UNEQUAL WAGES FOR WORKERS WITH DISABILITIES: THE ROLE OF OCCUPATIONAL STRUCTURE

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OBJECTIVE
To investigate whether occupational structure can explain the disparities in pay between workers with and without disabilities.

RESEARCH QUESTIONS
1. How much of the observed disability wage gap is explained by worker characteristics?
2. How much of the remaining gap is due to differences in the type of occupation held? (Occupational sorting)
3. How much of the remaining gap is due to within-occupation wage inequality?

BACKGROUND

Figure 1: Disability and Gender Hourly Wage Gaps

• Previous research does not consider whether and how occupational structure contributes to disability wage inequality
• Primary mechanisms that contribute to wage inequality
  » Differences in worker characteristics
  » Occupational structure
  » Location in overall structure (Discrimination + Self-selection)

• Characteristics of occupations and location of workers within occupations

DATA & SAMPLE

• Pooled sample of the 1996, 2001, and 2004 Surveys of Income and Program Participation (Waves 1 and 5)
• Workers aged 25-64, with > $1 in earnings; N = 306,382 (30,097 or 9.8% with disabilities)

• Level two unit: Census 2000 detailed three-digit occupation codes

METHODS

I. Partition the wage gap into the portions explained by:

A. Worker Characteristics

\[ Y = \beta_0 + \beta_1 \text{Dis} + \beta_2 X + \ldots + \beta_k X + u_i + r_j \] (Eq 1)

B. Occupational Sorting

\[ Y = \gamma_0 + \gamma_1 \text{Dis} + \gamma_2 X + \ldots + \gamma_k X + u_i + r_j \] (Eq 2)

C. Within-Occupation Inequality

\[ Y = \gamma_0 + \gamma_1 \text{Dis} + \gamma_2 X + \ldots + \gamma_k X + u_i + u_j + r_j \] (Eq 3)

II. Investigate whether remaining gap (empirical Bayes estimate) varies over:

A. Percent with disabilities in an occupation,
B. Within-occupation wage inequality, and
C. Occupational mean wage

RESULTS

Figure 3. Distribution of Disability Type and Timing of Disability Onset

Table 1. Definitions of Variables in the Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
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<tbody>
<tr>
<td>Disability</td>
<td>Any health condition limiting a worker’s health condition leading to limitations</td>
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<tr>
<td>Type</td>
<td>Mental, Immune System, Musculoskeletal, Sensory, Other</td>
</tr>
<tr>
<td>Worker characteristics</td>
<td>College degree, race/ethnicity, gender, age, marital status, union, employer industry, median earnings, years in occupation, months in occupation, within-occupation inequality, unit-level characteristics</td>
</tr>
<tr>
<td>Occupation</td>
<td>Occupation code of the worker, level one unit: Census 2000 detailed three-digit occupation codes</td>
</tr>
</tbody>
</table>

DISCUSSION & CONCLUSION

• Components of the disability wage gap
  » 40% explained by differences in worker characteristics
  » 10% due to occupational sorting
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  » 40% remains unexplained

• Important variations by disability type and timing of disability onset
• This study demonstrates occupational structure contributes significantly to disability wage inequality

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