

# Labor Market Institutions and the Composition of Firm Compensation: Evidence from Brazilian Collective Bargaining

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## **Abstract**

This paper studies how a widespread labor market institution—collective bargaining agreements (CBAs) negotiated between unions and employers—affects firm compensation. I study the effects of a reform that automatically extended all existing CBAs in Brazil, and thus restricted employers’ ability to phase out negotiated benefits upon their expiration, on both wages and amenities. To do so, I combine linked employer-employee data with text analysis for the universe of CBAs. Causal effects are estimated using a matched difference-in-difference design comparing establishments with extended CBAs, before and after the introduction of automatic extensions, to workplaces not negotiating with unions at the firm level. To compare wages and amenities, I construct a wage-equivalent measure of workers’ value for amenities based on the predictive power that text in a CBA has on an establishment’s ability to poach workers from other employers, conditional on wages. Although automatic extensions are considered pro-union, I find that mean wages and firm pay premiums fall at establishments with extended CBAs. However, the reform also increased unions’ incentive to secure gains in amenities relative to wages and, consistent with the predictions of a model in which unions trade-off bargaining over wages and amenities, I show that strong unions secure additional amenities valued above the decrease in wages. More generally, differences in pay premiums across firms in my data are not merely compensated by differences in the value of amenities included in CBAs. Finally, the changes in firm compensation arising from the reform led to an increase in hiring concentrated among low-skill workers, indicating that unions not only compress wage inequality but also overall compensation inequality, inclusive of amenities.

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