Incentivizing Property Tax Inspectors through Performance-Based Postings in Pakistan

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Sector(s): Political Economy and Governance

Location: Pakistan

Sample: 500 tax circles

Target group: Civil servants

Outcome of interest: Taxation

Intervention type: Incentives

AEA RCT registration number: AEARCTR-0002753

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Partner organization(s): Government of Punjab, Pakistan, International Initiative for Impact Evaluation (3ie), International Growth Center (IGC), National Science Foundation (NSF)

Effective state bureaucracies play a central role in delivering public services, but governments face many constraints on their ability to reward good public-sector employees or punish poor performers. Together with the provincial government, researchers evaluated the impact of a performance-based incentive scheme on tax inspectors' performance in Punjab, Pakistan. The incentive scheme allowed tax inspectors to choose their next posting location based on their past performance; specifically, how each inspector performed, relative to others, determined the order in which inspectors would choose their next posting. Tax inspectors who participated in the scheme for one year increased the growth rate of tax revenue in their collection areas by between 30 and 41 percent, suggesting that bureaucracies can use transfers as a low-cost way to improve performance.

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Bureaucratic structures and regulations hinder many governments' abilities to provide incentives to public workers. Especially in developing countries, strict civil service regulations may limit pay and promotions in an effort to reduce politicians' ability to use government jobs to reward political allies. In such rigid environments, one way for managers to provide incentives is through their control of where people are posted. Despite the potential for transfers to be used as a performance incentive, most bureaucracies assign postings based on other factors, such as personal or political connections. Moreover, implementing a performance-based transfer system presents a number of challenges for governments. First, for transfers to motivate good performance, workers need to understand that transfer decisions are indeed tied to their performance. Second, workers may not exert extra effort to acquire more desirable postings if they believe that others workers with similar location preferences will out-

perform them, or if they believe that their preferences are unique and they can therefore get their preferred postings regardless of how hard they work. Governments must also determine how to elicit employees' diverse location preferences, and must consider the costs of making transfers, as placing workers in their preferred locations may not always coincide with where the government wants to allocate well-performing workers. To better understand whether performance-based postings can improve performance, researchers Adnan Khan (LSE), Asim Khwaja (Harvard Kennedy School), and Ben Olken (MIT), in collaboration with the provincial government, examined the impact of a performance-based transfer system on tax collection in Punjab, Pakistan.

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Punjab is Pakistan's most populous province, with a population of around 110 million. Tax collection in this province is generally low, with substantial room for tax evasion–and, therefore, potential to increase tax revenues–particularly in the case of property taxes. Urban tax inspectors play a key role in assessing the tax liability in their assigned locations, as they are the government's main source of information about properties and their characteristics. Each tax inspector is responsible for determining liability and sending a tax bill to each property owner within his tax "circle," a geographic area that includes anywhere from two to ten thousand unique properties. Because the tax inspector has sole responsibility for assessing tax within a circle, collusion between taxpayers and tax inspectors is thought to be widespread. Tax officials receive fairly low wages that are rarely, if ever, tied to performance, and supervisors who want to improve performance can introduce only limited incentives.

Tax inspectors are likely to care about where they are posted: tax circles differ in terms of the number of taxable properties, the ease of collecting tax, amenities, and opportunities for corruption. However, inspectors may also prefer not to move; in fact, data from this study showed that 53 percent of inspectors preferred to stay in their current tax circle, while the rest expressed a desire to move. Under the status quo, transfers are fairly common, with about one-third of tax inspectors typically posted to new circles each year. In practice, though, the location-assignment process is opaque, so the use of postings as an incentive device has been limited.



A view from a rooftop over the city of Lahore in Punjab, Pakistan. Photo: Shutterstock.com

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Together with the provincial government, researchers conducted a randomized evaluation to test the impact of performance-based postings on tax collector performance. At the start of the first year of the evaluation, researchers randomly assigned each tax circle to a group containing nine to eleven other circles in the same metropolitan area, resulting in 41 groups total. After collecting baseline information on the location-assignment preferences of all inspectors for the circles in their assigned groups, half of the groups were randomly assigned to implement the performance-based postings by the Punjab government. The other half served as the comparison group for that year. In groups that implemented the performance-based transfers, inspectors were told that all tax circles within the group would be reassigned at the end of the year and that inspectors would choose their next assignment in a sequence determined by the ranking of their performance. Performance was measured as either year-on-year growth in tax revenue or year-on-year growth in tax assessments. At the end of the year, the government reassigned postings within the group as promised.

At the start of the second year, groups were re-randomized, and performance-based posting groups were again told that postings would be allocated based on performance. By re-randomizing the groups in year two, researchers were able to identify whether the impact of performance incentives differed depending on when and for how long groups were subject to incentives.

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Performance-based postings significantly raised tax revenues. In the first year, the average growth rate of revenue for inspectors in performance-based posting groups was 41 percent higher than in the comparison group, where revenues grew 11.7 percent.

The effects on revenue growth from one year of incentives persisted into the second year even for those inspectors no longer exposed to incentives. Continued high performance may be explained by the fact that first-year top performers in this context preferred to be reallocated to larger tax circles (or tax circles with high value properties), where their good performance translated into higher second-year tax revenues. Revenues grew by about 30 percent more than in the comparison group (where revenues grew 30.9 percent) for tax inspectors who were included in the incentive scheme beginning in the second year. Meanwhile, for tax inspectors exposed to the scheme for two years in a row, there was no impact on revenue growth in the second year–possibly because these inspectors became discouraged when faced with the need to work hard for a second year, or because they may have faced difficulties exerting effort in a new circle (e.g., inspectors in a new area may not know which properties can be added to the tax rolls). Groups performed similarly regardless of which performance measure was used.

Relative to a performance-pay scheme, which required the government to almost double the wages of tax staff, implementing the posting incentive scheme imposed no additional costs on the government and led to an increase in tax revenue about three-quarters as large, making it a cost-effective incentive program. Altogether, these results suggest that bureaucracies have the potential to improve performance at almost no cost by periodically using transfers as an incentive. Lastly, while the effectiveness of such posting-based incentives may differ based on the context–for example, based on inspectors' perceptions of how their preferences and performance compare to others'–these results also suggest that knowledge of local staff preferences and projected performance can be helpful in predicting the success of these incentive schemes.