

New publications

Teacher incentives and performance

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As teacher quality is understood to be a key driver of educational performance, much attention has been devoted to analysing the incentives that motivate teachers to perform well. The effectiveness of various incentives may depend on whether teachers have an underlying predisposition to a particular set of 'self-interested' or 'altruistic' incentives. In a self-interested model, teachers are expected to respond to a set of hard extrinsic incentives such as financial remuneration from performance-related pay. The 'ideal-type' contract corresponding to this model is one in which teachers are paid according to judgements about their performance and subject to relatively easy dismissal. An alternative model of worker behaviour places 'intrinsic' considerations such as altruism, reputation and the value of the work and vocation as important sources of teacher motivation. This may include 'soft extrinsic' considerations such as social responsibility, job security, and other non-financial rewards such as teaching honours. The 'ideal-type' contract corresponding to this model is where teachers are paid a fixed salary according to criteria such as their experience and formal qualifications and where they hold greater security of tenure.

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A crucial issue for education policy is what kinds of contractual arrangements will ensure the highest quality of teaching for a given expenditure? In a new OPI working paper, Ros Levacic describes how the principal-agent theory offers a basis for assessing the extent to which different forms of contract are likely to motivate teacher performance.

"OPI's mission is to contribute to public sector performance by providing international comparative evidence about what works best in different settings and why."



The paper explores several practical difficulties associated with the design of teacher contracts including the heterogeneity of intrinsic motivations between teachers in the workforce, the extent to which teaching outcomes can be attributed to teacher effort and the complexities induced by multiple teaching objectives. For example, it can be difficult to determine how much teacher effort contributes to pupil attainment in relation to other factors such as socioeconomic deprivation. The existence of multiple 'principals' compounds the difficulty of rewarding good performance as teachers are typically expected to satisfy a varied set of interests including parents, pupils, professional associations, head teachers and educational authorities. In addition to producing good pupil test performance, teachers are often expected to assist their students with less tangible outcomes such as the attainment of certain values, behaviours and attitudes. In the process of reconciling these conflicting interests, teachers may respond by 'cream-skimming' higher ability students, 'gaming' or 'teaching to the test' at the expense of delivering other equally important outcomes.

The paper concludes by surveying international evidence on performance-related pay and finds that in line with a prediction of the principal-agent theory, the effectiveness of PRP schemes depends on the design of the contract and on the cultural and institutional context in which it is managed. The balance of acquisitive and altruistic motives, the degree to which information is asymmetric and the existence of multiple objectives are important considerations in the design of teacher contracts.

The paper is available [here](#).

A political economy of education in India: The case of Uttar Pradesh

Geeta Kingdon, Chair of Education Economics and International Development,
Institute of Education and Mohammed Muzzamil
Professor of Economics, Lucknow University, India

In the context of a principal-agent theory, teachers might be considered to be 'agents' of the educational authority, answerable to the legislature who is the 'principal'. What happens when teachers are given guaranteed representation in the legislature, in effect acting as both 'principal' and 'agent'? In a new OPI working paper, Geeta Kingdon and Mohammed Muzzamil describe the case of the Indian state of Uttar Pradesh, where teachers have become legislators in the political system and where, as a result, teacher associations and unions have been successful in pursuing their demands through strikes and other forms of industrial action.



This has resulted in the improvement of their pay, job security and service benefits, while less progress has been made on broader improvements in schooling such as the promotion of education in general or improving equity and efficiency in the system. The analysis provides interesting insight into what can happen when teachers enjoy considerable influence over their own contractual arrangements and security of tenure.

The paper is available [here](#).

Projects update

My working life at UCLH: motivations and the NHS reforms

The NHS has introduced a series of reforms intended to improve the efficiency and the quality of health services by strengthening the formal institutions regulating the behaviour of health service managers and clinicians. In the case of hospital doctors, these include a closer scrutiny of activities by clinical audits, increased attention to results, the introduction of performance targets, the introduction of competition and a better specified consultants' contract. To date, there has been little empirical evidence about the effect of these reforms at the provider level.

This project is documenting the way the NHS reforms and other organisational changes were implemented at a large London teaching hospital and analysing their effect on worker motivation and labour productivity.

By developing estimates of 'clinical effort' (hours worked in excess of contract) and relating these to management and organisational changes, controlling for individual clinician characteristics, the study intends to investigate how sensitive labour productivity has been to the NHS reforms. NHS staff surveys have indicated that a significant number of survey respondents across the NHS and within UCLH work in excess of rostered hours. At UCLH in 2007, 41% of respondents reported that they worked 1-5 hours in excess of contracted hours per week and 14% of respondents worked 6-10 hours in excess of contracted hours. Although a well documented rationale for working in excess of contracted hours is 'to improve the quality of care,' the motivations for clinical effort vary. The study is attempting to tease out the relative effects of managerial and financial incentives on clinical productivity in relation to the 'soft' incentives generated by 'public sector motivation.' The overall objective is to contribute to the broader debate on cost-effective management regimes in health: 'trust with vigilance' or 'high powered' financial incentives and managerial controls.





A key preliminary finding is that there are significant variations in activity patterns among specialities within the hospital despite having been subject to similar organisational changes. By reviewing measures from the Hospital Episode Statistics on Finished Consultant Episodes, FCE per consultant, Daycase-FCE ratio, Mean Lengths of Stay and Waiting times, a hypothesis to be tested is that the performance of clinicians is dependent on the quality of leadership and management and the level of organisational citizenship within a team as well as the innate characteristics of different kinds of clinicians. Primary data obtained from clinicians in different specialities are expected to provide interesting insights into which types of incentives matter most and how the 'high-powered' incentives introduced by the NHS reforms interact with non-financial considerations such as professionalism, altruism and team dynamics in generating clinical effort.

More information is available [here](#).

Innovation in the provision of public services

Innovations in the public sector have the potential to reduce costs, improve the quality of public services and increase their diversity.

Despite research interest in the New Public Management and a recent PUBLIN study of health sector innovations (www.step.no/publin/), innovations in the provision of public services are under-researched compared with private sector innovations.

As a result, important questions remain unanswered. Why do some countries introduce public sector innovations (Singapore in health financing) but many don't? What are the incentives that drive or deter public sector innovation? How and why do some countries choose to adopt or adapt innovations developed elsewhere?

Why and how do countries choose to adapt innovations?

The use of coupons (vouchers) to allow poor families to purchase health services has been espoused by international donor agencies for more than a decade but has barely been tested much less adopted in poorer countries. On the other hand, another innovation, voluntary community health insurance, is being taken up by new countries regularly when the evidence is that voluntary insurance only works in the very specific conditions of strong social solidarity and high inter-personal trust. Why else would someone pay money now in the hope they will receive free treatment in the future when they are sick? [Matt Jowett](#) and [Sachiko Ozawa](#) each offer some insight on this question.

OPI is working with the India Development Foundation (IDF) in Delhi and the China Executive Leadership Academy, Pudong (CELAP) in Shanghai to help fill this gap. Although, in principle, the methodologies used for investigating innovation rates, diffusion rates and rates of adoption and adaptation in the private sector are applicable to the study of public sector innovations, the application of standard methodologies to the analysis of public sector innovations face challenges largely related to problems in classification and measurement.



The comparison of similar programmes requires that public services, or types of innovation, or both, need to be classified into reasonably homogenous groups. The classification of public sector innovations is particularly problematic as they cover better organisational arrangements for delivering public services as well as the actual production of new or improved services. OPI's work with IDF is using data collected from innovative health sector projects to test alternative classifications. Its work with CELAP concentrates on the incentives required for innovation, its diffusion, adoption and adaptation.

Classifying public services

The literature offers a number of possible classifications. Of these one of the most recent was developed by a team working on the EU-funded PUBLIN project.

PUBLIN classification

- Changes in characteristics and design of services, products and production processes
- Service delivery innovations
- Administrative and organisational innovations
- Conceptual innovations (policy learning)
- System interaction innovations

IDF and OPI have been testing two systems for classifying innovation. The first classifies innovations based on the types of technology involved:

- Innovations in policies, rules and regulations (e.g. removal of public sector monopoly in health service delivery)
- Product or service innovations (e.g. introduction of HIV-AIDS treatment)
- Financial innovations (e.g. introduction of health insurance)
- Organisational innovations (e.g. introduction of autonomous organisations)
- Managerial innovations (e.g. introduction of service delivery targets and staff performance management)
- Technical innovations (e.g. introduction of new diagnostic tests or pharmaceuticals)

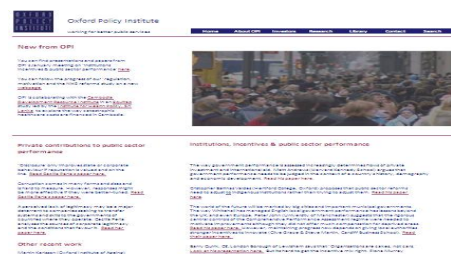
This provides a relatively straightforward way of classifying innovations and appears to be robust in the sense that most of the data compiled by IDF on health sector innovations can be classified in this way. However, its weakness is that it omits innovations designed to improve the consumption of public goods and services.

As a result, a second classification method is under test based on production and consumption functions which allow for demand-side innovations.

This classification is based on the notion that supply-side innovation results in a change in the use of one or more of the factors of production (capital, labour, technology and management) and that innovations designed to increase (or reduce) the consumption of public goods and services involves changes in one or more of the factors that influence consumption: consumer needs and preferences, prices or the consumer's budget constraint.

The initial evidence from the data compiled by IDF supports the common assumptions that public sector innovation rates are low, diffusion rates are slow, adoption rates are low and late, and adaption rates are very low and very late. Of course this omits some notable exceptions such as independent central banks which are not captured by the IDF dataset. The reasons for these patterns are the subject of further research. However, it might be postulated that low innovation and adoption rates can be explained by weak demand for public sector efficiency and equity improvements, risk aversion, and weak organisational and individual incentives to innovate. Slow diffusion rates can likely be explained by weak demand for public sector improvements, poorly developed academic-government and government-government networks. Low adaption rates may be the most worrying of all. Many useful innovations may be discarded because insufficient attention has been paid to adapting them to local conditions and circumstances. Reviewing even 'failed' innovations may be a source of ideas for adaptation.

Popular papers online



The most read papers on OPI's website during the past three months are:

- [Trust in Healthcare](#) Sachiko Ozawa
- [The economics of 'public sector motivation'](#) Martin Karlsson
- ['Public service motivation' and performance incentives](#) Jerrett Myers
- [Organisations are 'cakes' not cars: getting the public sector incentive mix right](#) Fiona Murray
- [Do we need a theory of government before we measure government effectiveness?](#) Matt Andrews

OPI welcomes papers that focus on the incentives and institutions that motivate public sector performance. Articles might highlight a current or emerging issue, develop a topic for further research, describe a piece of theory or offer some empirical evidence. The guidance notes are available [here](#).

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