Research Statement

I am a researcher working on Behavioral & Experimental economics, Economic Development, and Labor Economics. My current research explores novel angles on the barriers faced by underrepresented minorities. For instance, while there has been much research on whether employers discriminate against stigmatized groups, we know little about jobseekers' reactions to discrimination – can they be amplifying the effects of discrimination? In another paper, I explore what minority students can learn from academics' social media posts: can they trust statements supporting social causes, or are those uninformative about how potential mentors would treat them? Finally, in work in progress, I develop a novel measure of female leader autonomy in India to understand whether decades of quota policies succeeded in changing actual representation. In my future agenda, I also see a place for the social science of science – to understand scientific productivity – and integrating more theory into my applied work.

Perceptions of Discrimination. My job market paper – coauthored with my PhD classmates Ieda Matavelli and Fernando Secco -- explores how jobseekers' beliefs about (expected) discrimination affect their application decisions and interview performance. This is important for understanding the role of the supply side of the labor market in determining the ultimate impacts of discrimination. For instance, jobseekers might use strategies that completely offset discrimination, perhaps by changing how they present themselves. But it might also be that many jobseekers overestimate discrimination, becoming discouraged from applying to certain jobs or excessively stressed during interviews, amplifying the effects of discrimination. If the latter, even firms interested in hiring diverse candidates can have difficulty finding an acceptable candidate. We partnered with one of these firms in Brazil, to conduct a field study with 2,200 favela jobseekers.

For these jobseekers living in Rio de Janeiro's favelas, home address is a stigma, a mark of a strongly negative stereotype widely recognized in Brazilian society. To study the effects of anticipated discrimination, we set up a job application pipeline, which starts with identifying jobseekers, moves to a job application invite, and ends with a job interview for an actual set of jobs with our partner. We embed three experiments in this pipeline to understand the effects of expected discrimination throughout. Two experiments randomize expected stigma visibility: one allowing jobseekers to apply without declaring an address, and another randomizing whether interviewees are told their interviewers would know "only your name" or "your name and address". A third experiment leverages a new audit study we ran to measure anti-favela callback discrimination. We found no discrimination in callbacks in the audit study, and our third experiment with jobseekers randomizes whether we tell them these results, so we can observe whether that information affects application.

In our door-to-door survey, we incentivize jobseekers to predict the findings from our audit study. Over 80% overestimate discrimination in callbacks, and the median jobseeker predicts a 50% discrimination rate. When we look at interview performance, we see that those who expected to have their address visible do worse (0.13 SDs), with effects strongly concentrated (about 0.2 SDs) in the group that expected median discrimination or more. In the experiments in the pre-callback stage, we do not see effects on average application rates. Still, white jobseekers apply more often when their application invites say their address is not necessary for applying. This is evidence that these correlated stigmas are substitutes, and that could be because white jobseekers believe that they can pass for non-favela residents later, or because having one stigma visible is about as discouraging as having two. Confirming that, white jobseekers also benefit much more from believing their address is hidden in the interview experiment.

While randomizing information about our finding of no discrimination in the audit study does little to application rates, we see suggestive evidence that it improves interview performance later. Hence, our evidence suggests that (i) expected discrimination can hurt performance in face-to-face stages of the job search, (ii) the visibility of a stigma might be irrelevant if another stigma is already visible, and (iii) application rates respond less to expected discrimination, but information on market-level discrimination might help in the interview stage.

Signals in Social Media. In joint work with Matt Lowe and a large team of undergraduate research assistants, I explore whether tweets about racial justice predict offline discriminatory behavior. In social media, where public figures have broad reach but may also suffer from social pressure, can underrepresented minorities trust these figures to act according to their public statements? And do these minorities correctly interpret these signals? We answer the first question by comparing data from US academics' tweets on racial justice to an audit study measure of discriminatory behavior and political donations. We find that tweets are informative about racial bias in our audit study – in which each academic receives a request for a quick Zoom meeting from a fictitious student – and about the level of donation for Democrats (but not about donating to a Black candidate, in a case study of the Warnock and Ossoff 2020-2021 senatorial elections in Georgia). In a survey of graduate students (oversampling Black students), they generally overestimate how much discrimination we would find (similar to what I see in my job market paper) and underestimate the information in tweets. Nevertheless, this does not mean one would be better off in a world where students completely understood the information in tweets since that could increase signaling incentives and reduce informativeness.

Female Pradhan Autonomy. Many countries have implemented electoral gender quotas to improve representation in public decision-making. At the same time, verifying whether such policies successfully generate actual representation can be challenging, especially at the local level. I propose a novel and audit-like measure of female leader autonomy for village leaders (pradhans) in India: whether the female leader owns the phone number used to communicate with higher levels of government. This measure is easily scalable and can be used to estimate whether gender quotas have led to more autonomy and whether autonomous leaders can implement their preferred policies. To construct this measure, I scraped data from the Truecaller app, which covers over 95% of phone numbers in my sample. Truecaller is a popular "phonebook" app; if a person has a Truecaller account, that person can choose how to display the name associated with their phone number. If not, Truecaller elects a name from the set of all users with that number in their phonebook – so it is possible to explore both how people name themselves and how others name them. After I retrieve the phone owner name from Truecaller, I can see whether it credibly matches the village leader's name. If it matches the name of a female Pradhan, I classify them as autonomous (if not, it will very often match the name of a male guardian instead, which is listed in electoral data for most states).

Preliminary results from West Bengal indicate that reservations succeed in creating more autonomy, but only when the village leader's seat is reserved for women multiple times. I will use two strategies to estimate the effects of autonomy on policy implementation: first, a close-elections design in which females run for a seat, but only one of the top two candidates is classified as autonomous. Second, a differences-in-differences strategy in which I compare villages with similar pasts that now elected a non-autonomous vs. an autonomous female.

Science Twitter. This project explores the role of communication in the production of science by estimating how the use of Twitter impacts scientific production. For instance, social media makes it easier

for researchers to share their findings. It also makes it easier to find collaborators, which without social media was likely to be relatively harder for isolated or minority researchers. At the same time, social media use may crowd out other activities. I will use a difference-in-differences approach, exploring variation in the time each academic joined Twitter to estimate how social media use impacts production (publication, patents, funding), collaborations (geographical distance, breadth), and horizontal or vertical job transitions. The sample includes 28,000 research-active academics from the top-150 US institutions with a Twitter account as of March 2022.

Institutional Barriers to Speech. What is the sway of institutions in determining their employees' public speech? This question is especially relevant when it comes to universities since they produce both education and science. In this project, I use two strategies to identify how universities change social media speech. First, I will conduct a variance decomposition exercise – exploring academics' moves across institutions – to measure how much of the variation in speech can be attributed to universities. For measuring social media speech, I develop tweet classification algorithms to measure the share of academics' tweets about scholarship, politics, and social issues. Second, I explore the Scholars Under Fire Database, which documents calls for sanctions on scholars who expressed controversial views. I will use a differences-in-differences strategy to measure the effects of those events on the speech of academics of the same institution but who were not involved in the call for sanctions. The second approach also lends itself to measuring how scientific productivity evolves in institutions after individual academics face such sanctions since academics may lose coauthors or shift their research interests in response.

Dynamic Coordination with Present Bias. In this completed theoretical paper, I uncover and explore an adaptive consequence of present bias: it can help groups coordinate. Consider the following situation: groups benefit from staying together (strength in numbers), and people all begin in a single group. Some individuals might leave to form a new group in a better location, but there are trade-offs. Individuals would only leave if they believed others would follow with high probability (because strength in numbers in the initial location makes up for its lower quality). Leaving also causes a negative externality on those who stay -- an immediate cost. A workhorse model shows that exponential discounters leave even when the quality differential is too low to compensate for the social transition cost, causing inefficient welfare loss on those who stay. I show that present bias can ameliorate the situation, because it (partially) fixes the underweighting of the utility in the current location. Hence, while present bias is usually viewed as welfare-damaging, it might have provided an evolutionary group advantage and still be important in policy considerations involving coordination (like technology adoption) today.

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In the future, I hope to keep on doing applied work on economic development, discrimination, and on the intersection of science and social media. Economic theory – including behavioral aspects – has played a supporting role in my applied research up to this point, but I look forward to opportunities to give it a more central role, possibly through collaborations with future colleagues. As I have conducted my best research with amazing coauthors, I understand the value of collaboration and I am excited to find and create new joint projects.