Civil service reform:
A summary of IGC research

Highlights of the IGC's research over the past 10 years

Governments are the main provider of services such as health, education, infrastructure, and property rights in most developing countries. Improving productivity and performance of the public sector is therefore an important in supporting effective service delivery and promoting optimal conditions for sustainable growth. The International Growth Centre's (IGC's) research has explored several aspects of public sector reform to help governments address issues, including how to select and recruit the right individuals for public sector jobs, and how to motivate them to perform well in their posts.

IGC work in this area has emphasised the important potential role for financial and non-financial incentives in improving public sector performance. Offering incentives can potentially help attract stronger job candidates and motivate better job performance. In some cases, however, incentives can backfire. Our research has found that incentives can help attract better job candidates and motivate better performance in the public sector, but they need to be carefully tested and implemented to avoid negative unintended outcomes.

IGC works closely with in-country policymakers to generate understanding on the drivers of high-performing public sector organisations and apply these insights toward policy reforms. Our government partners include ministries of finance, ministries of civil service and administrative reform, revenue authorities, line ministries, and other government bodies. IGC's work in countries including Ghana, Pakistan, and Zambia, has generated important new insights into the relationship between how bureaucrats are managed and the effectiveness of the services they deliver. It has also explored the potential for technology solutions to improve the monitoring and performance of the public sector.

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1. Civil service recruitment

Attracting and recruiting a civil service workforce with the right skills, at the right time in their careers, is the first logical step towards ensuring a functioning civil service with the ability to deliver key public services effectively and efficiently. However there remain key frictions and challenges to identifying, attracting and recruiting a fully functioning civil service workforce. There exist many recruitment strategy potentials for public sector entities: The following section discusses IGC projects that look into the efficacy and impact of certain recruitment strategies.

■ **Job allocation and civil servant incentives for public service delivery** (**Shan Aman Rana, 2015**). Research in Punjab looked into the extent and effect of network-based job allocation, investigating the incentive structure of public service employees to understand whether discretionary promotions can be meritocratic. The research focused on the Pakistan Administrative Services (PAS) in Punjab, and found that when senior bureaucrats have discretion to promote juniors, they do so meritocratically. The findings demonstrate that seniors use privately available information, such as tax collection rankings among juniors (versus publicly available information such as civil servant rankings), to decipher hidden gems among the bottom of the performance distribution.

The results indicate value in allowing discretionary promotions and thus have wider implications for how we think about the use of subjective judgement in organisations. As the promotion power of seniors increase, they are more likely to pull high merit junior bureaucrats into their own team and promote them, suggesting that the self-interest and incentives of the person exercising discretion should be central to decisions to implement such promotion mechanisms.

- **[Recruiting and motivating health workers in Zambia](#)** (**Nava Ashraf, Oriana Bandiera, Scott S. Lee**). A randomised experiment in Zambia focused on government recruitment of community health workers in rural areas. It tested whether offering incentives – in this case, promotion prospects to better paid positions within the Ministry of Health – would help attract more talented individuals. The study found career incentives attracted better staff that were no less pro-social. Workers recruited via career incentive ads also proved to be more effective at delivering health services – they conducted more household visits and community mobilisation meetings, leading to improved health outcomes. After 18 months of deployment, Community Health Assistants (CHAs) recruited with career incentives conducted 29% more household visits (their primary job task), organised twice as many community meetings, and saw an equal number of patients at the health facility, with no differences in retention.

  The project has influenced government recruitment and compensation policies and a scale-up project is in progress. In October 2018, the World Health Organisation (WHO) recommended, as part of a major guideline document on managing Community Health Worker (CHW) programmes, that "a career ladder should be offered to practising CHWs, recognising that further education and career development are linked to selection criteria, duration and contents of pre-service education, competency-based certification, duration of service, and performance review." This recommendation, one of 15 in the WHO guideline document, is based entirely on the findings from this study.

- The research team is continuing to collaborate with the government on a follow-up project measuring the impact of a recent largescale nationwide reform of civil service salaries. A **[full lecture on 'Motivating Public Sector Workers'](#)** was delivered by IGC Lead Academic for Zambia and report co-author, Nava Ashraf.

2. Civil service motivation

Beyond recruiting an effective civil service workforce, another key challenge often faced by governments is worker motivation – how, and through what means, can public sector workers be motivated to provide effective and efficient services that contribute productively to a functioning society. There are several integral government functions, such as tax collection, education and health provision, and law and order, which depend on the positive motivation and transparency of civil servants. The following two sections provide an overview of IGC projects that have looked into the effect of both financial and non-financial incentives on civil servant motivation and performance.

Financial incentives

- **[Evaluating the impact of increasing police salaries in Ghana](#)** (**Jeremy Foltz, 2016**). An IGC study on police reforms in Ghana found that raising salaries alone is unlikely to be an effective strategy to improve performance and reduce corruption – in fact, police officers actually demanded larger bribes with increased salaries, although demanded the bribes less frequently

([**Foltz and Opoku-Agyemang, 2015**](#)). Overall, the amounts of bribes paid on roads increased by 23% due to salary increases. The researchers suggested that police officers may have had a higher sense of their own worth after the salary increase, or that supervisors or families asked for more money from the officers after learning of the salary increase. The results of the study add to the burgeoning theoretical and empirical literature on corruption in developing countries and potentially point to policy levers that can reduce corruption. The researchers are currently developing new thinking on the correct policy implications from the findings.

■ [**Performance incentives for tax officials**](#) (**Asim Khwaja, Benjamin Olkin, Adnan Khan, 2014**). A series of randomised experiments conducted by tax authorities in Punjab, Pakistan, in collaboration with IGC researchers from 2010 – 2014, found that offering monetary (performance pay) and non-monetary incentives (better job postings) for property tax collectors to improve their job performance helped increase tax revenues. In randomly-selected areas where tax collectors were offered large monetary incentives, revenues collected grew faster by 9 - 13 percentage points over the two-year study, with these gains exceeding the cost of the incentives.

Meanwhile, offering tax collectors a desirable non-monetary incentive – a merit-based opportunity to be transferred to a better location – led to increases of 44 - 80% in revenue growth over two years, at no extra cost to the government. The research was conducted in close collaboration with government departments and high-level policymakers. It also involved the embedding of researchers in local institutions, for example, in the property tax department of Punjab, Pakistan, and led to major policy reform and widespread coverage in the [**media**](#).

Non-financial incentives

■ [**Unlocking constraints to civil service productivity in Ethiopia**](#) (**Ravi Somani, Stefan Dercon, Daniel Rogger, 2018**). Requested directly by the Ethiopian Ministry of Public Service and Human Resource Development (MPSHRD), a comprehensive survey of civil servants at the federal level, and across the nine regions and city administration of Addis Ababa and Dire Dawa, was conducted to assess the link between incentives and productivity in the country's public sector. The results identified a lack of motivation and low level of prestige as key challenges in the civil service, particularly at the federal level. Decentralisation is associated with agents having better information, however, only if appropriate incentivisation for information acquisition is in place.

Research recommendations identified competitive entry exams, allocating greater funds for key operational tasks and systems, and focusing leadership training on motivating staff as key strategies to address these challenges. Recommendations have begun to inform specific policy change, including amendment of the Civil Service Proclamation (1064/2018) to include a competency-based Human Resources (HR) management system, and adapting the manuals of core reform tools, including the Balanced Scorecard and Citizens Charter.

- **Understanding the impact of payroll reform on worker performance** (**Nava Ashraf, Oriana Bandiera, Torsten F. Walter, 2018**). Working closely with the Zambian Cabinet Office's Public Service Management Division, an IGC project has been directly targeting challenges of data capture, cleaning, and management to support understanding and reform of civil service performance. As part of this body of work, a data collection tool for staff returns was developed in collaboration with the Ministry of Education's (MoE) HR department and the Zambia Education Sector Support and Technical Assistance (ZESSTA) group.

  The tool was developed after reviewing data from previous staff returns and noting that they could not readily be used to evaluate payroll mismatch and other key HR issues. The tool is currently being used to collect staff location data nationwide and the resulting data set shall provide a complete picture of the extent of payroll mismatch for the first time. Based on pilot data from one district, the Principal Investigators (PIs) have already undertaken some analysis as to the roots of payroll mismatch and potential remedies: This will be extended to the whole country once the data collection has been completed.

  To date, analysis of Education Information Management System (EMIS) and payroll data within the education system has revealed that, while there are substantially different teacher counts in the two datasets, pupil-teacher ratios indicated by both sources vary widely across schools. This finding motivated both global and **Zambia-specific research** on the allocation of teachers across schools and state capacity, which is currently being carried out as a separate IGC-funded project.

  Further research was commissioned as part of collaboration with the Zambian Ministry of Health (MoH), which merged all available national administrative data sets in the health sector in order to provide spatial mapping of the supply of health services at the micro-level (**Walter, Policy Brief, 2018**). The resulting database, including a spatial mapping, provides a powerful tool to assess the efficiency of the allocation resources and enable evidence-based policy making at the MoH (**Walter, Final Report, 2018**).

3. Civil service management practices

A key factor in the delivery of public services that contribute effectively and positively to a functioning society is ensuring efficiency and productivity through effective management. Not only is effective management linked to fostering appropriate worker motivation, it contributes directly to the ability of the public sector to utilise resources to maximum benefit and effect.

- **Understanding public sector management practices** (**Daniel Rogger, Orazio Attanasio, Imran Rasul**). A largescale in-depth study of civil service management practices in Nigeria was conducted in close partnership with the office of the Nigerian President. The project investigated the determinants of the success and failure of government projects and programmes in Nigeria, emphasising the potential benefits of bureaucratic autonomy. It used data on over 6,000 projects and programmes in the 2006 and 2007 government budgets, by civil servants from 100 organisations across Nigeria, at all

three tiers of government. The research found that granting bureaucrats more autonomy was associated with more effective bureaucracies (i.e., increased project quality and completion rates). It suggests that the use of key performance indicators (KPIs) and performance-based incentives may be counter-productive when 'good performance' is based on subjective assessments.

The report was adopted by the Head of Service, who commissioned it as a new pillar of civil service reform. The document is currently being processed by the Government for implementation of action points. Close collaboration with the Government of Nigeria proved fundamental to the collection of extensive civil service surveys, which constituted the largest consultation with Nigeria's public officials ever undertaken. The findings will help Nigerian policymakers design more effective mechanisms for public service delivery.

The same pattern was found in a similar study of Ghana's civil service, where the same researchers are currently conducting follow-up work with the government to help design, evaluate, and implement a training programme based on the research recommendations to improve the productivity of civil service employees (**Rasul et al., 2017**). As a result of the research, the curriculum at the Ghana Civil Service training centre has been successfully amended and those who attended a training workshop as part of the research project are now training other employees in the civil service.

■ **Improving procurement in Pakistan** (**Oriana Bandiera, Andrea Prat, Michael Best, 2018**). IGC researchers working with procurement authorities in the Punjab province of Pakistan have worked on a number of reforms to improve procurement outcomes and efficiency. Their project aims to ensure 'better value for money' by incentivising procuring officers in Pakistan and making procurement procedures more efficient. In country contexts where low-resources are combined with high-spending needs, as is the case in Pakistan, it is crucial to ensure that the available resources are spent in a cost-effective manner.

The first step was to develop metrics and methods for measuring procurement outcomes through an online system. The resultant Punjab Online Procurement System (POPS) – designed in collaboration with the Punjab Information Technology Board (PITB) and the Punjab Procurement Regulatory Authority (PPRA) – was developed and deployed to automate the process of procurement in Punjab and collect detailed procurement data from five administrative departments in over 1,500 public bodies (or 'cost centres'). This detailed purchasing data enables a wide range of analyses to inform policy-making and budgetary decisions.

The project was presented at a high-level meeting with the Chief Minister (CM) in March 2016. Subsequently, a task force was set up to support reform of the Punjab Government procurement processes under the direct supervision of CM Punjab. During this discussion, the Finance Ministry also asked the project team to share its learnings from this project with the Finance roadmap team, in order to facilitate reforms for a Finance Department in the Secretariat.

4. Utilising low-cost technology to monitor and improve performance

Governments across the world operate within resource-limited settings, making low-cost technological solutions an attractive and potentially fruitful policy avenue. Whilst technology can often present powerful solutions, it should not be seen as a panacea – technological interventions should be robustly trialled and evaluated for their efficacy and effects before being fully adopted. In particular, IGC research has studied the utility of mobile phones in providing low-cost, expansive, and dynamic solutions to specific issues of public service performance monitoring and improvement.

■ **Mobile monitoring of teachers in Uganda** (**Andrew Zeitlin, Ibrahim Kasirye, Clare Leaver, Pieter Serneels and Jacobus Cilliers, 2014**). Teacher absenteeism remains a serious challenge to the quality of primary education in Uganda, with estimated rates of absence as high as 27% (Chaudhury et al., 2006). Evidence from other countries suggests that a monitoring scheme, combined with bonus payments, could reduce absenteeism and improve education performance. However, it is unclear what form this scheme should take. An IGC study explored optimal strategies for designing mobile monitoring systems, at the interest of the Ministry of Education and Sports (MoES), and found that mobile monitoring of teachers via an SMS platform helped to improve teacher attendance, but only when there were financial incentives at stake and the head teacher was responsible.

■ **Mobile monitoring of public sector employees in Paraguay** (**Laura Schechter, Ernest Dal Bó, Frederico Finan**). IGC work is testing the potential for a cell phone-based monitoring system to improve the performance of agricultural extension workers in Paraguay and exploring key policy questions on the value of decentralisation in government organisations. The study estimated the effects of the introduction of a new cell phone-based monitoring technology on the job performance of agricultural extension agents in rural Paraguay.

It found that extension agents with this technology felt more monitored and thus changed the way they worked. Furthermore, technology adoption encouraged more farmer visits without compromising visit quality or length. The research team worked in-house with policymakers from the Ministry of Agriculture and Livestock (MAG) and the Ministry of Planning (STP) to coordinate and cultivate the research.

The results of the project were presented extensively to senior policymakers within the two Ministries and in 2016, led the STP to mandate that all extension agents working within the Ministry use monitoring technology. Furthermore, the STP also advocated for the expanded use of monitoring technology throughout three additional institutions: The Ministry of Health (MSPBS), The Municipality of Asunción, and The National Institute of Land and Rural Development (INDERT). During 2017, the STP's Information Technology (IT) Department facilitated Global Positioning System (GPS)-capable monitoring technology to 700 health, agricultural, and childhood extension agents across these institutions.

- **Mobile payments for public servants in Afghanistan** (**Michael Callen, Tarek Ghani, Joshua Blumenstock**). One issue undermining state effectiveness in Afghanistan is frequent delays and shortfalls in government salaries. The consequence for public service is low morale, high turnover, waste and leakage, and a lack of accountability – all contributing to low-quality public services. Mobile-phone based technologies, and in particular mobile money, offer opportunities for new types of policy action, including the payment of government salaries.

  This project focuses on Afghanistan's transition to using mobile payments to pay government workers and explores the costs and benefits of the new system within Afghanistan's Ministry of Labour, Social Affairs, and Martyrs and Disabled (MoLSAMD). Results show that a switch to mobile-based payments is popular and effective amongst trialled employees, with a significant savings potential if fully scaled up. This study has now fed into a scale up of mobile salary payments (MSPs) in other ministries in the Afghan government, including the Ministry of Education.

5. Ongoing civil service reform research and engagement

Continuing the strong momentum of IGC research to date, we look for future research to delve further into issues of how recruitment strategies, performance incentives, and monitoring systems can be optimally designed and implemented to help build the administrative capacity of the public sector. More research is needed to understand how organisational structures can be reformed, how norms and culture are established, and how organisational policies can shape these processes in different countries.

We aim to focus on areas of public sector reform that have large and/or direct links to enabling the growth of firms, including strategies to improve revenue and investment agencies, as well as improving public services, such as education and health. The IGC synthesised key lessons for policymakers from recent research on civil service reform in its Growth Brief publication, **Rewarding bureaucrats: Can incentives improve public sector performance?**

Examples of ongoing projects include:

- **Understanding the effect of civil service reform episodes**

  Alongside understanding the causal effects of particular management practices or experimental interventions on civil service performance, it is important to understand how large-scale changes occur through discrete episodes of reform. Such reform episodes are understudied because they typically bundle multiple policy changes together, are system-wide with no clear counterfactual, and only impact on measurable service delivery in a diffuse, indirect fashion.

  Ongoing IGC research is seeking to document and explain the implementation record of performance-oriented civil service reforms in

Africa, using three IGC countries as case studies: Ghana, Kenya, and Zambia (**Williams et al., 2018**). It will document the episodes of such reforms in the past two decades, collect primary and secondary data on their characteristics and implementation outcomes, and seek to explain why some reforms are implemented and change the way civil servants work, others are abandoned prior to completion, and (perhaps most commonly) other reforms are implemented on paper but not in practice. This comparative research will help provide evidence about why governments' efforts to implement major reforms so often fall short of their objectives, shedding light on how future civil service reform efforts might be better approached, designed, and delivered.

6. Looking forward

Research on civil service reform is gaining traction within the economic research community. Given the clear importance and application of this line of study, the IGC will continue to commission targeted research that will build on the strong body of knowledge that has already been created, as well as exploring new areas for knowledge creation and actionable innovation.

Research, and subsequent policy recommendation, must be fit-for-purpose, taking into close consideration contextual nuances that can underpin both individual behaviour and institutional structure. IGC research has shown that producing high-quality and actionable insights concerning civil service reform necessitates close partnership with government and government departments, whether they be centralised or localised.

A systems approach to civil service reform has the potential to bear significant fruit. Practices associated with data – from structures and processes that underlay data capture to its storage and use – can often play a core role in effective reform, however, to be most effective they should be well matched with individual behavioural change strategies as well as broader institutional structural reform. If informed and appropriate, the use of new technology can rapidly facilitate data capture, storage, and analysis for decision-making and adaptive management, as well as providing effective mechanisms for transparency and accountability.

Research into the use of low-cost yet powerful interventions looks poised to play a significant role in this space. This is demonstrated in IGC's work with the government of India. IGC researchers **Mahajan et al. (2018)** used a large-scale tax dataset and machine learning tools to identify potentially 'bogus' firms, which inspections should focus on. They estimated that this approach could recoup $30 million in potential additional revenue. There has also been work on e-governance and leakages - it would be interesting to see how this affects the role of civil servants.

Further, it is important to understand the broader context in and through which civil service reform is successfully implemented. Ongoing IGC research is intended to shed light on this and may provide broader lessons around what makes civil service reform effective. Finally, our next phase of research will explore the interaction between bureaucracies and politics, as one doesn't exist without the other.

The International Growth Centre (IGC) aims to promote sustainable growth in developing countries by providing demand-led policy advice based on frontier research. The IGC directs a global network of world-leading researchers and in-country teams in Africa and South Asia and works closely with partner governments to generate high quality research and policy advice on key growth challenges. Based at LSE and in partnership with the University of Oxford, the IGC is majority funded by the UK Department for International Development (DFID).

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