CÉSAR GARRO-MARÍN

 $www.cesargarromarin.com \cdot cgarrom@ed.ad.uk$

Research Statement

I am a labor economist working primarily at the intersection of labor and development economics. My research agenda centers on three broad themes: (i) how education and skills shape workers' choices and outcomes, (ii) how local labor markets affect gender inequality, and (iii) how firms, amenities, and job characteristics influence workers. I employ a broad set of methodologies, including quasi-experimental designs, randomized control trials (RCTs), and structural estimation. My work has been supported by the Weiss Fund, the Indonesian Research Fund, and the US National Science Foundation. Below, I summarize my research on these three topics.

Education and labor markets: I am particularly interested in understanding how education influences workers' choices and outcomes in different contexts.

In developing countries, weaknesses in the education system can result in low levels of technical skills. In "Linking Vocational Schools to Industry: Effects on Teachers in Indonesia", we use an RCT to study the effects on teachers of a mass training program aimed at improving the quality of vocational education in Indonesia. The government rolled out an intensive professional development program provided by private sector firms to enhance teachers' vocational skills. We embedded an RCT within the rollout and collected original survey data to study its effects on teachers' knowledge, classroom practices, and expectations of students' outcomes. We find that the training crowded out existing professional development offerings without increasing overall training participation. There is little evidence of improvements in teachers' knowledge or measures of school quality, albeit with suggestions of increased use of Information and Communication Technologies in the classroom.

In "Skill Use in Jobs: The Role of Education and Technology"—joint work with Costas Cavounidis, Kevin Lang, Raghav Malhotra—we study how education influences workers' skill investments in the labor market. Using data from the United Kingdom, we first document that workers with different education consistently employ different skills in their jobs. We then develop and estimate a flexible theoretical model in which education determines the cost of acquiring certain skills, and identify these costs primarily from within-occupation differences in skill use across workers with different education. We estimate the model using rich UK skill-use data and show that more educated workers have lower costs of investing in social, adaptive, and abstract skills while less educated workers acquire manual skills at a lower relative cost. These cost differences are consistent with the occupations workers with different levels of education choose.

Gender inequality and local labor markets I am particularly interested in understanding how features of local labor markets can drive differences in gender inequality within countries in countries at different levels of development.

In "Rooted Decisions: Local Labor Markets and Women's Work", I examine how early-life exposure to local labor markets affects women's adult labor supply. Using rich data on Indonesian internal migrants, I estimate the effect of exposure to their birth labor market using an estimation

strategy that compares women who moved from their birthplace at different ages but who now live in the same location. I find strong and persistent effects of longer exposure to high-female employment places, especially during the formative years between ages 6 and 15. Women exposed during their whole childhood to high-employment areas have 5 percentage points higher employment than those exposed to lower-employment areas, suggesting that about 23% of the spatial inequality in women's work is passed to the next generation, likely through learning of birthplace gender norms.

Firms, amenities, and working sorting: Another strand of my research studies how firms and job characteristics affect worker outcomes.

Why do workers tend to enjoy some job amenities together, while they tend to substitute for others? In "Work Hours and Amenity Trade-Offs"—joint with Neil Thakral and Linh Tô—we study how workers trade off amenities when firms offer some amenities together, and substitute between others. We develop a compensating wage differentials model that incorporates complementarity and substitutability in firms' provision of amenities and workers' preferences for them. These interactions help explain why some amenities tend to be bundled, while others are more often traded off. We then use data from the National Longitudinal Survey of Youth 1997 cohort to study amenity US substitution in the US labor market. We highlight how shorter or more flexible total work hours are traded off against other workplace amenities. Our findings suggest that women may need to forgo amenities they value to secure shorter, more flexible work hours.

In "Do Elite Universities Overpay their Faculty?" we focus on the US market for academics and study the drivers of US academics' pay, particularly in understanding whether elite universities pay salary premiums to their faculty. While it is well-known that US elite universities have higher average wages, this can arise because these universities offer higher wages –i.e., pay premiums– to all their faculty, or because they hire more productive faculty. In joint work with Shulamit Kahn and Kevin Lang –currently in second-round revision at the Review of Economics and Statistics—, we use restricted matched employer-employee data to study the determinants of US faculty pay, distinguishing between faculty and university pay premiums. We apply an AKM model (Abowd, Kramarz, and Margolis, 1999) and find that, unlike the broader labor market, elite US universities pay higher wages because they hire better faculty, with little evidence of any pay premium. We find no evidence that compensating wage differentials explain the lack of premium at top institutions. We suggest a model of matching with frictions that can account for the results.

2