UNEMPLOYMENT IS MORE DETRIMENTAL TO FUTURE EMPLOYMENT QUALITY FOR THOSE RECEIVING UNEMPLOYMENT INSURANCE
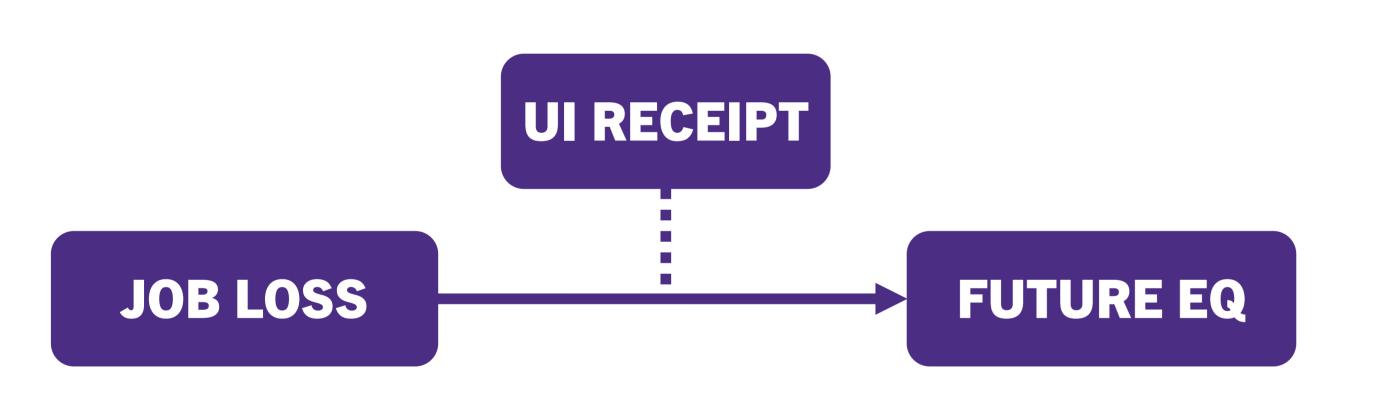
INTRODUCTION

- **Unemployment has scarring effects** on future earnings and employment stability, with ramifications for social and economic mobility and health.
- How unemployment affects **multi-dimensional employment quality (EQ)**, though, is less clear, with EQ also shaped by non-income material rewards, working time arrangements, worker rights and social protections, and collective organization opportunities.
- **Unemployment Insurance (UI)** may lessen scarring effects of unemployment, particularly for those socially disadvantaged, though **evidence is inconclusive.**

PROJECT OVERVIEW

We aim to understand:

1. What is the **total effect (on the treated)** of becoming unemployed on future re-employment EQ?
2. Does this effect **vary by UI recipiency**, and if so, when?

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        UI RECEIPT
            ┆
JOB LOSS ┄┄┄┄┄┄┄→ FUTURE EQ
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DATA & MEASURES

DATA:

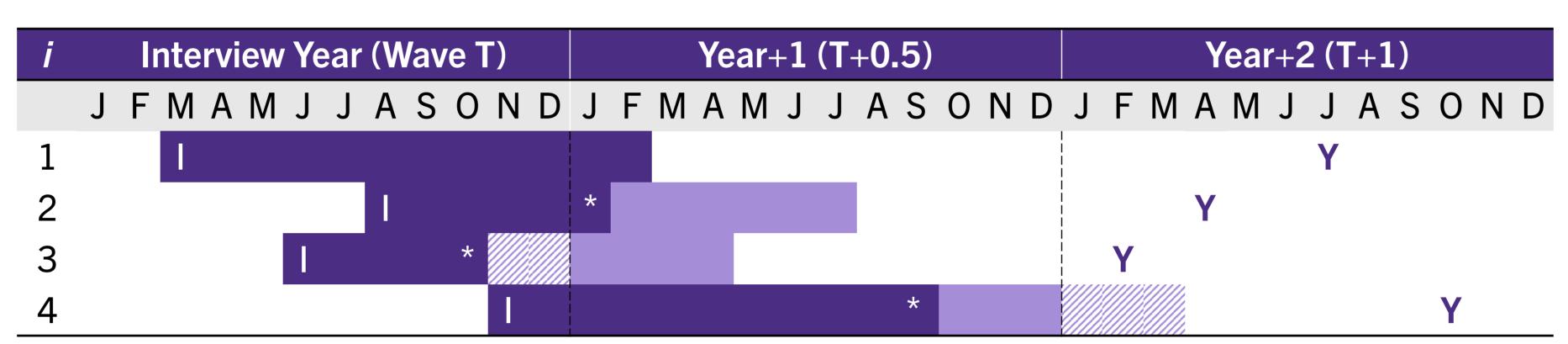2001-2019 Panel Study of Income Dynamics (PSID) data on **8752 adult participants** followed longitudinally.

MEASURES:

Exposure (A) — Unemployment during 12-mo post-interview
Moderator — UI receipt during first 6-mo of unemployment
Outcome (Y) — Continuous Multi-dimensional EQ Z-Score

METHODOLOGY

CREATING EXPOSURE, MODERATOR & OUTCOME VARIABLES:

We use **retrospective monthly data** from T+1 on unemployment status and UI recipiency to create exposure and moderator variables as below:
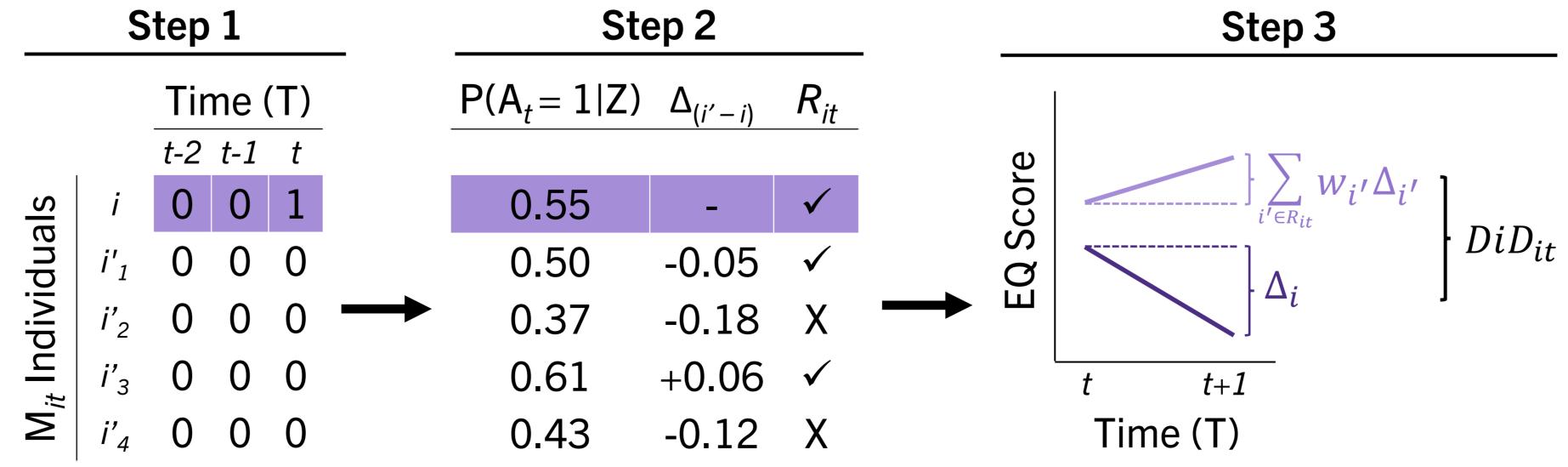

I: Interview month at *T*. Purple: Unemployment within 12-months of I. *: First Unemployment. Violet: UI receipt within 6 months post-unemployment. Striped Violet: Months where UI recipiency was not asked. Y: EQ at *T+1*.

We use a **principal component analysis (PCA)-based approach** with information from 9 EQ indicators (prior-year unemployment, job tenure, labor income, health insurance, pension contributions, salary status, extra overtime pay, hours worked, union membership) to create our outcome variable, with higher outcome scores reflecting better EQ.

ESTIMATING SCARRING EFFECTS & UI EFFECT MODERATION

We employ a **matched comparison group design**, estimating ATT/CATT using Imai, Kim & Wang's **semi-parametric TWFE estimator** as below:

1. Create 'matched sets' M_{it} for each newly unemployed (i,t) with consistently employed (i',t) in the same state & year with the same employment history.
2. Create refined sets R_{it} from each M_{it} restricting to the set of ten (i',t) with exposure propensity scores most-similar to (i,t) given pre-t covariates Z.*
3. Estimate ATT/CATT using a doubly-weighted difference-in-difference (DiD) estimator comparing pre-post changes in EQ for i vs. all i' in R_{it} across R_{it}.

* Z includes age, sex, race, ethnicity, nativity, childhood SES, marital status, educational attainment, family income, family wealth, baseline EQ, occupational sector, length of pre-interview unemployment, and state quarterly real GSP per capita and unemployment rate at the time of becoming unemployed, or at interview t if not applicable.

ACCOUNTING FOR STRUCTURAL OUTCOME MISSINGNESS

Respondents by-definition have **no EQ while unemployed**, yet:

- Our effect estimation approach relies on computing differences in individual EQ between waves t ('pre') and $t+1$ ('post').
- EQ at $t-1$ should also be accounted for as a potential confounder.

To address this issue while ensuring EQ at $t+1$ always occurs post-t when included in comparison sets, we assign EQ as follows:

A ($t-1$, t, $t+1$)	Used as $t+1$ In DiD	EQ Pre (t)	EQ Post ($t+1$)
0, 0, 0	Yes	Most recent ≤ t	Most recent > t
0, 1, A	Yes	Most recent ≤ t	Most recent > t
0, 0, 1	Sometimes	Second most recent ≤ t	Most recent ≤ t
1, A, A	No	Second most recent ≤ t	Most recent ≤ t

ACCOUNTING FOR RANDOM OUTCOME MISSINGNESS

Approximately **31% of eligible observations had missingness** in at least one analysis variable. We expect a complete-case analysis may induce selection bias, so use **multiple imputation** to avoid this.

MAIN FINDINGS

- Becoming unemployed results in a **significant decline in EQ** upon re-employment: ATT (95%CI): -0.56 SD (-0.61 to -0.52 SD).
- **These effects are larger for those receiving UI**: CATT (95% CI): No UI: -0.51 SD (-0.55 to -0.46 SD). Any UI: -0.94 SD (-1.08 to -0.81 SD).

UNEMPLOYMENT INSURANCE AND THE SCARRING EFFECTS OF UNEMPLOYMENT ON EMPLOYMENT QUALITY

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PROJECT DETAILS AND CODE