



# Seminario 418: Oaxaca-Blinder Type Counterfactual Decomposition Methods for Duration Outcomes

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**García-Suaza, Andrés Felipe**

Profesor auxiliar, Universidad del Rosario y Candidato a PhD, Universidad Carlos III - Madrid

**Resumen del documento:** Existing inference procedures to perform counterfactual decomposition of the difference between distributional features, applicable when data is fully observed, are not suitable for censored outcomes. This may explain the lack of counterfactual analyses using target variables related to duration outcomes, typically observed under right censoring. For instance, there are many studies performing counterfactual decomposition of the gender wage gaps, but very few on gender unemployment duration gaps. We provide an Oaxaca-Blinder type decomposition method of the mean for censored data. Consistent estimation of the decomposition components is based on a prior estimator of the joint distribution of duration and covariates under suitable restrictions on the censoring mechanism. To decompose other distributional features, such as the median or the Gini coefficient, we propose an inferential method for the counterfactual decomposition by introducing restrictions on the functional form of the conditional distribution of duration given covariates. We provide formal justification for asymptotic inference and study the finite sample performance through Monte Carlo experiments. Finally, we apply the proposed methodology to the analysis of unemployment duration gaps in Spain. This study suggests that factors beyond the workers' socioeconomic characteristics play a relevant role in explaining the difference between several unemployment duration distribution features such as the mean, the probability of being long term unemployed and the Gini coefficient.