

## STRENGTHENING STATE CAPABILITIES

Offering higher wages for public service positions in Mexico attracted smarter, more experienced applicants with a greater motivation for public service.

Featuring an evaluation by Ernesto Dal Bó, Frederico Finan, and Martín A. Rossi

**M**any low- and middle-income countries struggle to attract and retain high-performing, dedicated public servants. A well-functioning and competent civil service is critical to the effective delivery of public goods and services, such as providing basic infrastructure or health care, and protecting public safety. However, many governments face issues of absenteeism, lack of accountability, and corruption among staff. An important policy issue is to better understand how governments can attract qualified candidates to the public sector, what qualities are required for an effective civil servant, and how to optimally set their wages. Additionally, how can governments attract talented individuals to work in difficult locations?



IMAGE COURTESY STOCKVAULT

To help answer these questions, researchers Ernesto Dal Bó (UC Berkeley), J-PAL affiliate Frederico Finan (UC Berkeley), and Martín A. Rossi (Universidad de San Andrés), evaluated a program that the Mexican government rolled out in 2011 called the Regional Development Program (RDP). This program included a randomized evaluation to test the effect of offering different wages on public sector recruitment.

**Higher wages attracted higher-quality applicants.** In the recruitment areas that offered higher wages, the average applicant had a higher IQ score, better personality traits, more professional experience, and higher previous earnings than in places that offered lower wages.

**Higher wages did not adversely affect public service motivation in the applicant pool.** On average, applicants recruited under the higher wage offer exhibited a stronger proclivity to public sector work, found policymaking more attractive, and demonstrated more compassion and a stronger belief in social justice than those offered lower wages.

**Higher wages helped the government fill more vacancies.** This study provides the first experimental evidence on labor market competitiveness and found that financial incentives helped government recruitment in the context of a not-fully-competitive labor market.

**Higher wages helped the government fill vacancies in more challenging locations.** While distance, drug-related violence, and a lower level of human development dampened the ability to fill vacancies in certain areas, offering higher wages helped mitigate this recruitment challenge.

# EVALUATION

In 2011, the Mexican government established the Regional Development Program (RDP), which was designed to increase the presence and effectiveness of the federal government in some of the most marginalized and violence-affected areas of the country, where local government had proven ineffective. The municipalities included in the RDP spread across ten different regions of the country and were characterized by very low levels of socioeconomic development relative to the rest of Mexico. Income per capita was almost half that of other municipalities and infant mortality was 50 percent higher. Drug-related violence was also more prominent in these areas than in the other parts of the country.

Between June and August 2011, the RDP held a recruitment drive to hire 350 community development agents. These agents were charged with identifying areas for improvement in public goods and service delivery and working with local authorities to remedy any deficiencies. To attract a younger, more educated applicant pool, the RDP distributed job announcements to 113 community colleges in 106 locations, referred to as “recruitment sites,” across the ten program regions.



IMAGES COURTESY MORGUEFILE

In the first stage of the evaluation, the program randomly assigned wage offers to measure the impact of financial incentives on applicant quality. Sixty-five of the 106 recruitment sites were randomly selected to advertise a monthly wage of 5,000 Mexican pesos (approximately us\$500 at the time) and the remaining 41 recruitment sites announced a monthly wage of 3,750 pesos (approximately us\$375). Both of these wages represented a relatively high income within the program regions at the time of the study. In total, 2,254 individuals applied for the 350 agent positions. Applicants reported an average monthly wage of 4,276 pesos for their last occupation, which was well in line with the wages being offered for the RDP agent positions.

To assess their qualifications, all applicants were administered a three-hour exam designed to measure three broad categories of personal characteristics: quality, personality, and inclination toward public service employment. Indicators included a widely used IQ test, conscientiousness and emotional stability, and commitment to policymaking, social justice, civic duty, and compassion.

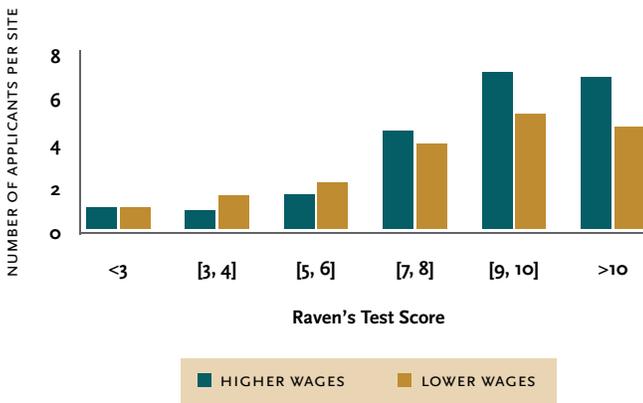
In the second stage, the remaining 1,875 applicants deemed eligible by scoring above an IQ threshold were assigned to one of four “wage-IQ” groups. Each of the 350 vacancies was assigned to a municipality and then randomly assigned to one of these four wage-IQ groups. Eligible applicants were then randomly selected to receive a job offer for each municipal vacancy conditional on their wage-IQ group and region of residence. This allowed researchers to evaluate the impact of municipal characteristics, such as distance from home, level of drug-related violence, and the community’s health and education profile on the acceptance of job offers.

# RESULTS

## Higher wages attracted higher-quality applicants.

Applicants from the high-wage recruitment sites exhibited higher cognitive aptitude as measured by the IQ test, scoring 0.19 standard deviations higher than the comparison group from low-wage recruitment sites (Figure 1). The high-wage sites also attracted applicants who were more likely to be currently employed, to have had work experience, and to have been previously employed in a professional position. For example, applicants from high-wage sites earned, on average, 22 percent (820 pesos) more in their previous job than applicants from low-wage sites, suggesting that the higher wage offer attracted applicants with better outside opportunities.

**FIGURE 1: HIGHER WAGES ATTRACTED SMARTER APPLICANTS**



## Higher wages attracted applicants with a better personality profile.

The high wage offer attracted applicants who were, on average, significantly more conscientious and emotionally stable. Overall, applicants from high-wage recruitment sites scored .09 standard deviations higher on the personality index than applicants offered the lower wage.

## Higher wages attracted applicants with greater motivation for public service.

An important policy question is whether offering higher wages for government jobs comes at the expense of attracting applicants who are less motivated about public service. This study found that applicants who received the high wage offer actually scored .09 standard deviations higher on a “public service motivation” index than those who received the low wage offer. They were more likely to find policymaking attractive, demonstrated more compassion, and had a stronger belief in social justice. This finding suggests that the traits associated with public service

motivation may be similar to those valued by the market and that offering higher wages will not shift the profile of the applicant pool in a direction away from public service motivation.

## Higher wages increased the likelihood that applicants accepted a job offer.

The study found that higher wages helped boost the job offer acceptance rate by 15.1 percentage points (or 35.2 percent) on a base of 42.9 percent for the low-wage offer group.

## Higher wages helped the government fill vacancies in more challenging locations.

Researchers found that poor job attributes, such as distance from home, high rates of violence, and low levels of human development have a strongly negative impact on acceptance of job offers for those offered a low wage. For example, while an additional ten kilometer distance to work reduced the acceptance rate by 2.7 percentage points among those offered a low wage, the extra distance had virtually no effect on the acceptance rate for those offered a high wage (Figure 2). Similarly, while shifting a job from the municipality with the highest level of human development to the lowest reduced acceptance by 50 percentage points, the community’s level of human development had no impact on the acceptance rate among the high-wage group. Higher wages also helped bridge the recruitment gap in areas of high drug-related violence. These findings indicate that higher wages can substantially help place public service workers in challenging locations.

**FIGURE 2: HIGHER WAGES INCREASED ACCEPTANCE RATES FOR JOB OFFERS FAR FROM HOME**



# POLICY LESSONS

**Wages can be a powerful tool for governments to attract more talented, conscientious applicants to public service.** This study has demonstrated that offering higher wages for government jobs can dramatically increase the quality of the applicant pool, attracting individuals who have a commitment to public service as well as the competencies valued by the market and required for an efficient bureaucracy.

**There is no evidence that offering higher wages shifts the applicant profile away from those motivated to public service in favor of those who prioritize financial gain.** For governments with a limited ability to screen applicants, higher wages can be particularly useful by helping to improve the average quality of the applicant pool.

**Offering higher wages may also help governments fill more vacancies.** Offering a higher wage may help governments compete for and recruit higher-quality individuals who have more numerous and better outside opportunities, particularly in labor markets that are not fully competitive.

**Higher wages can significantly improve acceptance rates for jobs in difficult locations.** Other quality-of-life issues beyond wages almost certainly factor into an individual's decision on whether to accept a job offer. This study demonstrates that the offer of a higher wage may dramatically increase acceptance rates for jobs posted in challenging environments that may be extremely poor, conflict-affected, or remote and lacking in amenities. Correspondingly, investments made to improve locations' overall conditions and quality of life could help governments save money on wages.

This study provides the first experimental evidence on the role of financial incentives on applicant quality and the ability to fill vacancies, generally and in more challenging environments. The study did not examine whether applicants who appear more capable will actually perform better once hired. Many other factors impact job performance, including institutional strength, accountability systems, and ongoing incentive structures. A promising area of future research would investigate the effect of higher wages on job performance. J-PAL affiliates Asim Khwaja (Harvard University) and Benjamin Olken (MIT), as well as Adnan Qadir Khan (IGC/LSE) have recently evaluated the impact of financial incentives for tax collectors in Pakistan on performance.<sup>1</sup>

**Featured Evaluation:** Dal Bó, Ernesto, Frederico Finan, and Martín A. Rossi. 2013. "Strengthening State Capabilities: The Role of Financial Incentives in the Call to Public Service." *Quarterly Journal of Economics* 128 (3): 1169-1218.

**Briefcase Author:** Thomas Chupein **Editor:** Claire Walsh **Design:** Blu Nordgren

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<sup>1</sup>"Property Tax Experiment in Punjab, Pakistan: Testing the Role of Wages, Incentives, and Audit on Tax Inspectors' Behavior". J-PAL Evaluation Summary. <http://www.povertyactionlab.org/evaluation/property-tax-experiment-punjab-pakistan-testing-role-wages-incentives-and-audit-tax-inspe>



IMAGE COURTESY MORGUEFILE

**ABOUT J-PAL** The Abdul Latif Jameel Poverty Action Lab (J-PAL) is a network of affiliated professors around the world who are united by their use of randomized evaluations to answer questions critical to poverty alleviation. J-PAL's mission is to reduce poverty by ensuring that policy is based on scientific evidence.

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