶ We were aiming for a broad sample more than a representative sample.

⁷ Please see the Data Appendix for survey and interview protocols and procedures.

⁸ We include those who have considered an economics career but rejected it in the non-disrupted group as they never began on the economics trajectory. We categorize those who started and left academia as disrupted even though they remain in economics because of the alteration of the career trajectory. Given the great desire of respondents to see more professors of color in academia, understanding why respondents left academia is of particular interest. We divide the sample into these two rather coarse groups, instead of more finely, to help maintain confidentiality.

⁹ Or more precisely the sample of people who responded to the *miq* question. Seventy-five eligible people began the survey; 67 answered the *miq* question.

do so in the first place is the issue we address in this article.) In addition to *disrupted* economists we targeted for interviews those with intriguing or unique answers to *the miq*.

We completed 42 open-ended interviews in total.¹⁰ Summary statistics for both the *interview* and *miq samples* are in Table 2. Both samples include respondents who graduated from college in the 2010s back to the 1970s, with more robust coverage from the 1990s on. Approximately half of respondents in both samples identify as Black, approximately half as Latinx and under 10 percent as Native American.¹¹ (Race categories were not mutually exclusive.) Relative to their representation in the sample, Blacks and women are overrepresented among *disrupted* participants which echoes the AEA Climate Survey results showing that Blacks of all genders and women of color are most likely to have experienced discrimination within economics and to have taken a costly action, such as leaving a job, to avoid negative treatment (Bayer, 2020).

While the focus of our article is on solutions to the racial diversity problem, in the remainder of this section we provide an overview of the problems respondents saw as hindering minorities' trajectories in economics, problems we will address in Section III of the paper. The *interview* and the *miq* data are complementary. In the interviews, respondents were invited to discuss an unlimited number of factors they felt affect minorities' progression in economics.¹² From the interviews we gain a sense of the range of issues impacting minorities' progress in the field. The top three hindrances mentioned by respondents in interviews were lack of mentoring, lack of good information and implicit bias.¹³ *Disrupted* respondents, not surprisingly, named more ways in which economics could improve. As often as the full sample spoke of the three factors named above, the *disrupted* sample mentioned those three *plus* lack of funding, departmental policies/action and the hostile climate in economics. *Nondisrupted* respondents discussed only mentoring and teaching as often as the full sample named its top three.¹⁴

The *miq*, on the other hand, asked respondents to zero in on the most important factor or factors impacting minorities' careers. While there is great overlap between the top *interview* and *miq* responses, *miq* respondents more frequently mentioned issues about the general climate or their interactions with other individuals in the field as *most important*. In the full *miq sample* the top responses are mentoring and implicit bias again, but this time followed by hostile climate. At the rate the full sample mentioned those three, the *disrupted* sample named eight hindrances: the three named by the full sample plus elitism, institutional inaction about diversity, lack of

¹⁰ We asked participants to schedule an hour's time for interviews. Many interviews, with the consent or even encouragement of the interviewee, lasted a great deal longer.

¹¹ We did not ask respondents for the place of birth or citizenship. But based on responses in interviews, we estimate 69 percent of the *interview* sample grew up in the US, 21 percent grew up outside of the US; we could not determine where 10 percent of the sample were raised.

¹² The interviewers prompted memory of these factors at least as related to the respondent's personal trajectory by having the respondent walk the interviewer through the respondent's career trajectory.

¹³ Based on our coding of respondent's responses.

¹⁴ However, lack of good information and lack of academic preparation were close. Sixty-six percent of *nondisrupted* interview respondents named these two while the third most frequent—actually a tie for second--hindrance overall was named by 67% of the full interview sample.

understanding/listening on the part of colleagues, bosses or professors, the fields' lack of openness to new questions and methods and career prospects. The *nondisrupted* sample wrote of a lack of mentoring and a lack of good information as the most important hindrances at the rates the full sample named its top three.¹⁵

Many respondents feel unheard, from one-on-one interactions with other economists to an inability to get their ideas out to the widest circulating journals. Because these ideas are their *most important* contributions to a very important ongoing conversation on race in economics, we list all responses to the *miq* in Table 2.

III Action Steps

In this section we describe respondent's experiences and reflections, drawing out lessons on action steps that economists can take today to improve both the numbers of and climate for minorities in economics. Some actions, like informing students about programs that help minorities transition from a BA to an economics PhD, take less effort while others, like starting *new* programs that help minorities make that transition, require much more. Our goal is not that any one person will pursue all of these actions, but that each person will take at least one.

We group actions into three categories: a) inform b) mentor and c) welcome. We discuss each in turn below.

A Inform

The trajectory to becoming a PhD economist is far from obvious. To take just one example raised in interviews, it is not intuitive that an undergraduate economics major is not sufficient preparation for a doctoral economics program.¹⁶ The great inequality of access to good information exacerbates economics' diversity problem. Because of the dearth of Black, Latinx and Native American economists and the fact that information spreads more readily within race/ethnicity, students from these minority groups are simply less likely to receive good information about an economics career. As a graduate student explains¹⁷,

because there are so many things about advancing in the career that have to do with interactions and with getting the right advice at the right time and when you don't have this knowledge, and when your family doesn't have this knowledge, your friends don't have this knowledge, then it's harder for you to know who to ask first. And even if you know who to ask, it's harder to even approach that person or to go about getting this knowledge.

¹⁵ The greater focus on environmental issues is not driven by the change in sample from interview to *miq*. Looking only at the *interview* sample responses to the *miq*, we find that respondents most frequently mention implicit bias, mentoring and lack of openness to new questions and methods. The *disrupted miq sample* listed those three plus brutal/hostile environment, lack of understanding/listening on the part of colleagues, bosses or professors and career prospects at the rates the overall sample named its top three. The *nondisrupted sample* listed only mentoring at those rates.

¹⁶ This problem is highlighted by Sharpe (2017).

¹⁷ We identify respondents with minimal demographics to maintain confidentiality.

1. What kind of information?

Respondents argued that more minorities would succeed in economics if more had access to pertinent information at the right time. Here is a partial listing of the types of information that respondents wish they had had access to earlier.

- How to succeed in college: A recent graduate looks back on her college experience

I wish I had been part of a program that would've taught me how college was different from high school. I think that would've made my transition, my first semester 1,000 ... times easier... [S]omebody to tell me, "This is what office hours are for. It's okay if the only thing you show up to office hours with is ... 'I literally understand nothing. I don't understand. Nothing you said today in class, none of it registered. Can you explain this to me again?'" I feel like that would've really made a difference.

- Bridge and mentoring programs for those interested in an economics PhD. An economics PhD student explains

I did not know this A[E]A [Summer] Program existed at all. No one ever mentioned its existence to me... [H]aving this be known to all economists would be very beneficial so that they can then just tell their students ... about pre-doctoral opportunities, just things of that nature for people who are interested.

- What you can do with an economics degree (BA and PhD): “The clearest path post economics B.A. from my university seems to be banking and getting information about other paths seems to be like pulling teeth,” reads one response to the *miq*. Many interview participants expressed a similar frustration. They lacked specifics in terms of where economists work. They wanted to learn more about the relationship between an economics degree and public policy work, both in and out of government. One respondent who considered an economics PhD but decided against it looked back more than 20 years to her college years. “I lacked concrete information on what my career prospects would be beyond academia. I didn't even know until recently that I could have worked for the Federal Reserve!”

Respondents also wished they had known more about economic research and what academic economists do outside of the classroom. And they wanted salary information. One interview respondent learned these things when she participated in the AEA summer program. “Once I saw that, that ... doing research, being an academic could be a career and that I could support myself doing that,” then a PhD in economics became a real possibility for the participant.

- How to succeed as a new PhD: A graduate student already expresses this concern:

People talk about the hidden curriculum or that sort of thing. And it goes really deep because it's not just about how does tenure work? But also, what do specific tenure

requirements look like at specific schools? ... People who have been around in the discipline for long enough know the subtle differences...

2. Disseminate Information

You can illuminate the “hidden” parts of the economic field. And if you are on a college campus, the work can begin even before students arrive. In a large field experiment involving 2,710 students across nine U.S. colleges, Bayer, Bhanot, and Lozano (2019) show that emailing information about a diverse array of topics and researchers within economics to incoming women and minority college students increases their likelihood of completing an economics course in the first semester by 3.0 percentage points, nearly 20 percent of the base rate.¹⁸

Once students are in class, be explicit about your expectations of them, including appropriate use of office hours, classroom conduct and class preparation time, and what they can expect from you including e-mail use, hours of availability and the type of help you are willing to give. Let them know what economists actually do and how they can get there through announcements and links on the course website and more seamlessly through course content (which would speak to respondents’ calls for more applied introductory courses in Section III.C.1).¹⁹

Outside of the classroom, actively share information. Make sure young people you work with have a sense of the breadth of economics in terms of topics studied, career trajectories, and places of employment. Share resources available for succeeding in such a career (We describe some in Section III.A.5) with those you supervise as RAs, interns or PhD advisees and those you meet at conferences, whether they ask for the information or not. Students may not know what they do not know. Additionally, the fact that you speak to the student about graduate school, for instance, may move it more squarely into the realm of possibility.

Invite students and junior colleagues to help with your research, to attend conferences, and to join your field. Invite undergraduates to attend seminars. Departments can host brown bags with professors, “so that we can learn about what cool stuff our professors are doing,” a recent college graduate suggested. Even better, allow an undergraduate economics club to drive the agenda for a speaker’s series. Respondents noted that affinity groups, such as groups for minorities in social science, or women in economics, are good tools of information dissemination as well. Departments can encourage and support their formation and sustenance.

3. Introduce

You can also facilitate connections among researchers and bring minority researchers into your own network. Related to the problem of lack of information is that of lack of connection to key networks. If you know an early researcher who would benefit from interacting

¹⁸ Such outreach, by individual faculty and departments, is necessary to help offset the information disadvantage and the biased recommendations of high school counselors, which these students face (Francis, de Oliveira, and Dimmitt 2019).

¹⁹ The advice and resources offered on the AEA website (Bayer et al 2019), including the videos that expose students to the research that economists do (Div.E.Q. 2019) are helpful in this regard.

with another researcher you know, put the two in touch. Connect people online and at conferences. Share opportunities to submit to, present in, and attend conferences. We know these connections are vital to success. A named professor in the sample attributes his strong publication record to being in a network that includes many journal editors. Another PhD says she is no longer in academia because she never made the connections she needed to get her work out there. “In the end, she says “it's who do you want to hang out with, who do you want to be friends with, who do you feel like you can talk with?”

4. Inform Yourself

Here we provide some basic information about *a few* of the bridge and mentoring programs available for minority economists and economists-in-training, so that you can pass the information along.

The AEA has three programs. The first is the AEA Summer Program where minority undergraduates and recent graduates take coursework to prepare them for a PhD in economics. The second is the AEA Mentoring Program where minority graduate students are matched with PhD economists for one-on-one mentoring. The final program is the AEA Summer Economics Fellows Program which places graduate students and junior professors within the research communities of government organizations, while allowing the fellows to work on research projects of their own. You can find additional information on all of these programs on the Committee on the Status of Minorities in the Economics Profession webpage.²⁰

Another major program in this space is the Diversity Initiative for Tenure in Economics (DITE) which supports minority scholars moving from untenured to tenured status. There are also several post baccalaureate programs that allow students to work as research assistants and complete coursework in preparation for a PhD. The PhD Excellence Initiative at New York University (NYU) is one example that particularly targets minorities. For a more complete listing, see the AEA’s website on Professional Development Initiatives.²¹ You can also join the Committee on the Status of Minority Groups in the Economics Profession (CSMGEP) listserv and join the American Society of Hispanic Economists (ASHE) and the National Economics Association (NEA) which “promote[s] the professional lives of minorities within the profession,” to be a part of their listservs and receive up-to-date information on opportunities for minorities in economics.²² The Association for Economic Research of Indigenous Peoples is a new professional association, founded in February 2019, which hosts events and resources “to facilitate intellectual exchange, foster networking and information sharing, encourage and promote teaching and research on topics related to the social and economic development of Indigenous peoples.”²³

²⁰ <https://www.aeaweb.org/about-aea/committees/csmgep/programs>

²¹ <https://www.aeaweb.org/about-aea/committees/cswep/programs/resources>

²² One way to increase your exposure to the intellectual contributions of minority economists is by attending CSMGEP, NEA and ASHE sessions at annual and regional meetings. See the most recent issue of their joint newsletter, *The Minority Report*, for a list of recent session. <https://www.aeaweb.org/content/file?id=11280>

²³ <https://www.aeripecon.org/>

Respondents praised bridge and mentoring programs as helpful not only in skill development, but also in terms of information acquisition and network formation. Said a recent graduate of the AEA summer program

A lot of people I still keep in contact with. We all, if someone's applying for a job, we'll check resumes. [If I apply to graduate school] I have people I know who can help me, read my application. And just have a support network in general. I think that was a super valuable experience.

And while respondents lauded the programs that were available, they saw a great need for more, particularly more programs to assist with the transition from a BA to a PhD in economics. Such programs can take many forms. One respondent was admitted to a PhD program that allowed her to take undergraduate math classes at no charge for her first year on campus, before moving on to the first-year PhD curriculum her second year. The AEA Summer Program consists of classroom instruction in preparation for a PhD application. Post baccalaureate programs that allow participants to combine classroom instruction and research assistant work are popping up on many campuses. These programs can take as few as one student per year and can often garner grant support. If you are interested in starting such a program one place to start might be by viewing the joint Committee on the Status of Women in the Economics Profession (CSWEP)/CSMGEP Panel “Launching a Professional Development Initiative: A Conversation among Mentoring Veterans, Eager Mentors, and Founders of New Mentoring Initiatives” from the 2020 AEA meetings.²⁴

B Mentor

As much as respondents praised bridge and mentoring programs, there was one suggestion for improvement from a summer program graduate.

I think programs like [the AEA Summer Program] would do even better if they added an ongoing mentoring component after the program to support students in the graduate school application process and journey.

In fact, mentoring was the most frequently named solution to the lack of racial and ethnic diversity in economics, in both the *interview* and *miq* samples.

Given the small numbers of minority PhDs in economics, for mentoring to be a meaningful part of the solution, a large share of those mentors will have to be non-minority economists. In our roles on CSMGEP we have heard non-minority economists question whether they can effectively mentor minority economists and would-be economists. The answer is yes. More than two-thirds of interview participants reported that a non-minority economist had acted as an effective mentor at some point in their career.²⁵

²⁴ <https://www.aeaweb.org/about-aea/committees/cswep/videos/2020/develop>

²⁵ Respondents are unsurprisingly quite eager to have minority mentors. Four Black women in the interview sample attribute their failure to go on to a PhD at least in part to the lack of mentors who looked like them. We see the constraint here as being about the numbers of minorities in the field rather than interest or knowledge about mentoring. Therefore, we hold off discussion of this issue until Section III.C.

Mentees do not expect all of their mentoring needs to be met by a single mentor. As one graduate student explained,

I'm sure it's a common thing for people of color ... and maybe for women, but you have to cobble together your team of mentors or advisors and have them each serve their own purpose. ... [M]y advisor is not going to be the person that I listen to about race and ethnicity in research... I think as much as she's read about that, that's not her expertise, and that's not where her political investments really line up with mine. And my mentor through the AEA mentoring program [Latinx like the speaker] ... in terms of political investments and in terms of inspired research, I talk to him and I get a million ideas... And I feel so jazzed about changing the discipline talking to him.

A respondent who started but did not finish a PhD program summed up the situation succinctly. “I think there has to be an effort by non-minority scholars to both understand that there is a pipeline problem ...and be willing to mentor.”

The key phrase is “an effort by non-minority scholars.” You will need to do more than wait for a minority student from an underrepresented group to knock on your office door and ask for mentoring. As one student explains,

First, undergraduate students need to see that there are people like them in the field. But you can't have that unless you have people in the field. So, it's a bit of a vicious cycle. But I think undergraduates also need people to tell them that if you are a minority, you can also come in. So even though you don't look like me, you're also smart or you're also talented or you're also driven enough to do this. So, I think [even] when there's no diversity in the cohort or [among the] professors, they can still actively look for diverse students. And I say actively...because I think one of the mistakes a lot of people make is assuming that, oh, the smart and the driven students are the ones that come to meet me [and] are the ones who asked me about graduate school. There are many smart and driven students that just don't dare or don't have maybe the language skills or don't have the information...[S]ometimes you just don't know. And I think the role that a professor can play, or a mentor can play is really big.

The mentoring relationship may last months or years, may be declared formally or arise more organically. Specifically, what are students and assistant professors of color looking for a mentor to do? First, provide information and connect the mentee to resources and networks as described in section III.A. These forms of support can be provided inside or outside of a mentoring relationship. Respondents would like to meet regularly with their mentors. And respondents would like mentors to listen and help the mentee to become the economist that the mentee wants to be, not a reflection of the mentor.

Respondents are also looking for mentors who are proactive. An academic explained

You asked me in terms of diversifying the profession and also mentoring and the things I talked about, sponsorship and mentoring, making sure that before the student [starts]

failing classes, intervene and make sure, check in with them. How are you doing? What do you need to get through to the classes? ... What do you need to get through this dissertation? Would you like to coauthor this paper? When they're faculty members, would you like to coauthor these papers? Would you like to go in on this NSF grant? Would you like to review for this NSF grant? Those are the kinds of things that are needed to retain [minorities in economics].

Finally, mentors should be encouraging. Be your mentee's champion. Too many respondents were discouraged from pursuing economics. One was told she would never attain the mathematical proficiency needed. Another was told that because he was unable to get into a top 10 program that it wasn't worth attending economics graduate school. (As we noted in Section II, respondents felt elitism was a major hindrance to minorities' careers.) What would make the economic trajectory smoother? A respondent who went as far as an MA in economics responded, "I don't know. I guess maybe just being told that you can actually be an economist."²⁶

Good mentoring was pivotal to many respondents' decisions of whether to major, work or get a PhD in economics. The AEA Summer Program graduate who opened this section believes that had she had a mentor to help her, she would have applied for economics PhD programs when she returned to her home campus that fall. She never did apply, but says if she had it to do again, she would, because she got a "thrill" from doing math and economics.

On the other hand, more than one respondent credits good mentoring with their being in an economics PhD program today. A student explained the value of mentoring as follows

I wouldn't have known from anyone that a PhD is what I needed if I hadn't had someone saying, 'Hey, this is what's going on. This is what [you] probably need. I think you can do it.' If we don't have people going out and speaking and encouraging and mentoring and being in relation with us, then what, you know?

C Make Economics More Welcoming

1. Broaden the Introduction

From the first contact that students have with economics, the field is off-putting, respondents tell us. Some believe that the introductory courses are designed to "weed out" students from the major. Whether professors are doing this deliberately to decrease numbers or not, respondents point to theories and formulas devoid of applications as uninviting. Respondents recommend that introductory courses be more applied and that they include examples that are relevant to students from all backgrounds. In fact, nearly 75 percent of interview respondents cited an interest in public policy in explaining what first attracted them to economics. Says a recent undergraduate,

Being able to connect what's happened in the classroom with what a given student's lived experience or question is, is extremely useful. ... I personally know a lot of ...people of

²⁶ For more on good, and bad, and ugly, mentoring, see Bogan (2019), Cook (2019), and the *CSWEP News* issue on mentoring underrepresented minority women edited by Mora (2019).

color, who, I think personally, if economics was much more accessible, they would probably be economists because they're interested in questions of, how do we fix the gender gap? How do we fix the racial disparities in education and wages? These are economics questions.

Another student was hooked by being invited to critique the textbook models.

Every time in class [the teacher] would say, I'm going to show you this model[and] I want you to know that these are all of these assumptions baked into this model... Every day you should ask yourself whether those assumptions are really true... And so, that got me thinking... And I started realizing that I actually wasn't that bad at math. I got to this point where I was like, oh wait, no, I'm proficient, I can probably do this.

This student is now in an economics PhD program.

Another discouraging factor in one's early years in economics is that, according to several respondents, professors give the impression that they are only interested in the top students. The same recent undergraduate advocating more applied work above explained, "It's like an ID card. Show your ID, show your A, "Okay, you get a letter. You get my attention." A respondent who graduated from college some time ago talked about how disheartening it was that he could not get a research assistant position on campus because all the positions had minimum GPA requirements. Given that students come into college (and graduate school) with different prior academic experiences, have different rates and manners of assimilating information, and that there are types of intelligence invaluable to research that may not show up on an introductory microeconomics final, we do ourselves (and of course the students) a great disservice by eliminating them from consideration based on solely their GPA.

Some students will come into an economics course (at the undergraduate or graduate level) together with a strong network. Others will know no one and will therefore be at a great disadvantage in completing coursework and studying for exams. Level the playing field by formalizing processes and taking across-the-board steps: share resources like copies of past exams universally; set up study groups for all students and encourage students to work collectively and assign and guide graduate student advising.

Minority (and female) students report a significantly lower sense of belonging in introductory economics classes (Bayer, Bhanot, Bronchetti, and O'Connell 2020).²⁷ Be upfront with students about the economics profession's need to be more diverse and the messages of exclusion communicated by materials that omit or diminish the experience of minorities. Div.E.Q. at DiversifyingEcon.org (Bayer 2011) provides strategies for managing diverse classrooms.

²⁷ Not surprisingly, diverse instructors (Fairlie, Hoffmann, and Oreopoulos 2014), TAs (Lusher, Campbell, and Carrell 2018), authors (Bayer, Bhanot, and Lozano 2019, Sumner tool with Khanna and Imei), and speakers (CSMGEP database) serve to increase belonging. In addition, successful interventions help students see that adversity is normal rather than an indictment of their belonging, reinforce beliefs that success is attainable and worthwhile, and build community. For example, an intervention designed to buttress Black students' sense of belonging improved academic achievement, as well as self-reported health and well-being, and reduced the reported number of doctor visits 3 years post intervention (Walton and Cohen 2011).

2. Call Out Bad Behavior

The profession does not become more welcoming in graduate school and beyond. In fact, interviews and survey respondents deemed it as “hostile,” “cutthroat,” and as previously stated, “elitist.” One associate professor describes her department’s treatment of graduate students as essentially their saying

“We're going to pit you all against each other. We're only going to support the top students. This is a fight to the death.” ...The type of environment that's in economics. I'm just going to be honest with you, I don't think that a student who is an underrepresented student does well in that environment. I think that we tend to do well in a more supportive environment where we don't feel so isolated.

And about the profession in general, she continued,

The economics profession is brutal. Colleagues and students can be disrespectful, have implicit biases, and not understand the stress that being a minority economist entails.”

There is a long history of economists from minority groups being pushed out, neglected, and undervalued.²⁸ So, what can you do now to create a more welcoming climate in economics for minority scholars?

You can take responsibility for the climate at work. Call out unacceptable behavior—racism, sexism, harassment of all types—when you see it and when it is reported to you. Your workplace (and our profession) needs clear policies and consequences for this behavior. The AEA Best Practice website²⁹ provides guidelines for developing such policies.

More often than explicitly racist behavior, respondents had interactions that suggested more subtly expressed racial bias.

[My White] colleagues or even other administrators, they don't know that you have to deal with different layers ... I can say something, exactly the same as my white male colleague, but when I say it, I'm being a witch, or I'm mean, but they don't deal with that.

The associate professor continues.

So, I'm usually the first Black economist [my students] ever seen. And that in and of itself has its own issues, like are you qualified? Are you competent? That's what I mean is [my colleagues] don't have to deal with [that] ... and then when you do get eval[uation]s, ... what [my chair] noticed was that when it comes to minorities, [the students] veer off [into] personality. He's like, “I've never seen that with eval[uation]s of the white

²⁸ See, for instance, the experience of Sadie Tanner Mossell Alexander (Malveaux 1991, Banks 2005), the history of the National Economic Association (Simms and Wilson 2020), and the results of the recent AEA climate survey (Allgood et al 2019).

²⁹ <https://www.aeaweb.org/resources/best-practices>

colleagues”... They might like my class [but] they'd be like, “But I don't like.” And it's usually something really personal or how I dress. And he's like, “I never see that with other colleagues unless they are usually underrepresented minorities.”³⁰

Other examples of this sort of subtle bias include differential treatment by colleagues, disrespectful interactions with supervisees or students, receiving more challenges and more interruptions from seminar audiences, and having one's right to be in a certain job or location challenged. To make the economics environment more welcoming, raise awareness of the more subtle, but pervasive, biases too. Question whether evaluations, made by students or by colleagues, might be biased. And then lessen the influence of remaining biases by standardizing processes such as job searches. Again, see the AEA Best Practices website for details.

3. Listen

You need to listen. Asked what would improve diversity in the economics profession, an economist at a policy organization answered

I think people understanding that we are unique, and we all have different experiences. People being open to people talking about their experience and ... actually hearing them. [I am] not saying that you have to agree with them. You don't have to, that's fine. But really listening to what people are saying that are from different backgrounds and saying like "Wow, I've never experienced that in my entire life but maybe that could be the case. And how can we talk about this?" And being more open about issues that minorities have.

Diversifying the profession means not just diversifying the hue of the skin of the people who do economics, but also diversifying the approaches, questions, experiences and goals of economists. Respondents ask to be heard on these differences which shape both the substance of their work and their workplace experiences, for example with their experiences with implicit and explicit bias. Respondents also want to be heard by advisors whose help they would like in reaching research and career goals that are *distinct* from those of their advisors.³¹ Service can be different for minority scholars, not only in terms of quantity of committees, but also in terms of intensity of the work, particularly advising. For example, minority faculty members frequently report more than their fair share of advisees, at least de facto, as minority students are eager to work with a minority advisor. And last in an incomplete list, respondents want to be heard in seminars and in other discussions of research including when they raise critiques through a racial lens, “Instead of being met with ... not her again,” explained a PhD student. The point is not to memorize these average differences, but to listen actively to each individual's particular concern, which may or may not be quite distinct from yours. And then help to address them.³²

³⁰ These experiences reported in the interviews are consonant with the findings of large-scale studies, which led the AEA to recommend “Do not rely exclusively, or even primarily, on student evaluations of teaching to inform tenure and promotion decisions” (Bayer et al 2019).

³¹ “If you're in graduate school and you know you don't want to be an academics, then there should be ... someone telling you that's okay; you don't have to be an academic. You can go to industry,” said a PhD economist who is satisfied with her career in industry.

³² Participants in an AEA Panel on “How Can Economics Solve Its Race Problem?” offer other examples of experiences as minority economics and the responses they find helpful. See <https://www.aeaweb.org/webcasts/2020/how-can-economics-solve-its-race-problem>.

4. Broaden the “Legitimate” Topics

More difficult than simply trying to raise certain topics, respondents say, is trying to pursue them as research topics.

I think there's a problem with this whole notion of ...bringing new questions and new ways of approaching very established and old issues in economics. People like to support, especially scholars of color, if they're ... echoing the mainstream and it's harder and tougher when you're not doing that.

Respondents struggled to get the economics community to engage with work that was viewed as interdisciplinary in nature, was outside of the neoclassical paradigm or that challenged economic dogma, among other topics. This played out for a current graduate student as follows.

A lot of the research questions I had ...as a first-year graduate student were kind of particular to my upbringing and the things that I experienced growing up and as a young adult. Early on, however, some faculty would always ask me to think about ... my research questions' value to other social scientists. This nudge led me to discard many of my initial motivations for pursuing a Ph.D., but at the time, I did not see this nudge as particularly evil. As I have reflected on this over the years, I realize that this nudge disproportionately affects minorities. The social science community consists mostly of white males... I'll reiterate that these statements probably came from a good place. But in retrospect, faculty should avoid hindering potential research agendas because they are not interesting to white males.

Different backgrounds and lived experiences of course can lead to different research interests and insights (e.g., Bayer and Rouse 2016, May, McGarvey, and Whaples 2014, Malmendier, Nagel, and Yan 2017). Respondents report that advisors and mentors particularly discourage graduate students and early stage minority researchers away from topics related to race or other aspects of their identity, the topics that in many cases drew the young researchers to economics in the first place. There is a perception that Blacks studying Blacks or Latinx peoples studying Latinx peoples or Native American people studying Native American people may be biased or taken less seriously as scholars. (Of course, this critique is never made of White males studying White males.) And sadly, this double standard has not changed across the years. A full professor who earned her PhD several decades ago says that because of a nudge away from identity her early work was “totally sexless and ethnicness-less” and it was 20 years before she began studying a topic that she enjoys and has been productive in, a topic related to her background.

We imagine that advisors and mentors suggest against certain topics because they believe that conference organizers, journal editors and hiring and tenure committees will not be appreciative of them. Thus, we need to take a broader view of legitimate economics research. Many minorities are drawn to contribute to economics research because they find that research

problematic or lacking in some fashion.³³ Our profession cannot afford to wait the 20 years for their input, or worse yet, not have their input at all.

5. Engage, Admit, Hire, Promote

You can bring more minorities into the profession. Many minority students struggle with being the only “one” of their race, class and/or academic background. Some students find it hard to connect across race. More frequently, respondents yearn to be in dialogue with other minority economists.

Furthering a sense of isolation is the lack of mentors or even role models of color.³⁴ Respondents were unequivocal that having more peers, mentors and role models of color would improve the economics experience for minorities. In fact, one graduate student said it would be “revolutionary.”

Start with role models. You can ensure that minority students (at all levels) and junior professors and all of the rest of the profession are exposed to the work of more minority economists.³⁵ Diversify the literature you cite on syllabi and in research. Consider racial diversity in the seminars and conferences you organize (and not just on the race-related panels, a tenured professor added). A great new resource is the Diversifying Economics Seminars - Speakers List, which includes economists who identify as underrepresented minorities and/or women and/or LGBTQ+, along with their area of research.³⁶ If you are a journal editor, then diversify who you publish. And of course, the more you cite, invite and publish the work of minority economists, the more likely it becomes that those minority economists will be able to stay in the profession. Not receiving enough submissions by minority economists? Solicit them. And invite minorities onto the editorial team. Respondents pointed to the lack of diversity in terms of both race and institutional affiliation of editors as contributing to the lack of diversity of authors and topics in economics’ leading journals. A tenured professor, unsatisfied in her position, put it bluntly

We need to quit being elitist. If you look at who are the editors of a lot of these journals, it's the same schools. So...if econ really wants to increase diversity, we have got to get editors who didn't all go to Harvard, Stanford, Yale, Princeton....

And if we want to increase diversity, we need more minority economists to act as mentors and of colleagues and to diversify the profession. While all the advice in this article is

³³ For example, a frequent critique of the literature on the economics of race is that it relies on a “deficit” model of the behavior in communities of color, rather than racism or structural racism, as explanations for differences in outcomes across race. See Darity et. al (2015) introduction to a special issue of the *Review of Black Political Economy* devoted to stratification economics.

³⁴ One respondent attended the AEA Summer Minority Program and yet does not remember having a single instructor of color. Another expressed surprise that, “Even though I went to college in Atlanta, Georgia, which has a very large minority population, I didn't know any economists who were minorities on a basis where I could shoot ideas off of them or ask them what their story was, or how they got to where they needed to be.”

³⁵ If you are on Twitter use that platform to be an advocate and to lift up research by minorities.

³⁶ <https://econspeakerdiversity.shinyapps.io/EconSpeakerDiversity/>

aimed at increasing the numbers of minorities in economics, here we directly address admissions and hiring.

One cannot rationally expect to obtain a different outcome with the same behavior. So, it is clear, if you want to increase diversity admissions and recruiting practices need to change. We do not know what the final process should look like, nor do we assume it will be the same for every department. But items that should be on the discussion table include: 1) Recruiting from a wide variety of schools including HBCUs and HSIs and dropping the elitist view of favoring applications from only certain schools. 2) Communicating by the words and actions of the department that students of all kinds are welcome 3) Discontinuing reliance on the GRE, a test that has not been shown to be predictive and on which scores are decreasing in female and minority status and increasing in one's ability to afford retakes. The exam is being dropped by top PhD programs in several of the sciences (Langin, 2019). 4) Working to develop a more holistic (beyond the scores and grades) picture of an applicant's potential research ability.

Hiring and promotion practices need to change.³⁷ Explains the same tenured professor who spoke about editors,

And again, it comes from having people who are more open when it comes to reading applications, who [don't] only want an applicant who looks like A. Who are more open to "Hey, this person might not like A, but they're doing some really interesting research." Maybe we should give them a position here. Even though they might not be in our network of friends.

These are some suggestions to begin a discussion in each department. 1) As the respondent urges, cast your net widely. For junior positions that means advertising broadly and giving full consideration to applicants from all schools. For senior positions this means creating a census of potential applicants and not only considering those economists who come to mind. 2) When we picture the ideal hire, we are overly influenced by what we have seen in the past—the phenotype, the academic record, and the research (Taverksey and Kahneman 1973). Strive to counter this tendency, i.e. to work with a broad definition of the questions, approaches and experience profiles that your department needs. 3) Prioritize diversity (of experience and of thought) in searches, otherwise it will fall to last place. 4) Structure recruiting and evaluation processes and standardize interviews so that unconscious biases do not create unequal opportunities for candidates to perform and impress. 5) At promotion time (or preferably before), note that diverse people will have diverse experiences and recognize and account for these diverse contributions (i.e. an advising overload) to your department. 6) Hire for the work and not for the phenotype. Respondents loath tokenism.

We will add a word about quality, a concept that is often used to end conversations about diversifying schools and workplaces. A respondent reported on a faculty meeting, "We were talking about what can we do to recruit, especially more Black professors. And then one of my colleagues was like, 'Well, we don't want to lower our standards.'" It is a given that departments do not want to lower standards. That this issue is raised (repeatedly) after someone mentions

³⁷ Consult Commission on Ethnic Minority Recruitment, Retention, and Training in Psychology, 2019, and the AEA Best Practices resource (Bayer et al 2019) for practical recommendations.

diversity and hiring is the sort of micro-aggression that can make minorities feel enraged and unwelcome.³⁸ It is also wrong. Biases in current admissions and recruiting practices are leaving money on the table.

IV Conclusion

I think that there needs to be intensified pressure on economics departments, in particular, to hire people of color. Because until there is pressure, I don't think people are going to change who they're seeking.

--a PhD economist who is no longer searching for an academic job

Economics has a diversity problem. The numbers of Black, Latinx and Native American economists are low, as is their relative level of satisfaction with the profession. Based on surveys and interviews of minorities both those who are on, and those who have exited, an economics career trajectory, we have suggested ways in which you can help to counter this problem.

We are economists. We recognize that individuals respond to incentives. Teaching, research and service are incentivized by accolades, promotion, tenure and raises. Economists put tremendous effort into these activities.

No such incentives exist for increasing racial and ethnic diversity, as much public goods as teaching, research and service are for the health of the profession. It is logical to conclude that diversity must not truly be a priority.

³⁸ Darity (2010) discusses “the fetishization of ‘merit’ as a rationalization for discriminatory outcomes.”

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Table 1: Summary Statistics (in Percentages)

	Interview Sample			MIQ Sample		
	All	Disrupted ¹	Not Disrupted	All	Disrupted	Not Disrupted
Race						
Black	50.00	61.54	44.83	47.76	68.75	41.18
Latinx	50.00	38.46	55.17	52.24	31.25	58.82
Native American	9.52	7.69	10.34	7.46	6.25	7.84
Gender						
Female	57.14	76.92	48.28	53.73	68.75	49.02
Undergraduate Graduation Cohort						
1970s and 1980s	11.90	15.38	10.34	11.94	18.75	9.80
1990s	26.19	53.85	13.79	22.39	37.50	17.65
2000s	30.95	30.77	31.03	31.34	43.75	27.45
2010s	30.95	0.00	44.83	32.84	0.00	43.14
Best Describes You²						
Considering Economics PhD	11.90	0.00	17.24	14.93	0.00	19.61
Considered Economics PhD but did not Attend	14.29	0.00	20.69	16.42	0.00	21.57
In Economics PhD Program	21.43	0.00	31.03	17.91	0.00	23.53
Started Economics PhD but did not Complete	9.52	30.77	0.00	7.46	31.25	0.00
Completed Economics PhD, but Currently not Employed	4.76	15.38	0.00	2.99	12.50	0.00
Completed Economics PhD, Currently in an Academic Job and is Still Satisfied	14.29	0.00	20.69	16.42	0.00	21.57
Completed Economics PhD, Currently in an Academic Job and is Unsatisfied	7.14	23.08	0.00	5.97	25.00	0.00
Completed Economics PhD, Left an Academic Job, Currently in a Job that Uses Economic Skills and is Still Satisfied	7.14	23.08	0.00	5.97	25.00	0.00
Completed Economics PhD, Left an Academic Job, Currently in a Job that Uses Economic Skills and is Unsatisfied	2.38	7.69	0.00	1.49	6.25	0.00
Completed Economics PhD, Went to a Non-Academic Job, Currently in a Job that Uses Economic Skills and is Still Satisfied	7.14	0.00	10.34	10.45	0.00	13.73
<i>N</i>	42	13	29	67	16	51

Notes: Data from survey responses

¹We define Disrupted based on the respondents' response to the "Best Describes Me" question on the survey. The respondent was labeled "Disrupted" if they answered with one of the following options: Started PhD but did not complete; Completed PhD but has no job; Completed PhD, currently in an academic job but is unsatisfied; Completed PhD but left academic job, still use economic skills in current job and is satisfied; Completed PhD but left academic job, still use economic skills in current job but is unsatisfied; Completed PhD but left academic job and does not use economic skills in current job; Completed PhD, obtained a non-academic job after that uses economic skills but is unsatisfied; Completed PhD, obtained a non-academic job after, currently in a job that does not use economic skills."

²We omit three responses to the "Best Describes Me" question because no respondents chose those options. They are the following: Completed Economics PhD, Went to a Non-Academic Job, Currently in a Job that uses Economic Skills and is Unsatisfied; Completed Economics PhD, Went to a Non-Academic Job, Currently in a Job that does not use Economic Skills; and Completed Economics PhD, Left an Academic Job, Currently in a Job that does not use Economic Skills.

Table 2

'Most Important Thing that Helps or Hurts Minorities' Progression in the Economics Profession?' Responses by
Economics Career Disruption Status

Disrupted Respondents

Lack of mentorship, also lack of understanding and appreciation about minorities' motivations for entering the field and how that might not align with trendy research paradigms.

Discrimination.

I think access to graduate level classes before entering [a] PhD program would help minorities succeed in completing the PhD course work. I notice a big difference in undergraduate economic courses vs. graduate level. Having some preparation beforehand may have helped in successfully passing preliminary exams.

Helps: Proper mentoring, supportive faculty at the degree granting institutions. Hinders: Discrimination; isolation; racist faculty/institutions

Networking is important, especially if you are open to exploring non-tenure track academic Employment.

Hurts: Access to pre-application process; costs associated to matriculation; biased application selection process. Students not going to certain schools' lack access to relationships that would allow minorities to intern or gain jobs in the private sector, government agencies or NGOs. There is also the preference to PhD over DBA. Haven't seen much overall that helps. Diversity programs are generally targeted towards white women and/or foreign students, when actual actions are taken.

The economics profession is brutal. Colleagues and students can be disrespectful, have implicit biases, and not understand the stress that being a minority economist entails. My senior colleagues also didn't help me with my tenure process, and they didn't help me when stressful situations arose. A better and more efficient network of colleagues and mentors is needed. I don't want to go to meetings and discuss all the issues we know about. Real help and change are needed. More support for minorities is also needed.

I think I suffered from the knowledge that I would not have gotten into my program if it had not been for my skin color and gender. I was clearly unprepared and knew it. I wish I had gotten a masters first, as the majority of people in my program had.

Of course, with seemingly declining opportunities in this digital age where robots are competing with men for jobs, minorities have to make much greater efforts to secure, as well as maintain jobs.

Qualifying exams were my road block. I started two well-ranked economics doctoral programs. In the first program, I failed qualifying exams (along with half my cohort). In the second program, I passed two of three qualifying exams and could not continue the program.

The implicit bias within the economics profession concerning minorities contributing to new approaches in economics: New questions, new applied methods, new data collection and survey design to better capture disenfranchised and neglected communities. ... I was told by senior white males: 'You couldn't have possibly written this article on your own... I was asked by a hiring committee member if I was planning to do 'Latino economics'... Deconstructing stereotypes of female and minority research capabilities held by members of the profession requires constant energy and a stainless-steel spine. But if there is no diversity of race/ethnicity, and especially class (working-class) members in the profession, nothing will change. The most disappointing time in the academy was training the next generation of minority economics and policy students who would confide: 'Why should I do a PhD in Economics ...only to face what I see you facing?' ...¹

There is an intolerance [to] differences in appearance and research agendas.

Economics is a wide-ranging field but when it comes down to it, job opportunities in academia are very limited to specific fields and ideas. Hence, we find ourselves in a self-serving and self-re-enforcing loop.

The most important thing that helps minorities is being mentored by other minority economists. The most important thing that hurts minorities is racism. Although many schools are aiming to recruit faculty of color, it is very clear that some places are not open to understanding faculty of color, listening to and supporting their interests as well as understanding research that is racially motivated.

The economics field is very cutthroat and hostile in general to anyone who does not look like the 'typical' economist. The field has also become too much about prestige and who has the best math skills. Many minorities get into economics because they want to make a difference in their communities, but the way the profession and economic careers are structured, this becomes exceedingly difficult to do.

White (males) have a virtual monopoly over the position of journal editor (not associate editor). There is an elite monopoly over control of NSF (and similar) funding. Departmental governance and search committees tend to exclude African Americans, assuming there's an African American in the department.

Non- Disrupted Respondents

Not sure. I can only use my experience.

Faculty that inspire students, suggest programs, and look out for them. In undergrad I had a Hispanic professor tell me about the AEA Summer Program and that changed my life in a major way. In graduate school I had a network of people that helped me along, including professors in graduate school.

Feeling isolated likely hurts most. I never felt this way, but this seems to be an important issue for many.

I would say having a mentor helps guide through the process.

Lack of role models; cultural differences perhaps.

Lack of mentors, exposure to internships/careers, knowledge of conferences/networking groups, confidence, and entry level opportunities.

Lack of mentors.

I believe it is really lack of understanding of what to do with the degree. Economics is not business where there is a very clear path on how to apply it, so I think that beyond academia, it is not clear. I know that as a minority, many of us did not grow up in an environment where business or careers are necessarily discussed. My parents were blue collar workers. College was a complete unknown other than a degree will help you. It was really feel your way through it.

Access to mentors. I grossly underestimated my need to see someone, anyone doing what I wanted to do who looked like me! Funding. I was unable to further pursue my interest due to being unable to locate funding to pursue and support myself.

I went to an excellent summer program [for] minority students interested in pursuing a PhD... Though I was encouraged to apply for Ivy League schools by the summer program staff... I lacked confidence and thought a good compromise was to get my Masters ... to transition to a PhD program afterwards. I finished my first year successfully ... Then, depression set in ... wasn't sure I had what it took to become an economist... [T]hough my professors were supportive... As a black woman I did not have any mentors or role models that looked like me. As a result, I don't think I confided in them about what I was feeling and going through... I quit altogether... With all that said, I think programs like the summer Econ program for minorities... would do even better if they added an ongoing mentoring component after the program to support students in the graduate school application process and journey...¹

I lacked concrete information on what my career prospects would be--beyond academia. I didn't even know until recently that I could have worked for the Federal Reserve! I think many minorities feel a sense of needing to graduate college and make money, as opposed to spending four additional years to teach.

The academic market for employing minorities seems 'thin' and unwelcome, as many colleges/universities, of all tier, public/private, have not had minority economists, particularly black economists, on their faculties in over 50 years.

Economics as a discipline still has a lot of work to do to critically deconstruct its systemic (both current and foundational) participation in and relationship with structures of oppression. It is very difficult to imagine belonging in a field that (on whole) doesn't do the work to enact structural change, is very resistant to seriously incorporating other social sciences' work and doesn't even really allow much scholarship that names and/or addresses racism directly.

I actually landed a non-academic job after my PhD and made it back into academia after two years. (it's not an option in the previous list of scenarios). One thing that hurt me was a lack of funding on my first year of the PhD (unlike the rest of my classmates). It also hurt me to come from an unknown undergraduate institution that lacked a strong economics program (the reason I went to this institution was that my parents couldn't afford tuition at the top schools I got accepted into). Finally, I think that my quirks represented an important barrier. I didn't understand how important it was to fit the mold during the job market

Proper mentorship is the key.

To have some [reference] that it is similar with us and he/she achieved what we desire.

The lack of social capital that comes from being minority or first-gen is my opinion the thing that hurts progress the most. Everything that puts all this information and connections out in the open and makes them inclusive for minorities helps.

This is the most hostile and worst field I ever entered. Faculty are abusive. Nothing that supports minorities in economics. At this point, I am only doing this because I have to. The faculty are outwardly racist.

Mentorship and not belittling people's efforts are very helpful

Having consideration on the different types of interactions that minorities might be used to, given their cultural background is important. Students can be less likely to ask for help or advice but they still need it. Furthermore, assuming that they have the same basic knowledge is also hurtful.

How to move forward on research. Research is hard for everyone but relying on networks for academic success is not an obvious route for people from minority backgrounds, I suspect. It may be easier for people with more privilege, who then have an easier time academically.

That there are high barriers to entry (e.g. the GRE).

Role of a supportive department and academic mentor who is invested in their success.

Support for publications in top journals. My dissertation advisor contacted the associate editor of a journal and asked him to meet with me to sketch out how my revise-and-resubmit paper should be reframed to meet the objections of the external reviewers. Getting this paper published in a top journal was central to my staying in academia and getting tenure.

Lack of mentorship during the economics degree. Lack of mentorship upon entering a position.

Hold me to the same standards as white males.

Communication.

Other than structural discrimination [as a hindrance], I think having a mentorship team and peer study groups are critical for successfully graduating with a PhD and making it through the promotion and tenure process.

Funding is an issue if you come from a minority background. Several classmates get extra support from their families in many ways (most classmates come from upper middle-income households in the USA, or high-income households if they are international students), but usually people with minority backgrounds have no external financial support because most of these students come from a working-class background. This is important because extra expenses do occur, minorities without extra financial support have to be RA/TAs ... during the summer (time to do research is reduced) and if unexpected emergencies occur, they have a larger negative impact among minorities.

Too much [lip] service; We are not monolithic; Lack of cultural knowledge from the majority group; Racism/sexism; Tell us to shut up and be grateful.

Lack of representation in grad school programs from peers and faculty to do research with. Lack of preparation and good mentorship.

Not having minority faculty similar to you in [your] program.

The lack of people with our shared experiences, both in terms of faculty and student-colleagues, hurts minorities progress in economics careers.

I was an average student; I had never taken an economics class before college, so it was all new to me. I persisted in the degree because I was being challenged intellectually, and I enjoyed it. Unfortunately, all the research opportunities were allocated to the top performers in the department... However, an undergraduate email list advertised a position in the economics department; the position did not rely on any grade point average cut[off] score. I met with the professor, also a minority, and he brought me onto the research team...the professor took me under his wing ...The support and guidance that a faculty mentor can provide is critical to what helps minorities progress in an econ career. Arbitrary cut[off] scores, on the other hand, can critically hurt minorities' progress.... The primary factor that made me want to pursue an Econ PhD was having a meaningful research experience...¹

Economics is a tool used most effectively to rob African Americans and to enrich the real minority, the 1%. When an African American is in the class, the professors recognize that economic theory gets personal. Because of life experience, Black students can see through the facade and this isn't appreciated by many classically trained economists, who do not appreciate having their theories questioned.

I think it is important for minorities who are considering economics to work with minorities who are already working in economics. I went to a summer program to encourage minorities to pursue economics but I don't remember being taught by or meeting minorities who had economics PhDs.

Number of other minority students; Number of advisors interested in topics minority students want to study; The deficit of the doubt, people not interested to talk to you before knowing your credentials.

Lack of information on ways to pursue economics as a career path.

For the most part, all faculty are very thoughtful and encouraging. Early on, however, some faculty would always ask me to think about how my research questions [adds] value to other social scientists. This nudge led me to discard many of my initial motivations for pursuing a Ph.D. But at the time, I did not see this nudge as particularly evil. As I have reflected on this over the years (rising fifth year), I realize that this nudge disproportionately affects minorities. The social science community consists mostly of WHITE MALES. Underrepresented minorities should not be encouraged to cater to either a specific race or gender. I'll reiterate that these statements probably came from a good place. But in retrospect, faculty should avoid hindering potential research agendas because they are not interesting to white males.

It's a very intimidating environment for minorities. As an economist from a Latin American country, we are required to have more years of education to apply for a PhD (most students who apply have a MA in economics). So Latin American students apply to a US program by their mid/late 20s. Thus, as a woman, I find it difficult to commit to a 6-year program at this age, in an environment that is not friendly or flexible for pregnant women or young mothers.

Access to mentorship.

Discrimination; preconceived notions by others about what you should or [should] not specialize in; resentment by non-minorities; preconceived notions of what being a minority means.

Mentorship... It's not just about having figures that look like you that you can look up to as role models but it's just knowing what to expect... I'm Native American and so talking to another professor of economics who is... Native is helpful to better understand... problems that would be unique to us... thing that hurts minorities progress in economics... a field that values homogeneity... if you are a minority interested in economics, you're an outlier... having above a 3.8 with a double major in math and Econ is pretty tough. There's no... support between these goal posts that make these expectations more realistic... wish there was... a post-bac... for economics... The summer program is great but... there needs to be something longer you can do for a year or two with financial support that helps close any gaps that might prevent you from entering into grad school for Econ.¹

In the PhD program, the bad behavior of primarily white men in Economics Departments [hinders] minorities' progress. We are treated like no one else. Others don't believe in us, or if they believe in us, they don't believe in us studying certain topics (stay away from race/ethnicity issues). The thing that is most helpful for minorities' is professional organizations for us, run by us. These should be supported, well-funded, with wide ability to create opportunities specifically for URM.

I currently attend [Redacted institution], and I am an undergraduate student. In my experience, unequal access to academic resources, unfriendly white faculty members, a lack of black economists who either teach or are advisors all amalgamate to frustrate students. The clearest path post economics B.A. from my university seems to be banking, and getting information about other paths seems to be like pulling teeth. Even if you can get an understanding of what is necessary, finding ways to conduct interesting research over the summer, pursue a Masters, etc. is daunting to say the least. I am a low-income first-generation college student and a black woman in a PWI.

Economics department rankings are based on research and not necessarily reflects the knowledge one obtained. However, if you have a degree from a less well-ranked university the disadvantage is fairly big. A standardized test (e.g. GRE) specific for economics would help to remove this bias.

Speaking from my personal life: minorities (I identify myself) have additional hurdles, struggles, and can mask them to blend in. It becomes at times, overwhelming and difficult to pursue academics even when one has the ability. There's simply more to achieving academic goals than the academic support, financial, and environment. I think I may have needed more time to focus, and work out personal obstacles, but couldn't even figure out that much way back then. It's easy to give up. Making the steps smaller, like a road map, but only providing a few small steps at a time would have helped. I did manage a graduate program, filled with minorities, and [took] courses to understand minority struggles so that I could teach minorities, and support them! I did good at that, being able to identify.

Having champions and role models matters and helps. Apathy, unwillingness to engage with issues of diversity, and disdain hurts.

The most important thing to consider is that racism is embedded in the academy and so racial bias affects minorities (especially Black people, specifically Black women) at every stage.

Recognizing structural inequities in the academic system and on top of that, the barriers in a career in academia. I am a first-generation low-income student who came to [Redacted institution] completely unprepared for the level of education. I suffered greatly due to a lack of proper counseling from my school, and lost faith in myself for the next few years. It wasn't until the end of junior year that I began regaining some confidence in myself thanks to some intervention and only then did I know I wanted a career in economics. By this stage, I was unable to generate A's in economics classes that professors like to see before helping students. I am STILL looking for pre-doctoral opportunities to do research, but my previous grades and lack of connections is making it difficult.

Representation and support at all stages matter - given Economics' historical preferences towards white men, support for them is systemically built in to allow them to succeed. This is most visible in the advisers and types of research given attention to. A good adviser brings attention to this, provides topics that are of interest to the student, and also shows what the future can look like to a student who has never seen a minority professor before.

Note: ¹Responses over 150 words were edited for length.

Data Appendix

We sent out our call for survey invitations through list serves and social media of The Committee on the Status of Minority Groups in the Economics Profession, the American Society of Hispanic Economists and the National Economic Association. Of course, these interest groups reach graduate students and practicing economists. Because we also wanted to reach those who at one time had an interest in economics but decided against it, we also targeted by e-mail former AEA Summer program attendants and program applicants who did not attend. (These groups were targeted for a survey designed to measure the impact of the AEA Summer Program (Becker et. al 2016)). As the call (below) makes clear we were especially interested in hearing from the disaffected and those who had left economics completely, groups that we presumed would be harder to reach. We asked invitation recipients to forward the invitation accordingly.³⁹ The survey portal was open from July 16, 2019 until September 17, 2019.

112 people began our survey⁴⁰. We could determine that 75 identified as Black, Latino or Native American⁴¹ and had considered an economics career so were therefore eligible. 67 of 75 completed the most important question and are therefore in the *miq* sample. A partially non-overlapping 66 of the 75 indicated that they were willing to be interviewed and provided an e-mail address. We attempted to interview 55 of the 66 (39/50 non-disrupted and 16/16 disrupted) who were willing, privileging those who were disrupted and/or had intriguing responses to the *miq*. We succeeded in interviewing 42, 29 of 39 non-disrupted and 13 of 16 disrupted. We were unable to interview individuals who did not reply to our original or subsequent emails.⁴² Interviews took place over Skype or Zoom between July 25 and September 30, 2019.

The three interviewers all identified as underrepresented minorities⁴³ but had no connection to economics. All were involved with academia.⁴⁴ We selected on these characteristics deliberately to encourage respondents to speak more freely. All interviewers were female. Interviewers met weekly with one of the PIs to maintain consistency.

We created a list of codes to apply to sections of text based on initial hypotheses. As is common in qualitative research, we added additional codes as the data presented themselves in unanticipated ways. Each transcript was coded twice, the second time to check for consistency and to reassess in light of new codes. The *miq* was coded using the same scheme. Coders met regularly with one of the PIs to check for cross-coder and internal consistency.⁴⁵

Our data for analysis included the coded excerpts and the survey data.

The protocols for the survey and interview and the correspondence we sent to participants are below. They are followed by the final coding scheme.

³⁹ In addition, a person in the practice interview sample asked for the link for forwarding and one of the PIs sent the link directly to a *disrupted* individual.

⁴⁰ Assuming that no individual started the survey more than once.

⁴¹ One respondent did not answer the race question. We interviewed her by mistake and in the interview she indicated her racial identity.

⁴² In one case we received a response that we had the wrong email address.

⁴³ All three identified as Blacks; one also identified as Latinx.

⁴⁴ Two are graduate students in psychology and one is a Student Activities Administrator at a university.

⁴⁵ In total we had three coders, with no more than two at a time. But availability was such that one coder did the vast majority of the initial coding and all of the recoding, while still meeting with the PI to check for consistency.

Survey Invitation

Looking for Participants from Underrepresented Minority Groups for Research on the Factors that Help and Hinder Minorities' Careers in Economics

Are you Black, Latino/a or Native American? Do you, or did you hope to, have a career in economics? We are looking to learn more about the factors and events that supported, hindered, or disrupted the career trajectories of underrepresented minorities in economics.

We want to hear about help and hindrances at all career stages, even if you no longer identify as an economist. Did you decide not to start an economics PhD program, or did you start but leave without your degree? Did you finish your degree but then were unable to land a job that made use of your doctorate? Did you land a job in academia, government or industry after your PhD but are now not in a position that fully uses your training and skill in economics? Did you have an academic job but then leave the academic track? Are you an economist with an established career? If any of these apply and you are Black, Latinx, or Native American, we want to hear from you about the factors that made it easier or harder for you to attain your initial career goals in economics. Interviewers will come from outside of the field of economics. Your responses will be held in confidence. If you are interested, please click here to complete a short screening questionnaire.

We appreciate your forwarding this communication to others who are potentially interested in participating.

Survey

Yale University

1. Investigators: Amanda Bayer, Gary Hoover and Ebonya Washington
Contact Information: ebonya.washington@yale.edu.

Amanda Bayer, Swarthmore College, Gary Hoover, University of Oklahoma and Ebonya Washington, Yale University are conducting a study of the factors that advance or hinder minorities' careers (or potential careers) in economics. Participation in this study will involve a 10-minute written screening survey, which you can do now or at your convenience, and then a one-hour open ended interview, which will be completed at a later date.

There are no known or anticipated risks to your participation. Although the study will not benefit you personally, our hope is that the results will add to knowledge about how to increase the racial/ethnic diversity and inclusiveness in economics.

All of your responses will be held in confidence. Only the researchers involved in this study and those responsible for research oversight will have access to the information you provide. You will be given a participant number. The code linking your contact information (including email address and work location) and number will be kept on a secure server.

The data will not be printed or published in any form that would identify any individual. Numerical results from this survey will be shared in summary form only. Free-form responses to open questions will be reported with identifying information removed, and without attribution.

Participation in this study is completely voluntary. You are free to decline to participate, to end

participation at any time for any reason, or to refuse to answer any individual question. If you have any questions about this study, you may contact Ebonya Washington, ebonya.washington@yale.edu.

If you would like to talk with someone other than the researchers to discuss problems or concerns, to discuss situations in the event that a member of the research team is not available, or to discuss your rights as a research participant, you may contact the Yale University Human Subjects Committee, 203-785-4688, human.subjects@yale.edu. Additional information is available at <https://your.yale.edu/research-support/human-research/research-participants/rights-research-participant>.

If you would like to participate in the initial screener survey please click "Begin".

- A. Begin (Please answer this question.)
2. What best describes you?
- A. I am currently considering entering an economics PhD program.
 - B. I considered doing an economics PhD program but did not attend.
 - C. I am currently in an economics PhD program.
 - D. I started an economics PhD but did not complete it.
 - E. I completed an economics PhD but was unable to find a job that used my economics skills.
 - F. I landed an academic job after completing an economics PhD. I am still in academia. My position is satisfactory to me.
 - G. I landed an academic job after completing an economics PhD. I am still in academia. My position is unsatisfactory to me.
 - H. I landed an academic job after completing an economics PhD but have since left academia. I am now in a position that uses my economics skills and the position is satisfactory to me.
 - I. I landed an academic job after completing an economics PhD but have since left academia. I am now in a position that uses my economics skills, but the position is unsatisfactory to me.
 - J. I landed an academic job after completing an economics PhD but have since left academia. I am now in a position that does not use my economics skills.
 - K. I landed an economics job in government, policy or industry (or other job outside of academia) after completing an economics PhD. I am now in a position that uses my economics skills and the position is satisfactory to me.
 - L. I landed an economics job in government, policy or industry (or other job outside of academia) after completing an economics PhD. I am now in a position that uses my economics skills and the position is unsatisfactory to me.
 - M. I landed an economics job in government, policy or industry (or other job outside of academia) after completing an economics PhD. I am now in a position that does not use my economics skills.
3. What is the most important thing we should know about what helps and hurts minorities' progress in an economics career?
- A. Open ended response
4. Race/ethnicity. Choose one or more.
- A. Black or African-American
 - B. Latino/a, Latinx or Hispanic
 - C. Native American

- D. Asian/Pacific Islander
 - E. White/Caucasian
5. Gender identification
 - A. Male
 - B. Female
 - C. Gender Non-Binary
 - D. Other. Please specify (Open ended response)
 6. In what year did you receive your undergraduate degree?
 - A. Open ended response (The value must be greater than or equal to 1940.)
 7. Tell us about the highest degree you have begun in economics, even if not completed. What is the highest degree you have begun in economics?
 - A. BA/BS
 - B. MA/MS
 - C. PhD/D.Phil
 - D. Other please specify (Open ended response)
 8. At which school did you begin this degree?
 - A. Open ended response
 9. What is your field of economics?
 - A. Development
 - B. Economic History
 - C. Industrial Organizations
 - D. Labor Economics
 - E. Macroeconomics
 - F. Microeconomic Theory
 - G. Public Economics
 - H. Trade
 - I. Econometrics
 - J. Other
 10. Tell us about your current employment. What is your place of employment?
 - A. Open ended response
 11. What is your job title?
 - A. Open ended response
 12. Are you willing to participate in an open-ended interview with a trained interviewer from outside the field of economics on factors that hurt and helped you in your economics career? (Please answer this question.)
 - A. Yes
 - B. No
 13. (If respondent answered yes) Please provide your email address so we can contact you for an in-depth interview.
 - A. Open ended response (Please enter a valid email address.)

Thank you for your participation in the Study on Minorities' Career Trajectories in the Field of Economics. If you have any questions about this study, you may contact Ebonya Washington, ebonya.washington@yale.edu.

If you would like to talk with someone other than the researchers to discuss problems or concerns, to discuss situations in the event that a member of the research team is not available, or to discuss your rights as a research participant, you may contact the Yale University Human Subjects Committee, 203-785-4688, human.subjects@yale.edu. Additional information is available at <https://your.yale.edu/research-support/human-research/research-participants/rights-research-participant>

If answered A then email follows completion of survey:

Thank you for your interest and participation in the Study on Minorities' Career Trajectories in the Field of Economics. Unfortunately, resource constraints prevent us from conducting open ended interviews with all interested. We balance concerns about diversity in demographic background and in career experience in selecting participants to interview. If you are selected for an interview, an interviewer will contact you for scheduling. Thank you for your willingness to speak on these issues.

If you have any questions about this study, please contact Ebonya Washington, ebonya.washington@yale.edu.

If you would like to talk with someone other than the researchers to discuss problems or concerns, to discuss situations in the event that a member of the research team is not available, or to discuss your rights as a research participant, you may contact the Yale University Human Subjects Committee, 203-785-4688, human.subjects@yale.edu. Additional information is available at <https://your.yale.edu/research-support/human-research/research-participants/rights-research-participant>

Email to Set Up Interview

Note: The survey does not ask for respondent's name. If respondent is interested in an interview s/he provides email address. In some cases the email address provides the name or at least the place of work. In these cases, feel free to google the email address to recover the missing information of title or name. However if the email address provides no clues to person's name or workplace (and the person fails to provide a workplace) then write to the person with a generic greeting (eg Good morning) to begin the conversation. People are of course free to provide a fake name for the interview.

Dear Dr (or Ms or Mr.) or Survey Respondent or Good morning/evening

Thank you for your participation in the Study on Minorities' Career Trajectories in the Field of Economics. We greatly appreciate both your completing the survey and your willingness to sit for an interview over Zoom. My name is [name] and I'm a [PhD student in psychology; Student Activities Administrator at NYU] and I will be conducting your interview. The interview will last approximately one hour. I am available this coming week on [fill in times and be clear they are east coast times if person not on east coast]. Please let me know which, if any, of those times work for you. If not, what works for you in the following week?

Thank you,
Name

Other Emails with Interview Participant

Those sitting for interviews are doing us a favor. Please remember to thank them in every communication.

Final Confirmation email

Dear Dr. XXXX,

Thank you for confirming our interview for the Study on Minorities' Career Trajectories in Economics on _____ at _____. You should receive a google calendar invite shortly in a separate email if you have not already.

Just a reminder, our interview will be conducted remotely via Zoom. Please note, in order to use Zoom, you'll have to download it from this page on to your computer if it is not installed already.

We have found we are able to obtain the highest quality audio recording of interviews by using Zencastr. Zencastr is web-based software that records audio from more than one computer simultaneously. Zencastr does not need to be downloaded, however, it only works on Google Chrome or Firefox and only works on a computer. Zencastr also works best if you wear a headset. However, if you do not have a headset nearby your computer's microphone will be fine.

At the time of our interview, please join Zencastr using this [*link*]. Once you have joined on Zencastr, you may join our Zoom meeting through the link provided in our google calendar invite. However, please mute yourself on Zoom to avoid double audio playback. Both links to Zencastr and Zoom are also provided in our google calendar invitation.

Please note once you click the Zencastr link, I will be able to hear you from your computer and vice versa. Feel free to join, only when you are ready to speak with me.

If you need help downloading or setting up any program or have any questions about these instructions or the interview itself, feel free to reach out to me.

I look forward to talking with you.

Sincerely,

Interviewer sets google invite to include a reminder one hour before the interview.

Interview Consent

(read and emailed to participant)

Yale University

Verbal Consent to Participate in a Research Study

Title of Study: Study on Minorities' Career Trajectories in the Field of Economics

Investigator: Ebonya Washington

Contact Information: ebonya.washington@yale.edu

Hi, my name is (*name*). I'm conducting interviews as an employee of Yale University and in particular for Amanda Bayer, Gary Hoover and Ebonya Washington's research study on the factors that help and hinder minorities' career trajectories in economics. Participation in this study involves an interview of under an hour about your experiences in the profession.

There are no known or anticipated risks to participation except for a possible loss of confidentiality. Although the study will not benefit you personally, our hope is that the results will add to knowledge about how to increase the racial/ethnic diversity in economics.

With your permission, your responses will be audiotaped and then transcribed. All of your responses will be held in confidence. Only the researchers involved in this study and those responsible for research oversight will have access to the information you provide. You will be given a participant number. The code linking your contact information and number will be kept on a secure server.

The data will not be printed or published in any form that would identify any individual. Responses will be reported with identifying information removed and without attribution.

Participation in this study is completely voluntary. You are free to decline to participate, to end participation at any time for any reason, or to refuse to answer any individual question. If you have any questions about this study, you may contact Ebonya Washington, ebonya.washington@yale.edu.

If you would like to talk with someone other than the researchers to discuss problems or concerns, to discuss situations in the event that a member of the research team is not available, or to discuss your rights as a research participant, you may contact the Yale University Human Subjects Committee, 203-785-4688, human.subjects@yale.edu. Additional information is available at <https://your.yale.edu/research-support/human-research/research-participants/rights-research-participant>

Would you like to participate?

Interview protocol

(conducted over Skype or Zoom except when those technologies failed for us)

You were generous enough to volunteer to speak to me for a study on minorities' career trajectories. What is it the most important thing we should know about minorities' career trajectories in economics? (Alternatively ask them to speak about what they said was most important in the survey or about why they left economics or are unhappy in economics if they respond so to question1.)

[Sample transitions to career trajectory.] Walk me through your career trajectory so I can understand how you were able to overcome obstacles such as (*whatever they described*) and make it this far.

Walk me through your career trajectory in economics, from your undergraduate days through now including all positions you have held and those you tried for but did not ultimately end up in. Here interviewers should make sure to follow up on survey question 1 as a hook. If a person says unhappy or didn't finish a particular level of econ schooling we want to know why. [Interviewer then asks the following questions about undergrad, grad, first job, second job through final job. If respondent moved from pre to post tenure at a particular job then ask about both stages. Interviewer also asks about jobs/schooling the respondent tried for but did not get.]

- A. Why did you decide to take (try to take or not take) this step? (Who was influential in decision?)
- B. What was the balance of teaching, research and service? How could the balance be improved? (not applicable for undergrad)

- C. (if person has not dropped out from this step) What helped (or what is helping you) be successful in this position(program)?
- D. What support or resources do you or did you not have that you wish you had? What would help (or would have helped) you make it through?
- E. Did you have a mentor during this stage? Was the mentor helpful? How so? Race of mentor?
- F. What hindered (or is hindering) your advance in this position (program)?
- G. Do you think your status as a member of an underrepresented minority group impacted your progress at this stage? If so, how

What initially attracted you to economics? In what ways has your career been as you anticipated? In what ways has it differed from your expectations? What do you like most about a career in economics? What has been the most disappointing aspect of a career in economics? Do you think your race/ethnicity/gender affects your research questions/methods/interpretations? If so, how? If you had it to do over again, would you make the choice to pursue economics?

Thank you for your participation. Before I go,
 What do you think would help improve the economics profession for minorities?
 What do you think would improve diversity within the profession?

Is there anything you would like to add?

Thank you. Your interview will inform a *Journal of Economics Perspective* piece by Amanda Bayer, Gary Hoover and Ebonya Washington on how to increase diversity in the profession. The article will appear in 2020.

Codebook

1. Problems- Stated reason as to why path not as originally envisioned or things that threatened along the way (even if eventually overcome)
 - 1.1. Tokenism (Respondent mentions not wanting to be or promoting others as being accepted, hired, or promoted due to their underrepresented minority status (a token) as opposed to their ability and qualifications)
 - 1.2. Mental health issues exacerbated by economics-related activities (code where respondent discusses struggling with mental health issues that were caused by or have gotten worse due to economics-related work/activities)
 - 1.3. Failure to pass through a checkpoint in the economics pipeline (Includes not getting into graduate school after applying, not passing their comps in graduate school, not succeeding in their dissertation defense, not getting tenure or promoted at their institution/job, etc.)
 - 1.4. Lack of/difficulty finding a professional network
 - 1.5. Social media (Social media is described as a problem by the respondent)
 - 1.6. Distance between school and home/family/community (e.g. respondent states distance between school and home, family, or community as a problem or important factor/constraint for them)
 - 1.7. Institutional inaction about diversity
 - 1.8. Underutilized resources
 - 1.9. Rapid turnover of professors
 - 1.10. Teaching style or practices
 - 1.11. Lack of/difficulty in finding an advisor
 - 1.12. Harmful/lack of policies/actions of department or boss
 - 1.13. Career prospects in economics profession (e.g. Respondent states concern of less financial security from economics relative to other professions, like STEM)

- 1.14. Harmful/lack of professional association (AEA) initiatives or activities
- 1.15. Community or cultural expectations/obligations
- 1.16. Outside Responsibilities (creating time pressure)
- 1.17. Explicit bias (including that based on race, gender, LGBTQ+ identity, socioeconomic status or other aspects of an individual's identity) by an individual (colleague, boss, professor, or student)
- 1.18. Harmful policies/initiatives at home institution or employer
- 1.19. Implicit bias (including that based on race, gender, LGBTQ+ identity, socioeconomic status or other aspects of an individual's identity) by an individual (colleague, boss, professor, or student) (Race not specifically mentioned, but the respondent felt the comment/action racially biased or had differential impact by race)
- 1.20. Lack of awareness, understanding, listening by colleague, boss, professor, or student
 - 1.20.1. Lack of appreciation (Respondent feels that their work, efforts, or presence is not appreciated by colleagues, boss, students, etc.)
- 1.21. Colleague, boss, professor, or student not believing in you / holding a fixed mindset
- 1.22. Subject not believing in self / holding a fixed mindset (including lack of confidence)
- 1.23. Job/activity was not enjoyable for subject
- 1.24. Job/activity did not match subject's values
- 1.25. Harmful/difficult family/significant other/friend obligations/expectations/understanding/support structure
- 1.26. Isolation in profession or workplace, lack of personal or cultural connection
- 1.27. Lack of mentor or help from senior colleague(s)
 - 1.27.1. Same Socioeconomic Status
 - 1.27.2. Female
 - 1.27.3. Male
 - 1.27.4. person of color
 - 1.27.5. same race/ethnicity
 - 1.27.6. white person
- 1.28. Lack of study group or help from peers
- 1.29. Lack of role model
- 1.30. Lack of good information or knowledge about job/career/application process/etc.
- 1.31. Lack of connections or elite background (e.g., unknown undergrad institution)
- 1.32. Lack of academic preparation
- 1.33. Lack of money/funding/other resources
- 1.34. Extra burden (minority tax, extra work minority economists called on to do that white economists are not) (e.g. if all committees must reflect the US population racially but minorities are underrepresented in faculty then minorities do more committee work; minority professors spending lots of time mentoring/working with minority students in ways white professors are not called on to work with white students; educating white co-workers about race)
- 1.35. Elitism in the economics profession
- 1.36. Brutal/hostile environment in the economics profession
- 1.37. Lack of openness to new questions, methods, topics in the economics profession
- 1.38. Racist institutions, systemic or structural oppression
- 1.39. Other problem (e.g., "politics")

2. Solutions- Explanation for how success occurred or what might have helped it occur

- 2.1. Sought Academic Resources (Respondent states that they took initiative in reaching out for help/using academic resources)
- 2.2. Benefited from being in a diverse environment
- 2.3. Awareness, understanding, or listening by colleague, boss, professor, or student

- 2.4. Teaching style or practices
- 2.5. Not wanting to be a statistic
- 2.6. Lack of outside responsibilities (The respondent discusses having more free-time to work on economics/career-related activity as a benefit/solution)
- 2.7. Distance between school and home/family/community (e.g. respondent states distance between school and home, family, or community as a problem or important factor/constraint for them)
- 2.8. Spirituality / Religion
- 2.9. Social media (Social media is described as a solution by the respondent)
- 2.10. Therapy
- 2.11. Colleague, boss, professor, or student worked explicitly to counter racism and bias
- 2.12. Grit (e.g. persevering through challenges on their own, off of sheer will, etc.)
- 2.13. Activity outside of economics for work/life balance
- 2.14. Colleague, boss, professor, or student was not biased
- 2.15. Colleague, boss, professor, or student listened / created positive environment
- 2.16. Colleague, boss, professor, or student believed in you / holding a growth mindset
- 2.17. Subject believed in self / holding a growth mindset (including confidence and drive)
- 2.18. Job/activity was enjoyable for subject
- 2.19. Job/activity matched subject's values
- 2.20. Beneficial family/significant other/friend structure/support/understanding
- 2.21. Did not feel isolated, made a personal or cultural connection
- 2.22. Had a mentor or help from senior colleague(s)
 - 2.22.1. Same Socioeconomic Status
 - 2.22.2. Female
 - 2.22.3. Male
 - 2.22.4. person of color
 - 2.22.5. same race/ethnicity
 - 2.22.6. white person
- 2.23. Had help from peers or a professional network
- 2.24. Role model
- 2.25. Had access to good information about job/career/application process/etc.
- 2.26. Benefitted from a connection or a privileged background
- 2.27. Benefitted from strong academic preparation
- 2.28. Had money/funding/other resources
- 2.29. Helpful policies/actions of department or boss
- 2.30. Helpful policies/initiatives at home institution or employer
- 2.31. Helpful professional association (AEA) initiatives or activities
- 2.32. Other solution

3. Timing and type of activity involved in problem or solution

- 3.1. Unknown time after degree
 - 3.1.1. Service to institution or profession
 - 3.1.2. Research/journals/conferences/coauthors
 - 3.1.3. Daily work of a non-academic job, e.g., in government
 - 3.1.4. Teaching/dealing with students
- 3.2. Non-economic Job
- 3.3. As grad student
 - 3.3.1. Research/journals/conferences/coauthors
 - 3.3.2. Teaching/dealing with students
 - 3.3.3. Service to institution or profession

- 3.3.4. Daily work of non-academic job, e.g., in government
 - 3.4. During job search/hiring/promotions
 - 3.5. 0-7 years after PhD
 - 3.5.1. Research/journals/conferences/coauthors
 - 3.5.2. Teaching/dealing with students
 - 3.5.3. Service to institution or profession
 - 3.5.4. Daily work of a non-academic job, e.g., in government
 - 3.6. 7+ years after PhD
 - 3.6.1. Research/journals/conferences/coauthors
 - 3.6.2. Teaching/dealing with students
 - 3.6.3. Service to institution or profession
 - 3.6.4. Daily work of non-academic job, e.g., in government
 - 3.7. Before grad school
4. US born (Best estimate using the transcript. Code if transcript indicates whether or not the respondent was born in the US; gauge the answer.)
- 4.1. Yes
 - 4.2. No
5. If you had to do it all over again would you still pursue economics? (Question asked towards the end of the interview. Coded Either yes or no)
- 5.1. Yes
 - 5.2. No
6. Goals- stated aspirations and motivations
- 6.1. Aspiration- Mark text where specific jobs/fields/topics are stated as goals
 - 6.2. Motivation- Mark text where values/issues/experiences are offered as motivating interest in particular jobs/topics
 - 6.2.1. Initial Attraction
 - 6.2.2. Left Economics Profession (Participant discusses exiting the pipeline in the Economics profession (includes opting out of completing an Economics PhD, not going into or staying in academia after PhD, etc.))
7. Consequences/outcome- Effects of the subject's experience on self, on others, or on larger society
- 7.1. Economic hardship for self/family
 - 7.2. Improvement in economic condition for self/family
 - 7.3. Stress/anxiety/depression for self/family
 - 7.4. Lack of stress/anxiety/depression for self/family
 - 7.5. Slowed or diverted career progression for self
 - 7.6. Hastened career progression for self
 - 7.7. Feeling worse about self
 - 7.8. Feeling better about self
 - 7.9. Changed topic or quality of a research project, started or stopped a line of research
 - 7.10. An effect on students
 - 7.11. An effect on society or policymaking

8. Impact of identity- Mark any text where race/ethnicity/gender or personal identity or status as member of an underrepresented minority group is noted as having an impact.
 - 8.1. Minority
 - 8.2. Nationality
 - 8.3. race/ethnicity
 - 8.4. gender
 - 8.5. LGBTQ+ status
 - 8.6. socioeconomic status (or first-gen college status)
 - 8.7. other aspect of personal identity
9. Great quote - Mark any text that coder thinks is a great quote
10. Useful but does not fit in current categories (Coder views as useful information but does not fit in current categories.) *Please bring to attention of PIs in coder meeting.*

Notes: Code broadly. For example, if someone discusses a problem in one sentence and the fact that it happened in grad school in the next sentence or even a couple of sentences down. Code a swath that includes both pieces of information with both codes. “Discrimination” stated alone coded as implicit bias.

Also, if excerpt continues onto another page, attach memo on both excerpt pieces, “continued on/from previous page” or “continued on/from next page”

REFERENCES

Becker, Charles M., Cecilia Elena Rouse, and Mingyu Chen. “Can a summer make a difference? The impact of the American Economic Association Summer Program on minority student outcomes.” *Economics of Education Review* 53 (2016): 46-71. <https://doi.org/10.1016/j.econedurev.2016.03.009>