

## Identifying and measuring economic discrimination

### Using decomposition methods helps measure both the amount and source of economic discrimination between groups

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#### ELEVATOR PITCH

Differences in wages between men and women, white and black workers, or any two distinct groups are a controversial feature of the labor market, raising concern about discrimination by employers. Decomposition methods shed light on those differences by separating them into: (i) composition effects, which are explained by differences in the distribution of observable variables, e.g. education level; and (ii) structural effects, which are explained by differences in the returns to observable and unobservable variables. Often, a significant structural effect, such as different returns to education, can be indicative of discrimination.

#### KEY FINDINGS

##### Pros

- ⊕ Potential discrimination in the labor market can be analyzed using decomposition methods.
- ⊕ Decomposition methods point to factors that are relevant to explain wage differentials, such as differences in educational attainment or college premia between groups.
- ⊕ Policymakers aiming to reduce inequality between two distinct groups in the labor market can be guided by decomposition results.
- ⊕ Decomposition methods are easily implemented because they are regression based and offered by most statistical software.

##### Cons

- ⊖ Decomposition methods rely on strong assumptions that are not testable and may not hold in the real world.
- ⊖ Decomposition results are sensitive to the choice of reference group, making it harder to measure precisely composition and structural effects.
- ⊖ It is not possible to determine causal interpretation in general from decomposition results because one cannot change an individual's identity group.
- ⊖ Detailed decomposition results are sensitive to the choice of the omitted categorical variable.

#### AUTHOR'S MAIN MESSAGE

Decomposition methods provide clear insights into issues related to discrimination in the labor market by separating wage differentials into composition and structural effects. These techniques can guide policymakers to design interventions whose goal is, for example, to reduce inequality between distinct groups. Findings that show relevant structural effects may suggest the need for direct labor market policies, while large composition effects may suggest the need for changes in educational policy, for instance. Although common, interpreting the structural effects as evidence of discrimination deserves careful attention.

