

# IAB-Colloquium

## zur Arbeitsmarkt- und Berufsforschung

### How Substitutable Are Workers? Evidence from the Effect of Worker Exits on Hiring and Wages

**Simon Jäger**

*Harvard University*

I implement a quasi-experimental research design to measure the substitutability of workers within and across firm boundaries. To do so, I estimate how unexpected deaths of workers affect hiring and wages using matched employer-employee data from Germany. Worker deaths lower employment only in the short-run and increase hiring as well as the retention and wages of coworkers. These results imply that coworkers are closer substitutes to one another than workers that can be hired externally: when a hard-to-replace worker exits the firm, the firm values the human capital of the remaining workers more. In contrast to the positive average effects, I estimate negative wage effects for deaths of high-skilled workers, suggesting that these workers raise the marginal productivity of their coworkers. Overall, wage effects are larger for deaths of longer-tenured workers and smaller in thicker labor markets, suggesting that human capital specificity drives the imperfect substitutability of insiders and outsiders.

**Donnerstag,  
20. August 2015**

11:00 Uhr

Sitzungssaal 126a