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**Timeline**

2009-2012

**Sample Size**

482 tax administrative units

**Data Repository**

<https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi%3A10.7910/DVN/MDHH...>

**Research Implemented by IPA**

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# Experimental Evidence on Performance Pay for Tax Collectors in Pakistan

## Abstract

While performance pay for tax collectors has the potential to raise tax revenues, there is concern that it may also increase the bargaining power of tax collectors with respect to taxpayers, leading to greater taxpayer dissatisfaction. To examine these issues, researchers conducted a randomized evaluation of three different performance-based schemes in Punjab, Pakistan. Results demonstrated that offering performance incentives led to a 46 percent higher growth rate in tax revenues in treatment areas, relative to comparison areas.

## Policy Issue

Tax systems in developing countries collect substantially less revenue as a share of GDP than in developed countries<sup>[1]</sup>. One reason for this may be that, in low-income countries, tax officials are often paid low wages with no link to performance, creating scope for corruption and leakages. Tying wages to performance, called performance-based pay, may be one possible solution to this problem. However, performance-based pay could also increase tax officials' bargaining power vis-à-vis taxpayers, increasing taxpayer dissatisfaction without increasing government tax revenue. To better understand these tradeoffs, researchers examined the impact of performance pay schemes on tax collection in Punjab, Pakistan.

## Context of the Evaluation

With over 80 million people, Punjab is Pakistan's most populous province. However,

compared to its population, tax revenue is very low. Property tax collection in the province is particularly difficult, given complex tax regulations that include differential rates and exemptions for various people and institutions.<sup>[2]</sup> Because tax officials wield significant discretion in applying property valuations and determining exemptions, the system creates considerable opportunities for corruption and tax evasion.

Tax officials in Pakistan are part of the provincial career bureaucracy, which receives low wages that are determined by rank and length of service rather than performance. During the period under study officials followed a manual system of billing and tax collection, and are subject to very little outside supervision.

## Details of the Intervention

Researchers partnered with the Government of Punjab to examine the impact of a performance pay scheme for tax collectors on tax revenue. Through a public lottery, they randomly assigned 482 tax collection units, called tax circles, in Punjab to implement one of the following three pay structures for tax collectors:

1. *Revenue Scheme*: tax circles in this group rewarded tax officials with bonus pay proportional to the additional revenue they collected above a predefined benchmark, which was determined based on historic levels of collection for each circle.
2. *Revenue Plus Scheme*: in this group, tax officials were either rewarded with bonus pay, or received pay deductions, for the accuracy of their tax assessment and for higher taxpayer satisfaction, measured through audits and surveys. This scheme was designed in order to address concerns that higher tax collection might come at the cost of lower taxpayer satisfaction and accuracy of tax assessments.
3. *Flexible Bonus Scheme*: in this group, tax officials were either rewarded with additional bonus pay, or received pay deductions, based on their relative performance as judged by a departmental “Performance Evaluation Committee” comprised of senior tax officials. This scheme allowed for more subjective assessments of performance rather than purely formulaic criteria.
4. *Comparison Group*: in this group, tax officials received their salaries under the status quo structure which was not tied to performance, and served as the comparison group.

To measure the impact of these schemes, researchers followed up two years later by looking at two data sources: circle-level administrative data to measure tax collection and property audits and taxpayer surveys to measure the accuracy of tax assessments, customer satisfaction, and corruption.

## Results and Policy Lessons

Overall, the performance pay schemes led to significant increases in tax revenue. Over two years, tax circles that implemented any kind of performance pay scheme experienced a 13 percentage point higher growth rate in tax revenues, compared to an average of 28 percent growth in the comparison group – a 46 percent increase in growth rates. Moreover, the

performance pay schemes did not impact taxpayer satisfaction or the accuracy of tax assessment.

Results suggested that clearer, predictable, and formula-based performance pay schemes may be more effective than subjective assessment methods. The Revenue scheme led to the largest increase in tax revenue (64 percent higher growth rate), while the Flexible Bonus scheme had the least impact on tax revenue. Compared to these schemes, the Revenue Plus scheme, which explicitly incentivized tax assessment accuracy and taxpayer satisfaction, improved these indicators, though by a small amount.

The increase in tax revenue in tax circles with performance-pay schemes came from a small number of both newly reported and reassessed properties that paid an average of PKR 1,884 (approximately US\$21.85) more than non-reassessed properties. In addition, taxpayers in these circles whose taxes were not changed reported that the going rate for side payments to tax staff had increased compared to the comparison group; for the small number of reassessed properties, the rate of side payments paid did not increase. These results suggest that the introduction of performance pay schemes increased collectors' bargaining power over taxpayers.

Finally, the study found the performance pay scheme to be a cost-effective program for improving tax collection; the increase in tax revenue offset the costs of providing incentives across all schemes.

## Sources

[1] Gordon, Roger, and Wei Li. "Tax Structures In Developing Countries: Many Puzzles and a Possible Explanation." *Journal of Public Economics* 93, no. 7 (2009): 855-866.

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