## Does the Selective Erasure of Protected Areas Raise Deforestation in the Brazilian Amazon ?

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## Résumé

Protected areas (PAs) have long been the leading conservation tool for deterring deforestation. However, there is resistance to PAs from land users who lose profit. That can lead to remote sites for PAs and to illegal deforestation within PAs, both of which reduce the PAs' forest contributions. After a PA is established, land users who lose from PAs may endeavor to reduce that protection: PA downgrading, downsizing and degazettement (collectively 'PADDD') are reductions in status (downgrading) or in size (downsizing or degazettement, i.e., the partial or full erasure of the PA). For the entire Brazilian Amazon, we estimate the impact of 2009-2012 PA erasures on 2010-2015 post-erasure loss of forest cover. We use matching in light of the relevant results for PADDD risks: for the Brazilian Amazon, PA erasures occur more near economic pressure – where deforestation is more likely (Tesfaw et al., 2018; Keles et al., 2019). Conceptually, erasures cause deforestation if the PAs faced and at least somewhat blocked pressures. Empirically, we find exactly that: since most forests selected for PA erasures faced pressure, these PA size reductions raised forest loss.

Mots-Clés: protected areas, PADDD, conservation, Brazil, Amazon, political economy, impact evaluation

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