# Welcome!

- A. Can economics deepen our understanding of why a firm should value diversity/inclusion?
- B. How empirical work can help understand the economics of the problem

# The Economics of Why a Firm Should Value Diversity and Inclusion?

Social Preferences—"Equity"

- "Efficiency" Purposes
  - □ Supply side
    - lower cost to produce what we already produce
    - more/better innovation of new products
    - give proper incentives to people in the long-run
    - withstand shocks—sustainability
  - Demand side (customers or shareholders demand)

## Lots of Open Questions/Debates

Diversity of what?

Thought? Gender? Race? SES category? All and more?

Main prediction from economics: many people have social preferences, but such preferences take on less import as their cost increases (as stakes ^^^ profit/efficiency will tend to become more important)

## Lots of Open Questions/Debates

This is why it is invaluable to have science around equity & efficiency

How to gather empirical evidence? Where should we start?

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#### **Economists as Data Sifters**

Economists have a semi-automatic approach of writing down a model, downloading mounds and mounds of secondary data, invoking various assumptions, and making causal statements

Modeling Naturally-Occurring Data

DID, PSM, IV, STR, etc.

DID: difference-in-differences

PSM: propensity score matching

IV: instrumental variables estimation

STR: structural modeling

#### When We Wait for Data

 Can learn a lot but many times difficult to make strong causal statements

Difficult to figure out the "whys" underlying the data patterns

#### Enter Randomization: Generating Data

Lab Exp.

Field Exp.

DID, PSM, IV, STR, etc.

- conventional lab experiment
  - employs a standard subject pool of students, an abstract framing, and an imposed set of rules
- conventional field experiment
  - employs a subject pool from the market of interest and usually occurs in the environment where the subjects naturally undertake these tasks

If we use the experimental method, as a firm where could we start if we are interested in D/I?

## Lots of Stages in the Workplace

- Application decision
- Hiring
- Wages
- Promotion
- Retention/Firing
- Worker sorting

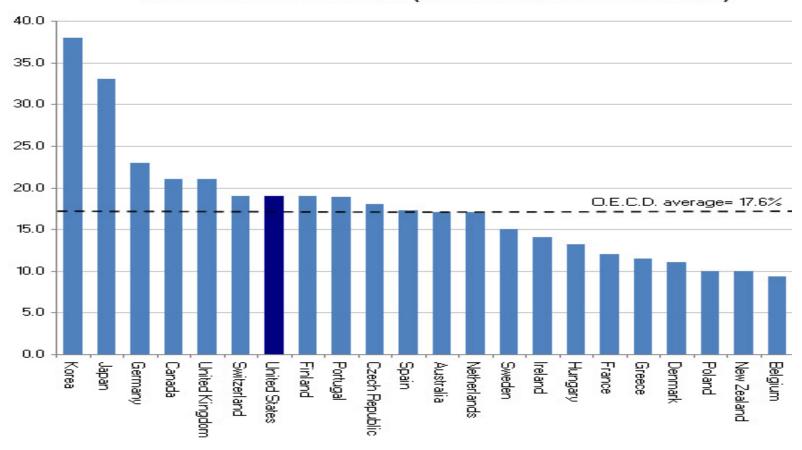
# Two research agendas that follow

A. Measure inequities and determine if we can affect decisions in the various stages

B. Determine if, and when, it is efficient for a firm to affect those decisions

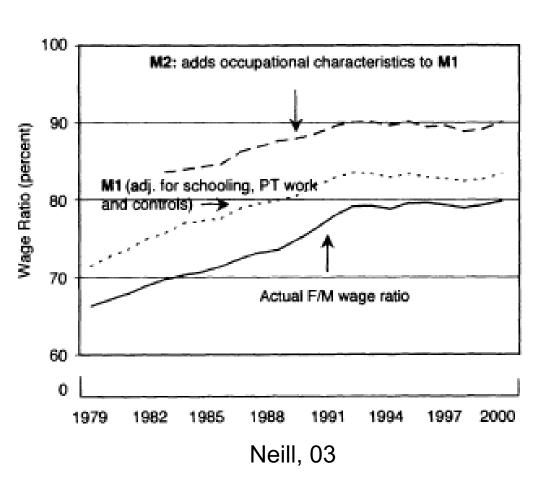
# A. A Measurement Example: Gender Pay Gap

Percentage Gap Between Median Men's and Women's Wages, for All Full-Time Workers (2006 or Latest Year Available)



#### **Explanations**

for gender differences in labor markets



- human capital (Blau & Kahn 00)
- labor market attachment (Lazear and Rosen 90)
- discrimination (Spencer et al 99; Goldin & Rouse 00)
- potentially worker preferences

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#### Our FE Evidence

- Our first FE (Flory et al., 2015, RESTUD): We advertised otherwise identical office jobs across 20 cities in the US, in one treatment arm we varied payment scheme:
  - □ fixed wage (\$15/hr.)
  - competitive scheme (\$12/hr. + \$6/hr. if you outperform a fellow worker).
  - □ 7000+ aps.

Early in the job search there are key gender differences:

women shy away from competitive pay incentive scheme more than men

#### Our FE Evidence

- A second FE (Leibbrandt and List, 2014, Mgmt. Sc.) we advertised identical jobs except:
  - \*in one ad we said wages are negotiable
  - \*in the other we left that aspect vague
  - in ambiguous bargaining situations women exercise caution whereas men (especially the low skilled types) ask for higher wages



"What must the last chapter contain for there to be equality in the labor market? It must involve changes in the labor market, especially how jobs are structured and remunerated to enhance temporal flexibility. The gender gap in pay would be considerably reduced and might vanish altogether if firms did not have an incentive to disproportionately reward individuals who labored long hours and worked particular hours."

--Goldin (2014)

# The Gender Earnings Gap in the Gig Economy: Evidence from over a Million Uber Drivers Cody Cook, Rebecca Diamond, Jonathan Hall, John List, and Paul Oyer

#### Key Aspects Why I Believed Little/No Gender Gap Would Exist

Many of the determinants of the wage gap in other contexts – e.g., negotiated wages, a job-flexibility penalty, and convex returns to hours worked – do not apply to Uber, which pays according to fixed per-minute, per-mile rates



Cody Cook, Rebecca Diamond, Jonathan Hall, John List, and Paul Oyer

Over 2 million drivers......

In the US, men earn ~7% more per hour than women working as an Uber driver



#### The Gender Earnings Gap in the Gig Economy: Evidence from over a Million Uber Drivers

Cody Cook, Rebecca Diamond, Jonathan Hall, John List, and Paul Oyer

#### The wage gap can be entirely explained by 3 things:

- Male drivers tend to work in more lucrative times and locations, such as late nights on weekends
- There is a learning curve to driving; drivers with >2500 lifetime trips earn ~13% more than those with <100 trips. Through working more hours per week and staying on the platform longer, the average male driver has accumulated more experience than the average female driver
- Due to Uber's per-minute and per-mile rate structure, there is often a return to driving more quickly. On average, men drive 2-3% faster than women and are compensated for this additional speed

# Summary of this Work

 Worker incentive contracts affect diversity of job applications

 Small changes in hiring approach affect applications & proclivity to negotiate

Gender pay gap in the Gig Economy might persist



B. Determine if, and when, it is *efficient* for firms to impact decisions in the various stages

 Scientific measurement of the value of diversity to firms can take many forms

Old experimental social psychology literature spoke to important issues.

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# B. Determine if, and when, it is *efficient* for firms to move decisions in stages

- Kent and McGrath (1967), Bray, Kerr, and Atkin (1978), and Frank and Anderson (1971)) find that in the lab sex composition is not significant determinant of productivity; task difficulty, group size, type of task are more important.
- Studies on gender of leader (Wesley and Hunt (1974), Eskilson and Wuey (1976) and Fowler and Rosenfeld (1979)) find slight differences in task-based behavior of leader, but no significant difference in effectiveness
- Studies do find statistically significant effects of gender of members and leaders on satisfaction and cohesion, but the effects are found in different directions in different papers



#### B. Economists' Work

Many people in this room have looked at various aspects of gender and race on trust, social preferences, group cohesion, etc., which affect group productivity

Hoogedorn et al, Mgt. Sc. (2013), Woolley et al, Science (2010), Hjort (QJE 2014), and others in this room examine diversity in various ways in the lab and field and explore its affects on team productivity

# Work at Lyft

Inspired by the literature, I have done some pilots at Lyft

Lyft has day long "hackathons" to solve important company problems

Driver engagement and retention is one such issue I have been pushing

# Lyft Pilot

- 2 person teams creating an incentive scheme and coding it in the App in a 24 hour period
- Three team types: FF, FM, MM
- Judged blindly and independently

So far, FM>FF=MM on creativity and usability

# Generation Next: Collaboration with private partners



- Field experiments in the private sector are a largely untapped opportunity
- Some low hanging fruit:
  - □ Diversity, optimal worker incentive schemes, hierarchal arrangements, social structures and networks relating to workplace design, firm compliance with rules and regulations, worker malfeasance, wellness and health programs.
  - Incentive schemes, disclosure rules, risk & uncertainty, monitoring, peer effects, how psychology should augment standard models, teaching, innovation, etc.

