

EDI Research Link Up Research Presentation



Center for Effective Global Action

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ECONOMIC
& DEVELOPMENT
INSTITUTIONS



Attracting, motivating, and retaining skilled public-sector workers is a key challenge to building state capacity (Dal Bo and Finan, EDI 2016).

- In developing-country education, there is tremendous variation in teacher quality (Buhl-Wiggers et al. 2016; Bold et al. 2017), and internationally these differences have lifelong effects (Chetty et al. 2014).
- In Rwanda's primary education sector, approximately 10 percent of teachers leave every year, another 10 percent move schools. Schools stay at prior staff size following a separation less than half of the time.
- With a few key exceptions (Dal Bo et al. 2013; Ashraf et al. 2016; Deserranno 2017), we know relatively little about how policies affect the composition of developing-country civil service workers.



Can performance pay attract, motivate, and retain better teachers?

- We study whether the promise of a two-year incentive contract helped to attract better applicants to teaching positions schools in hard-to-staff districts in Rwanda.
- For placed recruits, we separate the compositional from effort-response effects of performance contracts.
- We also study impacts of experienced performance pay on effort levels and retention rates among incumbent teachers.
- Policy opportunities: Started from leadership retreat white paper. GoR is reinstating *imihigo* for primary-school teachers and actively debating recruitment and retention policy. Our brief on teacher management policies attached to draft MINEDUC cabinet paper last week.



Study design: A two-tiered randomized controlled trial

Working with the Rwanda Education Board, we built and implemented a performance contract for upper-primary teachers.

We studied its compositional and effort impacts in a two-tiered randomized, controlled trial.

- First tier advertised either Pay-for-Performance or Fixed Wage contracts at the *labor-market level*.
- Once applications submitted and recruits placed in schools, second tier re-randomized experienced contracts at the *school level*.

We measured public-sector motivation and personality traits of placed recruits to build linkages to other studies.



Our measurement strategy allows testing several, related hypotheses.

- *Applicant pools.* We observe qualifying exam performance and gender for the universe of applicants to P4P or FW jobs, regardless of hiring outcome. Are these different pools?
- *Characteristics of hires.* For recruits placed in school, we measure **skill** (through a test comparable to the *Service Delivery Indicators*), **motivation** (through standard lab experiments, and the Perry Public-Sector Motivation instrument), and **personality** (Niederle and Vesterlund, BFI-15, Binswanger-Eckel-Grossman).
- *Learning.* Ultimately, we care about whether placed recruits differ in terms of the learning they deliver. Assessments at baseline, Y1, Y2.
- *Retention.* Do P4P contracts change retention patterns?



Progress

- We have worked exclusively on a blinded dataset to develop pre-analysis plans that tie our hands, while taking advantage of the experimental structure to sharpen statistical power.
- Drafts of these – one on recruitment, one on long-term effects including incumbents – have been completed.
- We would welcome feedback on both the questions we set out to answer and the specific tests we put forward.





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