## Double for nothing? The effects of unconditional teacher salary increases on performance

Joppe de Ree (World Bank)

Karthik Muralidharan (UC San Diego)

Menno Pradhan (University of Amsterdam)

Halsey Rogers (World Bank)

## Abstract

Does paying teachers more make them more effective in the classroom? This paper presents results from a large randomized field experiment in Indonesia that evaluates the effects of teacher certification - which includes a permanent doubling of pay - on teachers' knowledge, effort, and student learning outcomes. To our knowledge, this is the first RCT of the effects an unconditional salary increase in education and the first of its size-involving more than 3000 teachers and 80,000 students-in any field. We find that the program significantly improved teacher job satisfaction, reduced the incidence of and hours worked on outside jobs, and reduced self-reported financial stress. Nevertheless, the doubling in pay led to no improvements in either teacher skills, measures of teacher effort, or student learning outcomes, suggesting that the salary increase was mostly a transfer to teachers with no discernible short- or medium-term impact on student outcomes. It appears that if the reform is to improve student learning, it will need to operate through other channels, such as skill upgrading by teachers not yet eligible for salary increases or improvement in the quality of applicants to the teaching profession.