

Delivering Public Services in the Developing World: Frontiers of Research

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Abstract: This essay presents a view of the frontiers of research on public service delivery in the developing world, based on a series of interviews with researchers and practitioners actively working in this field. It recognizes the lasting contribution of the theoretical framework laid down by the World Development Report 2004 that emphasized accountability, and the randomized evaluations that have taken place to test and develop this theory. Research on other questions, such as those relating to the analysis of politics and the structure and organization of government, is at an earlier stage, and is likely to need a more structural approach. There are many questions still to be answered in this field.

Introduction

Public expenditure in the developing world is often ineffective and inefficient. Projects and programs are implemented over long periods to a low quality, and subsequent welfare impacts are meagre. As World Bank (2004) observes, ‘too often, services fail poor people - in access, in quantity, in quality.’

Even when governments in the developing world are able to muster resources and direct these toward public goods provision, welfare impacts are not ensured. As World Bank (2008, 2) states:

‘There is a temptation to view the relationships between welfare outcomes and [public expenditure] simplistically: if more money is spent on basic services, welfare outcomes will improve. However, this view flies in the face of the empirical fact that there is a weak correlation between spending and outcomes.’

The ‘public service delivery’ research agenda aims to understand the sources of this discrep-

ancy. It analyzes the mechanisms required to effectively transform resources into public goods.

For many years, the economics profession focussed on corruption and the weak state of the private sector as the core constraints to the adequate provision of public goods.² More recently, an increasingly subtle approach has been taken to this research that investigates the broader institutional context of delivering public services in the developing world.

This essay aims to sketch the frontiers of that research agenda. It integrates messages from a series of interviews with researchers actively working in this field.³ A list of those interviewed can be found at the end of the essay, and includes a range of academics, development practitioners and World Bank researchers. It is not a literature review, but rather a collection of thoughts by leading experts in service delivery. A more thorough treatment of the existing literature is given in Rogger (2009).

Building a coherent theory

The ‘public service delivery chain’ is made up of a plethora of institutions and interactions.

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²Rose-Ackerman (1999) is a classic example of this literature. Svensson (2005) and Pande (2008) provide an update on more recent work in corruption.

³Most of the interviews took place face-to-face in December 2008 in either London or Washington.

From bargaining over public good allocations in Parliament to implementing public projects at the local level, each step in delivering public goods is a link in the public service delivery chain. The framework for understanding this chain laid out in the *World Development Report 2004: Making Services Work for Poor People* (henceforth WDR) has provided the foundation for much of the research undertaken since.

At its core is the notion that ‘successful services for poor people emerge from institutional relationships in which the actors are accountable to each other’ (World Bank, 2004, 46).⁴ In the WDR, accountability is defined as a relationship among actors that has five features: *delegation, finance, performance, information about performance* and *enforceability*. For example, a government may delegate primary healthcare to a private provider, provide finance, and then track performance, threatening a punishment if the contract is broken (information about performance and enforceability).

The relationships underlying this statement have typically been sorted into a ‘long route’ of accountability (working through the political process) and a ‘short route’ (the client-provider relationship). If a public service fails, a citizen-client can lobby her politicians for change, or if there is choice, merely choose a better provider. These ‘key relationships of power’ are displayed in the World Bank’s ‘accountability triangle’ (Figure 1).

The WDR describes how components of each route may break down and thus hinder service delivery.⁵ For example, politicians may not listen to their constituents, and there may be little choice in provider of public services. The WDR drew from existing evidence and the World Bank’s own experiences to provide suggestive evidence on what might make a difference. Much of the research since then has focussed on testing the hypotheses laid out in the report.

⁴A number of interviewees questioned the WDR’s emphasis on accountability (due to demand side failures, questions of feasibility and so on). This was not the dominant consensus, but it is important to keep in mind the potentially restrictive nature of the approach.

⁵Thus, it provides (testable) predictions as to the mechanisms that drive service delivery. For example, the model predicts that improvements in citizen information about politician behaviour should, conditional on the compact, improve the services delivered to the citizenry. Similarly, it predicts that consumer choice will unconditionally improve services delivered. For a critique of this model, see Rogger (2009).

⁶This impacts on our ability to define appropriate principal-agent problems and conceptualize efficiency.

Advancing theory through testing

More progress has been made on testing some aspects of the triangle than others. For example, client power is increasingly well understood. Simply providing public goods may not be sufficient to induce take-up, even when the client is given a choice of providers. Information certainly helps, but is not always decisive (see, for example, the work by Svensson (2005)). Agents respond to quality (although this relationship needs to be better understood).

Pay for performance works in many settings, but not in all. Mookherjee (1997) lays out the conditions under which pay for performance schemes are welfare improving (reducing). He finds that ‘institutional parameters’, such as the precise range of tools available for providing incentives, the extent of discretion available to bureaucrats and the relevant dimensions of bureaucratic performance, determine the effectiveness of a pay-for-performance scheme. This nicely summarizes the now large empirical literature on this subject. A typical example is Kingdon and Teal (2007), which finds private schools in India benefit from linking pay to performance, whilst public schools do not.

In terms of relationships to the state, understanding of the compact (the relationship between providers and the state) is far more developed than that of voice (the relationship between citizens and politicians). This is true throughout much of the higher echelons of government. Little is known about the objectives of public sector principals in general.⁶

Similarly, some sectors are better understood than others (education and health versus water and sanitation for example). In education, much is now understood about teacher incentives and school-based management (see the work by Muralidharan and Sundararaman (2008), who emphasize the role of improved incentive schemes for teachers over grants for student-level inputs and the addition of support teachers). The con-

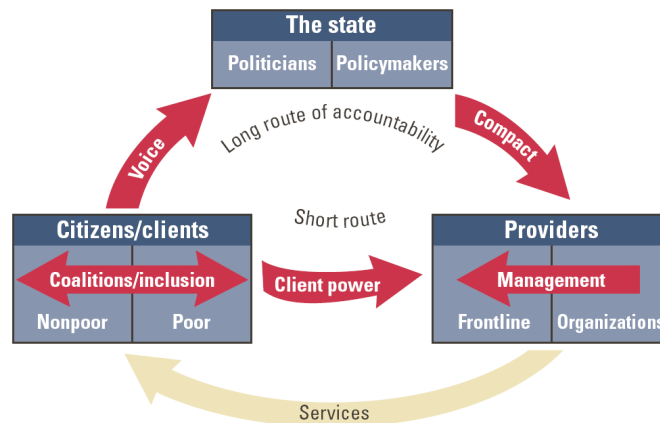


Figure 1: The 'Accountability Triangle' (figure 3.2, page 49 of WDR)

ditions under which public-private partnerships work in the social sectors are increasingly well defined (see, for example, the theoretical framework presented in Iossa and Martimort (2008)).⁷

The role of information has recently emerged as a key theme for research: how and where it impacts on the service delivery chain and in what ways it determines the success of an intervention.⁸ It seems that information can play a critical role in the uptake of public services. Many open questions remain. What is the optimal 'form' of information: lists of budgetary allocations, a 'citizen's report card' or a friend's recommendation? How should information be delivered: published in newspapers, pasted on community notice boards or announced at town hall meetings?

Back to the frontier

Much remains to be done. At a very basic level, no coherent set of indicators for service delivery

exists that would allow systematic tracking of service delivery across regions and countries. A number of initiatives are attempting to agree upon such a set of indicators. Progress is slowed however by the magnitude of the task, the ambiguous nature of many processes in the service delivery chain, and the lack of consensus as to what determines effective service delivery.

The area with the most unanswered questions is that of politics. How do elites bargain and share power? How do we align their incentives towards delivering services? How do prevailing political equilibria interact with other features of the service delivery chain?⁹ There is a lot of institutional detail that researchers suspect matters a lot, but little economic research that explores the topic.¹⁰ A number of interviewees argued that sustained change can only be driven from above, at the sectoral or national levels, and so such research is of critical importance.¹¹ An important contribution

⁷Iossa and Martimort (2008) argue for public-private partnerships when there is scope for innovation, the ability to verify market value, the ability to discipline and enforce private contractors and when demand is stable and forecastable.

⁸In other words, how does information interact with other elements of the service delivery chain?

⁹For example, if you initiate a pay for performance scheme, how does the prevailing political equilibrium impact on its effectiveness?

¹⁰There is much research on politics in the developing world, but outside of economics. See for example, ?. A number of economists have begun to bring the tools of economics to analyze politics. See for example the work by Persson and Tabellini (2000).

¹¹Reinforcing this, Daniel Kaufmann, in his farewell speech to the World Bank on December 9th 2008, argued that political corruption and state capture are amongst the most important issues in development, but have been neglected in research.

related to this point is Banerjee et al. (2008), which argues that bottom-up interventions explain only a small proportion of the variance in public good provision. Rather, they provide a number of examples in which top-down interventions have been central to the process of public good expansion.

The paucity of research into politics and more generally into the internal workings of government may be due to a lack of data, or inadequacies of that which exists.¹² Relatively clean measurements of outcomes can be taken at the local level, such as changes in mortality or participation rates, and these measures are well understood. In contrast, little progress has been made on developing a coherent set of robust and widely agreed-upon measures of institutional change. The development of such measures would be a valuable research agenda.

The lack of any common theoretical foundation may have also hindered research progress. The motivation of public servants and the internal workings of public institutions are little understood, so there is little theory to test. A number of researchers have begun to explore intrinsic motivation (see Besley and Ghatak (2008, 2005) for references). Others have started to explore non-economic motivations (such as in psychological and behavioural economics), but there is still much room for these to be applied to the internal workings of government and to development in general.¹³

Finally, the gaps may reflect the fact that the dominant evaluation tool that has prevailed in service delivery research, randomized evaluation, is much better equipped to analyze client power than politics. Overall, these gaps offer opportunities for researchers who can 'say something structural' about the mechanisms underlying service delivery equilibria.

¹²For example, in Public Expenditure Tracking Surveys.

¹³WDR authors had not considered such issues as central to service delivery, arguing that incentive problems will always occur at the margin.

¹⁴For a thorough discussion of the foundations of structural models, see Reiss and Wolak (2003).

¹⁵Although there are exceptions. Wantchekon (2003) experiments with political messages in political campaigns in Benin by randomising across parties and candidates.

¹⁶In other words, what is the external validity of a particular study, not because the motivations of actors are not the same, but because the institutional settings are different in important ways?

Saying something structural

Much of the work to date has used experiments but shied away from structural analysis: the development of underlying economic theory that coherently relates endogenous and explanatory variables that, combined with explicit statistical assumptions, provides a model capable of rationalizing all possible observable outcomes.¹⁴ The randomization literature provides many important insights. However, structural modelling allows us to better understand the mechanisms behind a particular finding. Moreover, randomization is infeasible in many settings important to service delivery: democracy, politics, ministry structure, and so on.¹⁵ Structural approaches will be of core importance in analyzing these institutions.

Such a structural approach strikes at the heart of the endogeneity that characterizes service delivery outcomes. Since each element of the service delivery chain is part of a larger system (or triangle) of service delivery, it is at its core endogenous. Trying to isolate elements of this system is likely to be best done by structural approaches which will provide a better understanding of the interactions behind relationships. Whilst experiments would continue to play an important role in research into service delivery, the frontier challenge is in combining theory and empirics coherently.

Of course, a structural approach will not be useful if it does not explicitly test between competing explanations (it must identify something). A number of interviewees stressed the need to model the context of interventions: how do different systems perform in different contexts?¹⁶ How does a microfinance scheme function when core public infrastructure is inadequate? How successful is a healthcare intervention in a region known for corruption? Can a benevolent state governor succeed if the national polity is rotten?

Experiments may be an important complement to structural work in the correct settings.

Some parameters may yield to identification through experimental variation, whilst others may require structural assumptions. Combining the two is likely to be a powerful research mechanism. Duflo et al. (2008), for example, combine a randomized experiment and a structural model to test whether monitoring and financial incentives can reduce teacher absence and increase learning. To separate the effects of the monitoring and the financial incentives, they estimate a structural dynamic labour supply model that allows for heterogeneity in preferences and auto-correlation of external shocks (and find the teacher responded to the financial but not the monitoring incentives).

The weakness of structural approaches is their heavy data requirements. Interviewees argued that simple extensions to ongoing evaluations, adding heterogeneity in providers for example, will provide the first important steps. Where available, the researcher can utilize existing within-country institutional variation. There continues to be scope to investigate household, facility and exit surveys.¹⁷

Another track entirely

A more fundamental query was the extent to which centralized agencies (be they the World Bank or academic institutions) could produce the required experimental variation required by this research. If context really matters, experiments would have to be performed worldwide, and by agents at many points in the service delivery chain. This, it was argued, could only be achieved by empowering grass-roots agents such as local non-governmental organizations to experiment themselves. The role of the more centralized agencies would then be to learn from this wealth of experience and spread best practice.¹⁸

There are hints of this from a number of ‘randomistas’ (the name given to economists committed to reduced-form randomized evaluation).¹⁹ By encouraging independent organizations to take up randomized evaluation, they

hope to create an environment in which such a methodology flourishes without central control.

Conclusion

This essay has presented the main messages from a series of interviews with researchers active in the field of public service delivery. The research agenda has shifted from a focus on private sector weaknesses and corruption to a broader analysis of the economic effects of incentives, institutions and information. Since 2004, many authors have founded their work in a theoretical framework in which accountability plays the key role. Progress has been made in understanding how elements of the accountability triangle can fail, and how we might correct these failures.

There are many questions still to be answered in this field. There continues to be much to understand in how politics and more broadly ‘the internal workings of government’ impact on service delivery outcomes. Since randomization is infeasible in many of these settings, a structural approach is likely to be the most productive framework for analysis. However, where randomization and structural modelling can be combined, we may be better placed to understand the mechanisms underlying public service delivery.

Interviewees

- Maria Amelina, Senior Social Development Assistant, World Bank.
- Tessa Bold, Junior Research Fellow, University of Oxford.
- Stephen Commins, Lecturer of Urban Planning, University of California, Los Angeles.
- Damien De Walque, Economist, World Bank.
- Shantayanan Devarajan, Chief Economist (Africa), World Bank, and Editor, World Development Report 2004.
- Deon Filmer, Lead Economist, World Bank.

¹⁷Examples of those discussed were the Demographic and Health surveys, and the Public Expenditure Tracking surveys.

¹⁸A related opinion is that information about what works and what does not in service delivery will come from practical action rather than academic evaluations.

¹⁹See, for example, section 3.3.3 of Duflo and Kremer (2004).

- Ariel Fiszbein, Advisor to the Senior Vice-President, World Bank.
- Maitreesh Ghatak, Professor of Economics, London School of Economics.
- Markus Goldstein, Senior Economist, World Bank.
- Mattias Lundberg, Senior Economist, World Bank.
- Natasha Mesko, Service Delivery Adviser, UK Department for International Development.
- Marc Maxson, Manager of Performance Analytics, Globalgiving.
- Anne Mills, Professor of Health Economics and Policy, London School of Hygiene and Tropical Medicine.
- Halsey Rogers, Senior Economist, World Bank.
- Deepali Tewari, Senior Municipal Development Specialist, World Bank.
- Dennis Whittle, CEO, Globalgiving.
- Tim Williams, Senior Governance Adviser, UK Department for International Development.

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