



# A more effective State

Capacities for designing, implementing and evaluating public policies



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### **PROLOGUE**

The debate about public policies for development has focused on defining the best interventions to promote growth and inclusion. At the same time less emphasis has been put on analyzing the capacities of government agencies and institutions to design policies and put them into practice.

However, there is ample evidence of policy efforts with clear objectives, with track records of success in other contexts, and with available financial resources, but they do not achieve expected impacts because the capacities of the agencies in charge of designing and implementing interventions are limited. Moreover, these flawed experiences can be a valuable source of learning to improve the management of resources in the future. However, in the majority of cases these opportunities are not taken advantage of.

These facts have motivated the focus of the present edition of the Report on Economics and Development to study the capacities States must have to improve the effectiveness of the public interventions to promote development.

Identifying what these capacities are and how they combine in the efficient production of public goods and services is a challenge. An effective State requires capacities to design, implement and learn from policies. In part this depends on the presence of a quality bureaucracy; a public procurement system that facilitates obtaining key inputs to effectively carry out programs; citizen participation that strengthens accountability, and through this channel, improves the provision of public services; and finally, the institutionalization of monitoring and evaluation schemes that transform experiences in managing public resources into knowledge and learning to increase the effectiveness of the entire process.

The main findings of the report deal with four aspects. The quality of the bureaucracy depends on the characteristics of public employees and on the norms and procedures that guide, encourage or limit their actions. Pay schemes that attract the best workers and promote their efforts are a primary requisite to improve the quality of public administration. This can require adapting salary structures that link remuneration and career development more closely to the competencies, skills and levels of effort of bureaucrats.

In addition to human and financial resources, the appropriate execution of policy initiatives requires a public procurement system capable of providing the necessary supplies in sufficient quantity and quality in a timely manner. Given their nature, these systems are subject to risks of inefficiency, and even corruption that, as well as implying the misuse of public resources, can call into question the legitimacy of State institutions. Available evidence suggests three sets of measures to increase the efficiency of public procurement systems: establishing monitoring and control mechanisms, promoting more competition among suppliers, and strengthening transparency in managing procurements.

Citizen participation can be an important external control factor to promote better State performance. There are spaces in the region to increase citizen participation, above all by the non-electoral route and to increase the quantity and quality of information that the State provides to citizens so that their participation is more effective. The lack of knowledge about certain mechanisms of participation or about how they function, as well as a perception by citizens of a low level of effectiveness of participation, added to the high cost in time and other resources of interacting with the State are the main obstacles to overcome interaction.

By reducing the costs of coordination among citizens for collective action and interaction with bureaucrats, and as a mean of rapid and widespread dissemination of information about the performance of the State, new information and communication technologies are tools with great potential to increase the power of citizens to improve the design and implementation of public policies.

Finally, the many decisions that are made when managing public resources present opportunities to generate and systematize valuable knowledge for those that design and implement public programs. But taking advantage of these opportunities is more an exception than a rule in the countries in the region. At the same time, it is necessary to increase the benefits and reduce the costs of evaluating public policies for the agents that take these decisions. For the knowledge that is generated to be used in management, it is necessary to promote an institutionality that favors decision-making based on the best possible evidence. More autonomy and an environment that favors policy innovations are aspects that can promote change.

Through this new edition of the Report on Economics and Development, CAF seeks to contribute to the study and understanding of the State's capacities to design, implement and learn from policies, and in this way, to generate a constructive debate that can favor the strengthening of these capacities.

L. Enrique García
CAF Executive President

### RECOGNITION

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# WHAT DO WE UNDERSTAND BY STATE CAPACITY?

**Chapter 1** 

### **Chapter 1**

# WHAT DO WE UNDERSTAND BY STATE CAPACITY?<sup>1</sup>

### Introduction

In 2001 India launched a very ambitious program to improve the quality of basic level education in rural areas. Significant investments were made in infrastructure. Teachers were recruited and trained and other educational improvements were introduced. The result? While the number of students registered and school attendance increased, there was zero increase in educational attainment.

The history of this program illustrates the reality of many public policy programs: it is not enough to have clear objectives or adequate funding, state capacities are needed. One of the particular aspects that explains the failure of the program in India is that it did not succeed in lowering the absenteeism rate from a stratospheric 48% (Pritchett *et al.*, 2010), illustrating that part of state capacities is determined by the incentives for public workers to meet their obligations.

Regrettably, a major part of the analysis of public policies for development have focused on identifying the appropriate actions and programs to promote growth and inclusion, taking as a given that government agencies and institutions have the capacities to design and implement these actions. The program in India is an example of how these capacities often do not exist, resulting in governments failing to provide essential public goods.

In this report an effective State is understood as one that has the capacities to design public policies and implement them effectively and efficiently, as well as to generate learning throughout these processes.

This definition of State capacity is agnostic with respect to the existing political system or the specific policies that countries adopt. The focus is not on whether import tariffs are high or low or if public services are provided through private companies, public-private associations or public enterprises. What is important is that the State has the necessary capacities to effectively and efficiently design and implement policies.

The measurement of public capacities must distinguish between the results of the actions of the State and the factors that determine these results. For example, an indicator of the perception of corruption in the government, while it reflects the expectations of citizens about the functioning and legitimacy of the State, does not allow for identifying (nor does it try) the determinants (ties) that explain this result: flaws in the selection of personnel with suitable attributes, salary regimes that pro-

<sup>1.</sup> This chapter was prepared under the direction of Pablo Brassiolo and Pablo Sanguinetti, with the research assistance of Carlos Catanho and Julieta Vera Rueda.

The capacity of the State refers to the factors that affect the ability of public bodies to design public policies and put them into practice effectively and efficiently.

mote the misappropriation of funds, lack of internal controls in the institutions that regulate public procurement, the absence of external control schemes through citizen participation, or a combination of these.

Many features affect the management of public policies that together determine the success of interventions. These features are related to the quality and quantity of resources that are employed in their production (e.g. financial and human resources and intermediate inputs) and with the technology that is used to combine these resources (e.g. the adoption of electronic media to simplify tasks, management practices that encourage effort, or the definition of processes and activities to avoid duplication). A school with teachers without knowledge or the ability to teach is equivalent to a school with fewer teachers or with less motivated teachers. And if the school had a dysfunctional organization, its purpose of stimulating a higher level of education among its students would also be compromised.

One of the key factors in the provision of public goods and services is the bureaucracy (ministries, specialized agencies, offices of control, etc.), composed of managerial levels responsible for aspects of the planning and design of policies, as well as more operative areas related to the direct provision of services. A crucial aspect is that these public officials should have the knowledge and technical profile required by the positions they occupy, as well as having incentives to efficiently fulfill their duties. Chapter 2 deals in depth with aspects associated with the functioning of the civil service in Latin America.

But in addition to trained and motivated workers, the efficient provision of public services also requires the use of inputs that the State must acquire. Chapter 3 analyzes systems of public procurement and the internal control mechanisms of the State to regulate such procurements. These mechanisms are a key complement in the production of services, such that flaws in their functioning can significantly affect the capacity of the State to fulfill its tasks.

Public management can benefit from citizen participation that complements internal systems of control in their role of controlling and making the functioning of the bureaucracy more transparent. This contribution can be through the "long route" (the electoral route) and the "short route" (direct interaction between service providers and clients) of accountability. Chapter 4 describes the evidence about the role of this factor in improving public management in Latin America.

Finally, a central ingredient of public management that strengthens the capacity of the State in all its dimensions is monitoring and evaluating policies. These allows for generating learning that feedbacks to the design and implementation processes, generating a virtuous circle for improving policies. Chapter 5 analyzes this theme, investigating the incentives for bureaucracies and political authorities to establish evaluation and monitoring mechanisms, and the extent to which the knowledge produced results in correcting public initiatives.

This chapter goes into depth on the definition of the concept of State capacity and reviews the different methodologies that have been proposed for measuring this

capacity. The chapter also presents a conceptual framework on the public policy cycle that allows for identifying with greater clarity the different capacities required for effective management. This conceptual framework underlies the structure of this report and its main messages.

A capable State needs: a quality bureaucracy, an effective system of public procurement, interaction between citizens and suppliers, and monitoring and evaluation mechanisms.

# State capacity: a labyrinth of concepts and measures

The concept of State capacity has received much attention from political scientists, sociologists and recently as well from economists interested in relating the capacities of the State to economic development. This proliferation of analyses from different perspectives has created a labyrinth of definitions and measurements that, according to critics, has cost the concept any sense of precision (Andrews, 2010; Altman and Luna, 2012, Rothstein and Teorell, 2008, 2012).

The starting point of the concept of state capacity is the broader concept of governance or "quality of government" (Rothstein and Teorell, 2012). This concept is multidimensional, which makes it complex and at times vague. One definition is "the way in which power is exercised in the administration of the economic and social resources of the country for development" (World Bank, 1992). Another definition is "the traditions and institutions by means of which authority is exercised in a country", including: 1) the process by which governments are selected, monitored and replaced; 2) the government's capacity to effectively formulate and implement policies; and 3) the respect of citizens and the State for the institutions that govern economic and social interactions (Kaufmann *et al.*, 2004). Some authors (e.g. Bratton, 2013) group these dimensions of governance into three categories:

- The first dimension is the political, which encompasses the concepts of:
   1) the degree of reaction (if elected persons respond to voters' priorities);
   2) accountability (if the lack of reaction can be disciplined) and 3) legitimacy (if citizens obey and recognize the commands of the government and its legitimacy).<sup>2</sup>
- The second dimension is the economic, which encompasses the concepts of: 1) effectiveness (whether the government is capable of achieving its goals);
   2) efficiency (whether goods are provided in a cost-effective manner); and 3) equity (whether there is equitable access to public goods).
- The third dimension is the administrative, which encompasses the concepts: 1) legality (whether the government adheres to the law); 2) transparency (whether public procedures are transparent); and 3) honesty (whether the activities of the bureaucracy are free from corruption).

<sup>2.</sup> Fergusson *et al.* (2015) studied the political restrictions for developing State capacities, with an application to the case of regulating the assignment of lands in Mexico. A more general analysis about the political determinants of the capacity of the State to provide goods and services can be found in Stein *et al.* (2006).

There are many definitions of the capacity of the State and consequently many measurement methodologies.

These dimensions are related. For example, a transparent government allows for citizen control, which in turn can result in better management. However, a State can be successful in one dimension of governance and not in another, because of which it is reasonable to study these dimensions separately.<sup>3</sup>

Other authors define State capacity simply as "the abilities of the State to implement policies". In particular it refers to the professionalization of the bureaucracy, its capacity to protect property rights and establish credible commitments with private investors and their independence from political interference (Besley and Persson, 2009; Evans, 1995; Evans and Rauch, 1999).

A Government with capacities is one that carries out the functions it proposes. Consequently, the concept can be sub-divided according to the functions that the State must fulfill (Savoia and Sen, 2012):

- Bureaucratic and administrative capacity: The State needs a bureaucratic
  apparatus to design and implement policies. This dimension is central to all
  areas of research about the State and development. Traditionally, the indicators
  of State capacity are focused on the competency and ability of the bureaucracy
  (Evans and Rauch, 1999, Rauch and Evans, 2000) and generally include the
  ability to efficiently spend tax incomes on public goods.
- Legal capacity: This dimension includes several aspects like the capacity to require compliance with contracts and property law, a judicial system that resolves disputes according to the law, among others. There is consensus that the government should provide these public goods as a minimum, given that the private provision of the same would not be optimal (Besley and Persson, 2009, 2011; Yifu Lin and Nugent, 1995; Collier, 2009).
- Infrastructural capacity: This dimension refers to the territorial scope of the State, that is, the point to which the State exercises control over a geographic area, or the geographic area in which policies can be implemented (Soifer, 2008).
- **Fiscal capacity:** This is ability of the State to collect taxes (Besley and Persson 2009 and 2011; Cárdenas, 2010; Shapiro *et al.*, 2015).

Depending on the conceptual framework that is adopted, there are many definitions of State capacity and, as they correlate, many variables and methodologies to measure them. Table 1.1 summarizes the most commonly used indicators and their coverage in terms of countries and years available. These indicators encompass objective measures —constructed on the basis of statistical data about, for example, political instability, credit risk, tax collection, measures of the harshness of formal regulations and laws, etc.— and subjective measures based on the opinions of experts, business persons, NGO representatives, credit rating agencies, or from surveys of citizen or business perceptions.

<sup>3.</sup> In effect, in using the term "governance" some authors refer to the capacity of the government to establish rules, enforce compliance and provide services, independent of whether the government is democratic or not (Fukuyama, 2010). This definition contemplates elements of the economic dimension of governance, which is studied separately from other dimensions like the political dimension.

Table 1.1 Indicators of State capacities

Index and source	Methodology	Coverage <sup>a/</sup>	Data <sup>a/</sup>
E	Bureaucratic and administrative capacity		
Bureaucratic quality International Country Risk Guide	Expert evaluation point to the degree of autonomy from political pressure and the strength and experience to govern without drastic changes in policies or interruptions in government services, as well as the existence of mechanisms for hiring and training.	140 countries	Panel, 1984-2014
Quality of Government The Quality of Government University of Gothenburg	Quality of Government as the impartiality of government institutions. In other words, at what level do public employees implement public policies without taking into consideration aspects not stipulated in the policy or the law.	193 countries	Panel, 1946-2014
<b>Quality of Government</b> Teorell <i>et al.</i> (2015)	The average value of the variables of the International Country Risk Guide (ICRG) of "Corruption", "Law and Order" and "Bureaucratic Quality", on a scale from 0 to 1. Higher values indicate higher quality of Government.	140 countries	Panel, 1984-2014
Government effectiveness Worldwide Governance Indicators World Bank	Expert evaluations and surveys. Components added from several sources. Continuous scale: -2.5 to 2.5.	215 countries	Panel, 1996-2013
Impartiality and professionalism in public administration Teorell et al. (2015)	Quality of the survey of the Government Institute on the quality and behavior of public administration.	58 countries	Cross-section, 2008-2009
Bureaucratic compensation, career opportunities and meritocratic recruitment Evans and Rauch (1999), Rauch and Evans (2000)	Survey of experts (academics and others) asking about "career opportunities", "bureaucratic compensations" and "merit-based hiring". The three measures are equally-weighted indices drawn from a group of questions that seek to assess the aforementioned aspects throughout a determined period (1970-1990).	35 less developed countries	Cross-section, 1970-1990
	Ranges from 0 to 1.		
	Fiscal capacity		
Efficiency of revenue mobilisation Country Policy and Institutional Assessments World Bank	Evaluation by experts of the general patterns of mobilizing incomes, not only the theoretical tax structure, but also all sources of income that are really collected.	81 less developed economies	Panel, 2005-2013
	The index ranges from 1 to 6.		
	Infrastructural capacity		
Regulatory Quality Worldwide Governance Indicators	Evaluations and surveys by experts. Components added from several sources.	215 countries	Panel, 1996-2013
World Bank	Continuous scale: -2.5 to 2.5.		
Quality of public administration Country Policy and Institutional Assesments World Bank	Experts assessment of the extent to which civilian central government staffs (including teachers, health workers and police) are structured to design and implement public policies and effectively provide services.	81 less developed economies	Panel, 2005- 2013
	The index ranges from 1 to 6.		

Index and source	Methodology	Coverage <sup>a/</sup>	Data <sup>a/</sup>
Stateness Bertelsmann Transformation Index Bertelsmann Foundation	Expert evaluation measuring the extent to which the monopoly of the State in the use of force covers the whole territory; the extent to which all relevant groups in the society agree about citizenship and accept the nation state as legitimate; and the extent to which the legitimacy and legal order are defined without inference to religious dogma; and the extent to which basic administrative structures are in place.	129 developing and transitional economies	Panel, 2006-2014
Quality of budgetary and financial management Country Policy and Intitutional Assessments World Bank	Expert evaluation to measure the extent to which there is/are: (a) a credible and complete budget linked to priority policies; (b) effective financial management systems to ensure that the budget is implemented as anticipated in a controlled and predictable manner; and (c) fiscal reports that are rigorous and available in a timely manne.	81 less developed economies	Panel, 2005-2013
	The index ranges from 1 to 6.		
	Legal capacity		
Steering Capability Bertelsmann Transformation Index Bertelsmann Foundation	Expert evaluation analyzing the extent to which political leaders establish and maintain strategic priorities; how effective the government is in implementing policy reforms; how flexible are political leaders and their proclivity toward innovation; and whether or not the political leadership learns from past errors.	129 developing and transitional economies	Panel, 2006-2014
Legal system and property rights Fraser Institute	A subjective evaluation that combines surveys and expert opinions that vary in score between 1 and 10, where a higher score indicates greater protection of private property rights.	152 countries	Panel, 1970-2012
Rule of law Worldwide Governance Indicators World Bank	Evaluation of experts and surveys. Components added from several source. Continuous scale: -2.5 to 2.5.	215 countries	Panel, 1996-2013
Law and Order International Country Risk Guide	The element "Law" is measured as the strength and impartiality of the legal system."Order" is measured as the popular observance of the law.	140 countries	Panel, 1984-2014
Expropriation risk International Country Risk Guide	An evaluation of the risks of having property confiscated or nationalized.	140 countries	Panel, 1984-2014

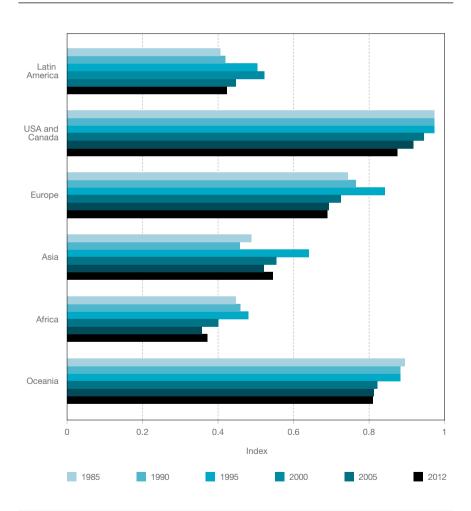
Source: the authors, based on Savoia and Sen (2012), updated with information from the webpages of: International Country Risk Guide (The PRS Group, Inc.), The Worldwide Governance Indicators (World Bank), Country Policy and Institutional Assessment (World Bank), Bertelsmann Transformation Index (Bertelsmann Foundation), Gwartney (2014) and Teorell et al. (2015).

This report considers State capacity as the ability of public institutions to design and implement policies and provide services, which is associated with management capacity. In this sense, of all the indicators in Table 1.1, emphasis is given to those that capture this dimension and do not take into account aspects relating to the characteristics and functioning of the political system or that involve value judgments about which policies are correct (Pritchett *et al.*, 2010). How is Latin America positioned in relation to these indicators?

Chart 1.1 shows the Quality of Government indicator (Teorell *et al.*, 2015) for several regions of the world in several years between 1985 and 2012. This indicator has values between 0 and 1, combining the mean values of the indicators of Corruption, Law and Order and Quality of the Bureaucracy, which are constructed on the basis of expert opinions and perceptions gathered in surveys. Latin America is not well positioned. It was in last place in the 1980s and 90s. By the mid-90s, without doubt as a result of reforms that were implemented in this period, its position rose, although it fell again between 2005 and 2010. Beyond these small movements, in general no important variations in the capacities of the States are observed over time or in absolute or relative (among regions) terms.

In relation to the indicator of government quality, Latin America is behind other regions of the world.

Chart 1.1 Government quality index, by regions 1985-2012a/

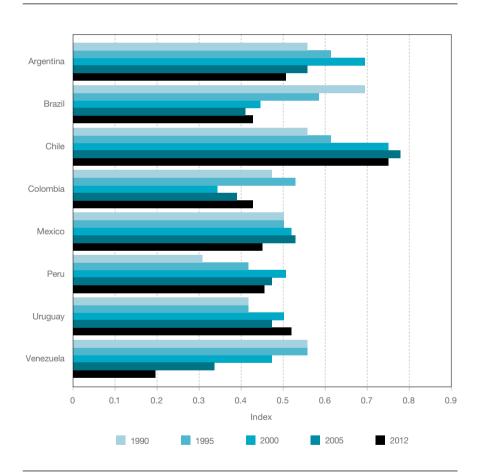


a/ The index is constructed based on variables developed by the International Country Risk Guide (The PRS Group, Inc.). The index is composed of the average values of the variables "Corruption", "Law and Order" and "Bureaucratic Quality" on a scale from 0 to 1. A higher value indicates a higher quality of Government.

Source: the authors, based on Teorell et al. (2015).

Chart 1.2 describes this indicator for a sample of Latin American countries between 1990 and 2012. There is a high degree of heterogeneity in the region and more significant changes in the index are observed over time. Chile consistently has the highest state capacity, showing a positive evolution over recent decades, with a value slightly higher than the average value in Europe in 2012. In contrast, declines have been observed in the last few years in Argentina, Brazil, Mexico, Peru and Venezuela, and increases for Uruguay and Colombia.

Chart 1.2 Government quality index for selected Latin American countries, 1990-2012  $^{\rm a/}$ 



a/The index is constructed based on variables developed by the International Country Risk Guide (The PRS Group, Inc.). The index is composed of the averages values of the variables "Corruption", "Law and Order" and "Bureaucratic Quality" on a scale from 0 to 1. A higher value indicates a higher quality of Government.

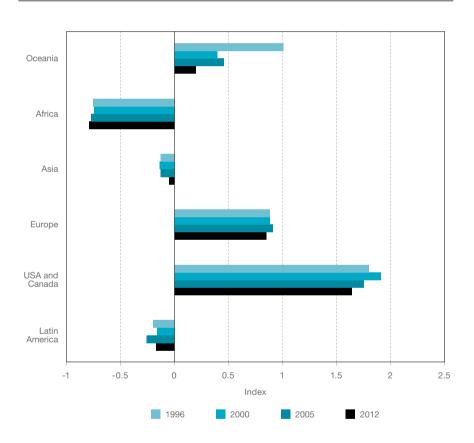
Source: the authors, based on Teorell et al. (2015).

Chart 1.3 shows the Government Effectiveness index (Kauffmann *et al.*, 2009) for several regions of the world in different years between 1996 and 2012.

This indicator measures perceptions about the quality of public services, the quality of the bureaucracy and its independence from political pressures, the quality of the processes of formulating and implementing policies and the commitment and credibility of the government to carry them out. The index takes values in the interval (-2.5 to 2.5), in which higher values indicate greater government effectiveness. Latin America is also lagging behind the other regions of the world in this indicator, with negative values and no defined tendency over time.

Latin America is also lagging behind with respect to the indicator of government effectiveness.

Chart 1.3 Government Effectiveness Index, by region for 1996-2012 a/

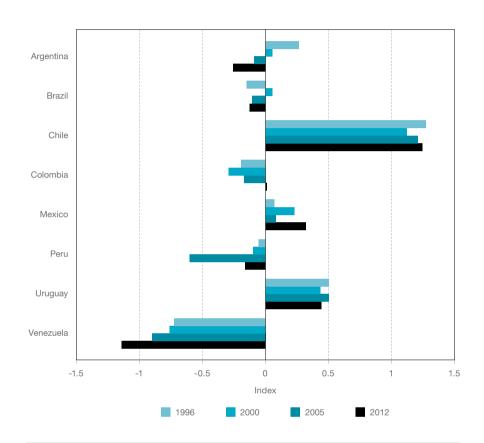


a/The Government Effectiveness Index was developed by the The Worldwide Governance Indicators, World Bank.

Source: the authors, based on Teorell et al. (2015).

Chart 1.4 (see p. 28) shows this same indicator for a sample of Latin American countries in the same years. Once again Chile has the best state capacities, with levels above the European average. Uruguay is also notable, although with values much lower than those for Chile. Certain improvements are observed with increases from the very low values for Colombia and Mexico, and deterioration in the cases of Argentina and Venezuela.

Chart 1.4 Government effectiveness index for selected Latin American countries, 1996-2012 a/



a/The Government Effectiveness Index was developed by the Worldwide Governance Indicators, World Bank.

Source: the authors, based on Teorell *et al.* (2015).

These indices, as well as many others compiled from the World Governance Indicators (WGI) and the International Country Risk Guide (ICRG) have the advantage of wide geographic and temporal coverage, which allows for making comparisons among countries and assessing the evolution of one or several countries over time, even if the changes are modest. However, there are certain limitations. Firstly, these indicators of state capacity are related to state performance (e.g. the perception of corruption, compliance with the law, tax collection, etc.) and not to all of the capacities that determine this performance (e.g. the degree of political autonomy of bureaucracies, the existence of promotion for merit schemes in public agencies, the prevalence of salary contracts that stimulate effort, etc.). In other words, most of these indicators measure the dependent variable of the "production function" of public goods, whose arguments are capacities (including technology). An agenda of study and measurement of state capacities attempts to identify these factors and quantify their relative importance in the performance of the State.

Second, and related to the above, these indicators do not offer a guide about the type of public intervention that could improve the situation (e.g. they do not indicate whether low performance is due the lack of technical skills of public employees or because of problems of incentives) because of which they do not constitute a good base for orienting reform initiatives. This problem is reinforced with the summary of several dimensions in an index with weightings that are not always properly justified.

There is a high degree of heterogeneity in state capacities within countries.

Third, several of these indicators are constructed on the basis of expert opinions that, because they are not free of political or ideological bias, can bias the value of the variables.

Finally, much heterogeneity can be hidden within countries, either among levels of government, or between ministries and agencies at a given level.

With respect to this heterogeneity, there are government agencies within the state apparatus of several Latin America countries with better trained personnel and/or more solid institutions that have been called "islands of excellence" (Evans, 1995; Geddes, 1994; Bersch *et al.*, 2013a). Box 1.1 documents the heterogeneity prevalent in the Federal Government of Brazil, evidenced by the wide dispersion of some indicators of capacity like the percentage of employees with a technical profile or that specialize in areas that correspond to the purpose of the agency. Among the public policy areas with agencies that are more capable according to this measurement are International Relations, Economy and Planning, and Comptroller and Legal Aspects, while areas like Infrastructure, Tourism and Environment are among those most lagging behind.

#### Box 1.1 State capacities at the level of federal agencies in Brazil

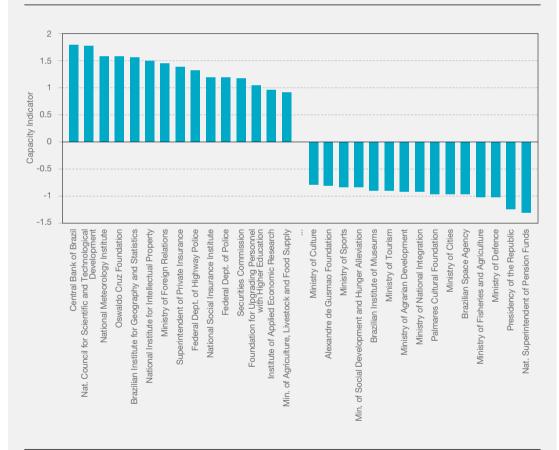
Measuring state capacities at the national level can be relatively uninformative when trying to explain why some programs function and others do not, given that there may be variability in the capacities of the different agencies that make up the State. Thus, not reporting on the distribution of capacities in the State impedes exploring where it is most important to increase these capacities to achieve greater economic and social development.

Bersch *et al.* (2013a) attempted to fill this gap in the literature by measuring the capacities of bureaucrats of different agencies of the Federal Government of Brazil. Using data on public employees, they developed a measure of bureaucratic capacity at the level of agencies based on four components: 1) percentage of public employees with training that coincides with the mandate of the agency, or with the multidisciplinary training that allows them to perform in any agency (e.g. a specialist in public policies); 2) average seniority in the civil service; 3) percentage of employees transferred from other agencies (as a measure of dependence on qualified personnel from other agencies to function adequately); and 4) average salary. This measure seeks to capture the capacity of the bureaucracy to implement policy programs, independent of the type of program.

To aggregate these components in an indicator of capacity, the authors used a latent variable focus. This method offers several advantages, among them that it does not require subjectively defining weightings and that the results do not depend on the way in which each component affects the aggregate index.

The results show enormous heterogeneity among the bureaucracy of the Brazilian Federal Government. While some agencies have bureaucrats with a high level of professionalism (termed "islands of excellence"), others lag well behind. Nevertheless, the results to some extent contrast with the belief that there are few islands of excellence and an immense majority of agencies with low capacity. Even when the "excellent agencies" appear to be the exception, there is a significant group of agencies with moderate capacities (Chart 1).

**Chart 1** Indicator of bureaucratic capacity of agencies of the Federal Government. The 15 agencies with the greatest capacity and the 15 with the least capacity in Brazil<sup>a/</sup>



a/ The chart shows the capacity of the bureaucracy at the level of agencies of the Federal Government of Brazil, constructed with a focus on latent variables. The value of the indicator has a mean equal to 0 and a variance equal to 1. A higher value of the indicator indicates higher capacity.

Source: the authors based on Bresch et al. (2013b)

The authors also constructed a measurement of autonomy from political power at the level of agencies based on the influence of political parties in the assignment of public employees, and showed that there is also a high degree of variability in levels of autonomy within the same government. They also argued that capacity and autonomy are two distinct concepts, both very important for the implementation of policy programs.

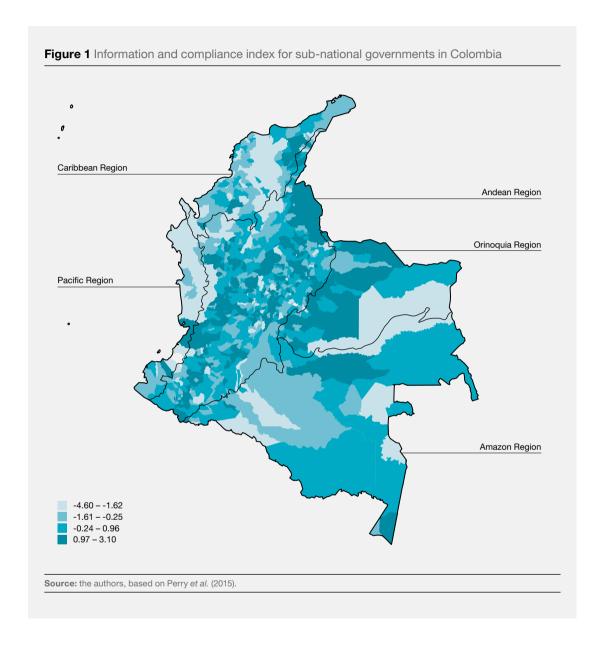
Source: the authors, based on Bresch et al. (2013a) and Bresch et al. (2013b).

There can also be major differences in capacities among sub-national governments. For example, in the case of Colombia, Perry *et al.* (2015) calculated an index of state capacity at the level of departments and municipalities that reflects aspects related to complying with regulations and the transparency of management. They found a high degree of variability: sub-national governments in the Andean area, the richest area of the country, have relatively high values, while the sub-national governments of the Pacific and the Amazon, where per capita incomes are substantially lower, have much lower values (Box 1.2).

#### Box 1.2 Variability in State capacities in Colombia

In a work commissioned for this report, Perry *et al.* (2015) used seven indicators produced by the National Procurator in Colombia to construct an index of state capacities at the departmental and municipal levels in Colombia. The Operational Capacities Index is composed of the following variables: 1) the degree of compliance with the Internal Control Manual, which groups a set of standardized procedures to evaluate and verify municipal achievements; 2) the effectiveness of storing and classifying public documents and information in municipal archives; 3) the degree of compliance with regulations for public procurements; 4) the coverage of electronic government; 5) the timing of sending documentation and information to national control bodies; 6) the frequency of public meetings; and 7) attention to citizen complaints. These indicators are available for the 1,101 municipalities and the 32 provincial governments in Colombia.

Based on these indicators, the authors created two sub-indices, one of administrative information and compliance that combines indicators 1, 2, 3, and 5, and the other of accountability that combines indicators 3, 4, 6 and 7. With respect to the first index, high values were obtained for the central Andean area (where some of the most important cities in the country are located) and much lower values in the Pacific and Amazonian regions (Figure 1).



# The public policy cycle, performance measurements and state capacities

To understand which capacities determine the performance of the State, it is useful to have a conceptual framework that describes the public policy cycle. This allows for defining performance indicators corresponding to each stage of this process, which facilitates identifying the capacities that determine these results.

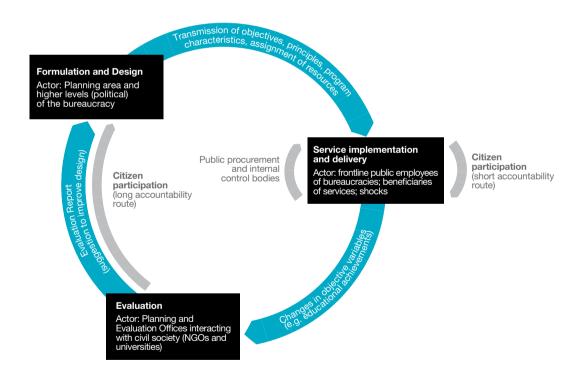
#### THE PUBLIC POLICY CYCLE

Public policies go through a three-stage cycle: formulation and design, implementation, and results and evaluation (Figure 1.1).

The effective provision of public goods and services depends on the processes involved in each stage being carried out satisfactorily such that the virtuous circle of learning and service improvement is not broken. This in turn depends on the capacities within organizations (e.g. availability of information, coordination among diverse public agencies, technical capacities of public workers, internal control and monitoring schemes, etc.), and adequate interaction among these organizations and services users.

Public policy goes through a three-step cycle: formulation and design; implementation and reaching the target population; and results and evaluation.

Figure 1.1 The public policy cycle



Source: the authors.

The design stages make intensive use of information and technical capacities. The planning areas of public agencies participate in this stage, together with higher bodies of diverse ministries defining the most important characteristics of programs: target population, budgetary and personnel resources, processes, main components, goals, etc.

The success of public policies depends on adequately fulfilling the processes and actions of every stage in policy cycle.

The implementation stage begins when these elements of the programs are transmitted to frontline public workers that deal directly with the beneficiaries of the service (e.g. hospital directors or nurses). Implementation also requires the procurement of inputs (e.g. medicine), complementary services (e.g. cleaning concession for a hospital), and capital goods (e.g. ambulances), so public procurement systems, concessions and tenders are fundamental for the good implementation of public services. Likewise, control mechanisms and bodies within institutions, as well as ones external to institutions but nevertheless part of the State (e.g. General Comptroller) intervenes to ensure the good performance of management tasks. Finally, the implementation stage culminates in the delivery of the services to the target population. The results of the interventions implemented certainly depend on the quality of the design and the implementation, but also on the characteristics and beliefs of the benefitting families (e.g. perceptions about the benefits of a vaccination can determine the participation of families in a vaccination program), as well as external shocks (e.g. climate, natural disasters, etc.).

In the implementation stage, citizen participation can favor the accountability of public employees, and in this way contribute to achieving the better provision of services. Citizen participation can take the form of the "long accountability route" (citizens reward or punish for the results of policies via elections) or the "short accountability route" (direct interaction between service users and providers) (World Bank, 2004).

The monitoring and evaluation step is important precisely to disentangle the influence of the elements of the initiative itself (that is, the quality of the design and implementation) and of the exogenous factors on the objective variables. This allows for generating learning that is transmitted to the areas of planning and implementation. The evaluation areas of public offices are involved in this stage, most often in collaboration with institutions of civil society (NGOs and universities), to give greater credibility and transparency to information that emerges from the evaluations.

### PERFORMANCE INDICATORS AT EACH STAGE

The success of public policies depends on carrying out the processes and actions of each stage adequately. Generating indicators for each stage can serve to identify the capacities that are lacking to improve public policies.

# PERFORMANCE INDICATORS IN THE FORMULATION AND DESIGN STAGE

In the design stage it is very important to clearly define the goals and objectives that are to be met. It is important to define not only the global objectives, but also the intermediary goals that contribute to reaching them. For example, in the case of a flu vaccination program against the flu in newborns in vulnerable conditions, the objective of the policy could be to reduce flu-related infant mortality by a determined percentage; while an

intermediary goal could be to vaccinate a certain number of infants in a determined area.

To reach both final objectives and intermediate goals it is important that the program be based on updated diagnostics of the characteristics of the benefitting population (e.g. the number of children in conditions of being treated, the incidence of the disease among the target population, etc.) and that there is consistency between the logical framework of the intervention (that is, the channels through which the initiative affects the proposed objective) and the main characteristics and components of the policy. For example, it is fundamental that the budget be adequate for the proposed objectives.

In order to define the objectives and goals it is necessary to find indicators that measure the factors that the policy or program seeks to impact. For example, in the case of the vaccination against flu among newborns, updated statistics are required about infant mortality in the treated area.

Diverse initiatives in Latin American promote the definition of indicators for effective monitoring and evaluation during the program design stage. For example, the National Evaluation Council (CONEVAL for the initials in Spanish) in Mexico has published a manual for developing indicators specific to programs. which in turn are aligned with national development plans (CONEVAL, 2013). The establishment of these indicators for each program is included in the Results Indicators Matrix (MIR), which also has a description of the objectives, the main components and expected results. The elaboration of indicators follows criteria generally adopted by countries of the Organization for Economic Cooperation and Development (OECD) and the recommendations of multilateral organizations<sup>4</sup>. In particular, the indicators are classified according to the stage of production of the services, or the areas of control, in: 1) inputs and processes ("activities" according to the nomenclature of CONEVAL); 2) products or services provided ("components"); 3) immediate results ("purpose"); and 4) final results or impacts ("ends"). For example, in the case of a scholarship program with the objective of promoting completion of high school students from low-income families, one input indicator could be the total cost of the program; an indicator of process could be the time required to apply to the program; an indicator of product could be the number of scholarships awarded to members of the target population; and an indicator of result could be the percentage of youths with scholarships that end their secondary schooling over the total number of youths selected for the program.5

<sup>4.</sup> See, for example, the recommendations described in Bonnefoy and Armijo (2005) and García and García (2010).

<sup>5.</sup> As well, at every stage of the production process every indicator can be classified according to different measures of performance: efficiency, economics, efficacy and quality. In general, the indicators of products or results measure the efficiency of programs in the sense of describing levels of coverage reached or other variables with results or impacts on the target population. For their part, input or process indicators lend themselves to assessing efficiency (e.g. costs per unit of service, number of days consumed by tasks or activities necessary to provide a service, operational costs over the total budget, etc.). The dimension of economy refers to indicators, for example, that reflect the recovery of program costs via genuine incomes.

In the design stage it is very important to clearly define the goals and objectives to be reached. A very interesting aspect of the experience of Mexico with CONEVAL is that the agencies that propose programs and request budgets to implement them must prepare an MIR and provide it to CONEVAL for review. CONEVAL checks several aspects of the program budget, in particular: 1) whether it is aligned with the objectives proposed in the National Development Plan; 2) whether it has a vertical logic, that is, if the activities (inputs and processes) are those required to produce the expected products and services (components); and whether these services and/or components are necessary to achieve the results (purposes) and expected impacts (ends); 3) whether it has a horizontal logic, that is, if the indicators proposed for each step of the program allow for evaluating compliance with the achievements associated with each of these steps. Table 1.2 shows the record of the evaluation of the MIR used by CONEVAL. This experience of Mexico shows how this exercise of defining quantifiable objectives and goals through the development of specific indicators is important not only to facilitate the subsequent evaluation of initiatives, but also to correct errors in the design of the intervention.

Table 1.2 Areas and sub-areas of quality evaluation of the result indicator matrix (Mexico)

i. National planning	Criteria
i.1. The program has a direct relationship with or is congruent with the higher strategic objective that it is linked to.	The aim of the program is linked to sectorial, special or institutional objectives considereing that:  a. Are there common concepts between the aim and the objectives of the sectorial, special or institutional program?  b. Does achieving the aim contribute to meeting any of the goals of the objectives of the sectorial, special or institutional program?
ii. Vertical logic	
ii.1. The necessary and adequate activities to achieve every component are included.	a. Are the activities unique (except for crosscutting activities)? b. Are the activities the necessary ones to generate the components? c. Are the activities sufficient to generate the components? d. Does the wording of the objectives of activities comply with the wording suggested in the Logical Framework Methodology (LFM)? e. With the exception of cross-cutting activities, are the objectives of the activities repeated at some other level of the MIR? f. Are the objectives ordered chronologically?
ii.2. The components are necessary and sufficient to achieve the purpose of the program.	a. Are the components of the objectives unique throughout the matrix? b. Are the components the necessary ones to reach the established objective? c. Are the components sufficient to reach the established objective? d. Does the wording of the objectives of the components comply with the wording suggested in the LFM?
ii.3. The purpose is unique and represents a specific change in the conditions of life of the target population.	a. Is the objective unique? b. Is the objective of the purpose identified as a specific change in the life conditions of the target population? c. Is the target population defined with clarity and geographic or social boundaries? d. Is it a direct result that is expected to occur as a result of the components? e. Does the wording of the objective of the purpose comply with the wording suggested in the LFM?

ii.4. If the purpose contributes to the final aim and the associated assumptions are maintained, the sustainability of the benefits of the program is ensured.	a. Is the final aim associated with at least one assumption? b. Is the assumption beyond the control of the program? c. If the assumption is maintained, does meeting the final aim imply acheiving a hierarchically higher objective?
ii.5. Achieving the purpose and meeting the associated assumptions will contribute to achieving the final aim (vertical logic).	a. Is the objective of the purpose associated with at least one assumption?      b. Is the assumption beyond the control of the program?      c. If the assumption is maintained, does meeting the purpose imply acheiving the final aim?
ii.6. If detailed components are produced and they comply with the associated assumptions, the purpose (vertical logic) will be achieved.	a. Are the components associated with at least one assumption? b. Is the assumption beyond the control of the program? c. If the assumptions are maintained, does the delivery of the components imply achieving the purpose?
ii.7. If the programmed activities are completed and the associated assumptions are met, the components will be produced (vertical logic).	a. Are the activities associated with at least one assumption? b. Is the assumption beyond the contol of the program? c. If the assumptions are maintained, does conducting the activities imply generating the components?
iii. Horizontal logic	
iii.1. The indicators at the level of the final goal allows for monitoring the program and adequately evaluating the achievement of the final goal.	The indicators should have the following criteria: a. Clear b. Relevant c. Monitorable
iii.2. The indicators at the level of the purpose allows for monitoring the program and adequately evaluating the achievement of the purpose.	d. Adequate As an added review, it should be determined if: a. Are the indicators the ones necessary to monitor the performance of the established objective?
iii.3. The indicators at the level of components allow for monitoring the program and adequately evaluating the achievements of every component.	b. Are the indicators sufficient to monitor the performance of the established objective?
iii.4. The indicators at the level of activities allow for monitoring the program and adequately evaluating the achievements of every activity.	-
iii.5. The means of verification identified for the indicators of the final goal are those necessary and sufficient to obtain the information required to calculate the data and for external verification (monitoring).	a. Does the frequency of measurement coincide with means of verification?     b. Are the data of the variables effectively measured by the proposed method of verification?
iii.6. The means of verification identified for the indicators of purpose are those necessary and sufficient to obtain the information required to calculate the data and for external verification (monitoring).	-
iii.7. The means of verification identified for the indicators of the components are those necessary and sufficient to obtain the information required to calculate the data and for external verification (monitoring).	<del>-</del>
iii.8. The means of verification identified for the indicators of activities are those necessary and sufficient to obtain the information required to calculate the data and for external verification (monitoring).	-

In the implementation stage it is possible to establish indicators based on administrative records that allow for following the execution of programs.

## PERFORMANCE INDICATORS IN THE IMPLEMENTATION STAGE

In the implementation phase it is possible to develop indicators based on administrative records about inputs, processes, services effectively delivered, costs and budgets executed, that permit following up the execution of programs. Several countries in the region generate this type of indicator with the support of information systems, often in open consultation.

In particular, it is very common that countries make follow-up on public investment possible through National Public Investment Systems (SNIP for the initials in Spanish). For example, the SNIP in Nicaragua has an official registry of all public sector investment initiatives and institutions that are integrated into the SNIP must incorporate legally required information related to their projects. In addition, based on programming contracts, follow-up is conducted through the System of Physical-Financial Project Follow-up, which evaluates the extent to which established goals are met. The follow-ups are ordered according to the institution that manages the project, with the enumeration of the projects under every institution. In turn, every contract is described, detailing the data about the contracted firm and the date of signing an agreement, along with the following elements: 1) scope (identify the implementation indicators to assess performance); 2) execution timetable (programmed start, official start, programmed completion, extended completion); 3) costs (original cost, cost variations, updated cost, advance, depreciation rate) and 4) programming (percentage of total physical advance, total programmed, percentage of physical advance in the year, programmed for the year). Finally, a score is given to the "state of the contract" according to the percentage of deviation from the programmed physical advance, classified as "normal" (deviations of 10% or less), "delayed" (deviations between 10% and 20%) and "critical" (deviations greater than 20%).6

Similarly, other governments have encouraged greater transparency in the execution of public works, developing projects to follow up the implementation of such works. For example, the program "Follow-up to Public Investment Projects", under the National Planning and Development Secretariat (SENPLADES) of Ecuador, allows for real time follow-up of public works considered emblematic by SENPLADES<sup>7</sup> through its webpage. Analogous to this are "INFOBRAS" (Peru) and the website GEO-CGR for citizen control of public works (Chile), which also permit easy access to follow-up public works. This kind of initiative encourages citizens to participate in measuring the execution and implementation of public works.

<sup>6.</sup> For more information consult http://ws.snip.gob.ni/bps/

<sup>7.</sup> For more information consult http://app.sni.gob.ec/web/camaras/

Finally, several countries have incorporated indicators of follow-up or implementation (of performance) of public policy management through a results-based budgeting (RBB) strategy. For example, making use of this strategy, the Paraguayan Ministry of Finance annually communicates to the bodies that make up the General Budget of the Nation (PGN for the initials in Spanish) the budgetary directives for planning, formulation, programming and determination of measurement indicators of program management. A budgeting for results report is then presented, which summarizes the performance indicators of the subprograms of different ministries. These indicators follow a similar logic to the case of CONE-VAL. The indicators for the implementation stage can be of *inputs* or "process" and "product". An example of a process indicator is the percentage of execution of financial resources for a certain period and certain program *vis-à-vis* the profiled goal; an example of a product indicator in the case of the Complementary Nutritional Sub-Program of the Ministry of Education and Culture is the number of students in situations of vulnerability that receive school meals.

RESULTA in Peru seeks to progressively incorporate the largest number possible of budgetary items to the RBB methodology. All the programs integrated into RESULTA must have an intervention logic that specifies the proposed activities, the products the programs plans to provide, and the intermediate and final results that are sought. Table 1.3 shows the example of a rural electricity program that specifies several products that the program seeks to offer (for example, train rural residents in the efficient use of electricity, provide electric power to rural homes using photovoltaic technology) and an intermediate result (increase the coverage of rural electrification). The final unspecified objective could be to increase the productivity of rural activity. It also makes the performance indicators explicit through which the provision of these products and achievement of results is monitored as well as the source of information used to compute performance.

Table 1.3 Performance indicators - RESULTA (Peru)

Budgetary program	Performance indicator	Source of information			
Access and use of rural electrification					
Specific Result					
Coverage of rural electrification	Coverage of rural electrification	National Survey of Strategic Programs (ENAPRES)			
	Consumption of electricity by rural user				
Product					
Rural residents trained in the efficient use of electrical energy	Percentage of households trained in the efficient use of electrical energy in a year	General Directorate for Rural Electrification of the Ministry of Energy and Mines			

Budgetary program	Performance indicator	Source of information	
Rural residents trained in productive uses of electrical	Electricity consumed by trained productive units	Concession-holders	
energy	Percentage of productive family units trained in the productive use of electrical energy in one year	General Directorate for Rural Electrification of the Ministry of Energy and Mines	
Residences provided with electricity through household level photovoltaic generation	Percentage of households with access to electrical energy through Projects for Isolated Photovoltaic Installation	Administrative records and georeferenced maps of the General Directorate for Rural Electrification (DGER)	
Residences provided with electricity through local power generation	Percentage of households with access to electrical energy through Supply with Local Generation of Electricity Projects	Administrative records and georeferenced maps of the General Directorate for Rural Electrification (DGER)	
Residences provided with electricity through interconnected national network	Percentage of households with access to electrical energy through projects for Extension of National Interconnected Electrical Networks – SEIN	Administrative records and georeferenced map of the General Directorate for Rural Electrification (DGER)	

**Source:** the authors, based on the Ministry of Economy and Finances, Republic of Peru, RESULTA - Performance indicators of budgetary programs.

Finally, Chile has been a pioneer in establishing a RBB scheme to generate performance indicators that allow for following up the implementation of public programs. The System of Management Evaluation and Control of the Budget Directorate (DIPRES for the initials in Spanish) covers almost the entire public budget. In line with international guidelines, indicators are defined in function of the stages of production of services or the area of control (that is, whether it deals with inputs, processes, products or results) and also in function of the dimensions of performance (effectiveness, efficiency, economy and quality). Table 1.4 illustrates the application of this methodology in the case of National Women's Service, which is under the Ministry of Social Development. It describes the majority of programs that the agency administers and for each program enumerates the product and results indicators, whether intermediate or final. As well, each indicator reflects a dimension of performance, which in this example is always "efficacy". The values of the indicators since 2011, the estimated value for 2014 and the goal for 2015 are shown. It is interesting to consider the differences in the values of the output indicators (which are related to the provision of the services and consequently in large measure under the control of the agency) and those of results (above all those relating to impacts, the compliance of which is to a lesser degree under the control of the agency). For example, in the case of the program "Living Well with Sexuality and Reproduction" the performance indicator (at the product level) to evaluate meeting the goal of participation in women's workshops in function of pre-established quotas is almost 98%; while in the case of the program "Working Woman and Head of the Household", the performance indicator (at the level of result) to evaluate whether women that participate in the program are able to enter the labor force was only 8% in 2013 and 18% in 2014, which also reflects a modest goal of 20% for 2015.

Table 1.4 Performance indicators for 2015 - Budget Office (Chile)

	Ministry of Socia	al Dev	velopme	ent					
Subsecretariat for Social Services Solidarity and Social Investment Fund	National National Women's Youth Service Institute	Corp for Inc	ational poration digenous lopment	Ser	ational rvice for disabled	Serv	tional vice for elderly	for S	cretariat Social Luation
Strategic product	Indicator		Effective 2011	Effective 2012	Effective 2013	Effective to June 2014	Estimation 2014	Goal 2015	Weighting
Support and strengthen women's economic, sexual and reproductive autonomy (Live Well with Sexuality and Reproduction Program)	Women that participated in workshops to promote sexual and reproductive rights in year as a percentage of all the womprogrammed to participate in such workshops in that year. Disaggregated by sex: No Territorial management applies: N	en	0%					98%	15%
Promote and strengthen women's participation and influence in the political, social, economic and cultural decision-making of the country (Women, Citizenship and Participation Program)	Efficacy/Output  Women that participated in the Women, Citizenship and Participation Program in year t as a percentage of all the womprogrammed to participate in the program in that year.  Disaggregated by sex: No Territorial management applies: N	en his	0%					98%	15%
Support and strengthen women's economic, sexual and reproductive autonomy (Woman Worker and Head of Household Program)	Efficacy/Intermediate result Women that entered the Women Heads of Household Program in year t as a percentage of all wom participants in the program in year t. Disaggregated by sex: No Territorial management applies: \text{\text{\text{Y}}}	nen	0%	46%	51%	2%	50%	70%	15%
Support and strengthen women's economic, sexual and reproductive autonomy (Woman Worker and Head of Household Program)	Women participants in the Women Head of Household Program that succeeded in entering the labor force in year t as a percentage of all women participants in the Women Head of Household Program.  Disaggregated by sex: No Territorial management applies:	d	0%		8%	2%	18%	20%	5%

Strategic product	Indicator	Effective 2011	Effective 2012	Effective 2013	Effective to June 2014	Estimation 2014	Goal 2015	Weighting
National system of prevention, attention, protection and reparation of all forms of violence against women (Program of attention, protection and integral reparation of violence against women)	Efficacy/Intermediate result Percentage of women that, after having entered a women's shelter, maintained or improved the conditions they presented at the time of entering. Disaggregated by sex: No Territorial management applies: Yes	0%	88%	94%	95%	85%	90%	20%
New Institutionality for Gender Equality, Equal Rights and Women's Autonomy (Strengthening Municipal Women's Offices)	Efficacy/Output Percentage of stages implemented in the design of the integral Management Model of the Municipal Women's Office. Disaggregated by sex: No Territorial management applies: No	0%				0%	100%	10%
Political-technical assistance to incorporate gender equity, modifying gender patterns and stereotypes and co- responsibility in public policies (Follow-up and monitoring system for intersectorial compliance with gender indicators)	Efficacy/Output Percentage of stages implemented for the design for the Follow-up and Monitoring System for Intersectorial Compliance with Gender Indicators. Disaggregated by sex: No Territorial management applies: No	0%				0%	80%	10%
National system of prevention, attention, protection and reparation of all forms of violence against women (Program of attention, protection and integral reparation of violence against women) Women's Centers	Efficacy/Intermediate result Percentage of women that, after entering a Women's Center, maintained or improved the conditions they presented at the time of entering the center. Disaggregated by sex: No Territorial management applies: Yes	0%		92%	91%	85%	85%	10%

Source: the authors, based on the Budget Office (DIPRES), Chile.

#### PERFORMANCE INDICATORS IN THE EVALUATION STAGE

In the evaluation stage it is necessary to monitor the value of socioeconomic variables that public policies seek to affect (e.g. school performance). Beyond follow-up on these variables of results, establishing a causal relationship between policies and variables of interest requires carrying out impact evaluations with a minimum of scientific rigor, which can require the collaboration of public bodies with universities and/or NGOs. In turn, the results of the impact evaluations can generate learning and recommendations that feed a new cycle of policy design and implementation.

In recent years governments in several countries in the region have encouraged impact evaluations of their programs. For example, in Colombia, the National Evaluation System for Management and Results (SINERGIA) conducts evaluations of a strategic character and promotes a culture of evolution in the country. Certain programs are subject to rigorous impact evaluations, often through independent institutions and consultants that are expert in these evaluations. At the end of the evaluations, certain recommendations are made that can be taken into account by related programs in the future. For example, SINERGIA carried out an evaluation of the "Families in Action" program, an initiative of conditional transfers of the Colombian government that provides monetary support to SISBEN level 1 families (the lowest social level according to the System of Identification of Potential Beneficiaries of Social Programs) in exchange for meeting certain commitments. The objective of the impact evaluation was to determine whether the program helps to improve the conditions of the beneficiary population in terms of school attendance, family consumption and health practices. The evaluation showed that effectively the program helped to increase school attendance in both rural and urban areas, had positive impacts in terms of the frequency of feeding small children and the adoption of protective breastfeeding practices by parents and caregivers of the children benefitting from the program (Attanasio and Pellerano, 2012).

In the evaluation stage it is necessary to monitor the value of the socioeconomic variables on which the public policy seeks to have an impact.

Similarly, the National Council of Evaluation of Social Development Policy (CONEVAL) in Mexico carries out rigorous evaluations of social development programs and actions of the Federal Government that form part of CONEVAL's inventory of Federal Social Development Programs and Actions, as well as social policy and diverse strategies. It presents a list of reports of diverse institutions where it has tested the effects of programs.

In Costa Rica, the Ministry of National Planning and Economic Policy (MIDE-PLAN for the initials in Spanish) carries out evaluations aimed at monitoring rather than perform impact evaluations. This ministry presents weekly reports to certain public institutions about the advance in the execution of goals established each year with respect to associated strategic and institutional actions. These reports include a regional section in which strategic goals are analyzed disaggregated regionally. The governing bodies of each sector conduct self-evaluation, assessing performance or advance in annual strategic goals at the sectorial, institutional and regional levels, assigning classifications like "satisfactory advance", "need for improvement" and "critical lag". Their results are presented to MIDEPLAN, where they are analyzed and reports are prepared including not only evaluations but also recommendations.<sup>8</sup>

<sup>8.</sup> These reports are available at http://www.mideplan.go.cr/

A flexible salary structure that links salaries to career development and the efforts made by workers can attract better quality bureaucrats and encourage good performance. Finally, the System of Management Evaluation and Control of DIPRES in Chile, mentioned above, promotes the development of follow-up indicators, the evaluation of diverse dimensions of public policies: institutional, costs and efficiency, efficacy or compliance with objectives and impact on development objectives. In the Program Evaluation Section there are reports on distinct programs and institutions (Government Program Evaluation, EPG) which in the majority of the cases includes an evaluation of: 1) the "design", that is, the main problem the policy seeks to resolve and its correct identification, the definition of the target population and its clarity; 2) the "organization and management", that is, the institutional quality to carry out the program (e.g. the number of professionals, the organizational structure, etc.); 3) "efficacy", that is, meeting objectives at the level of components, purposes and ends; 4) the "quality" with which public services are provided; 5) "economy", that is, the sources and uses of financial resources and budgetary execution, and 6) "efficiency", that is, performance in terms of efficiency indicators/results, distinguishing efficiency at the level of intermediate and final results, at the level of activities and/or components and the level of administrative expenditures. Every report ends with an analysis of "global performance" and recommendations. As well, the final report includes commentaries and observations by the responsible institutions, constituting feedback from diverse agencies. DIPRES also publishes impact evaluations of programs that determine the magnitude of the impact on beneficiaries of public programs.

In synthesis, these performance indicators serve for state agencies to improve the design and do follow-up and evaluations of the results of their programs. While they do not directly measure capacities but rather products and results of them, they can be useful for identifying aspects and activities throughout the cycle of production of public goods or policy implementation that could be failing.

#### Main messages of the report

An effective state requires capacities for the design and implementation of and learning from policies. Among these capacities are notably the bureaucracy as a crosscutting actor in the design and implementation of policies, public purchasing systems as a crucial instrument in the implementation stage, citizen participation as an ingredient in the process of public accountability of the State that is fundamental for improving policies and, finally, the transformation of the experiences of policies into knowledge and learning that allows for increasing effectiveness. The main messages of this report are organized in terms of these four elements:

Remunerate bureaucrats well and encourage their efforts. A fundamental determinant of State capacity is the quality of the bureaucracy. A flexible salary structure allows linking salary and career development to the competencies and efforts of the worker, which can attract better bureaucrats and encourage better performance.

A good bureaucracy requires qualified, honest and motivated public employees. But a good bureaucracy also requires a structure of incentives that encourage efforts to improve performance. In this sense, the compensation mechanisms defined in the employment contract, with their effects on attracting and retaining bureaucrats, becomes a key instrument for a quality bureaucracy.

Combining monitoring mechanisms with greater transparency improves the efficiency of public procurements.

The compensation schemes of Latin America bureaucrats present three fundamental characteristics. First, there is salary differential in favor of the public sector, which is greater among women and which persists even after discounting the effect of the characteristics of the worker like education and work experience. This differential decreases at the level of qualification of the worker, to the point of being negative among men with higher levels of education. Second, the public sector salary increase very little over the working career, and the advance of workers in the hierarchy are not always determined on the basis of individual merit. Third, mechanisms of payment for performance are relatively unused in relation to what occurs in the private sector.

These characteristics have implications in terms of the type of workers that the public sector attracts (and retains) and their performance. The reversing of the salary gap in the upper part of the skill distribution generates problems of recruitment and retention of the most qualified workers. While this problem is attenuated in the case of workers with intrinsic motivations for public service, it does not cease to be a concern. As well, many of the more qualified workers that remain in the public service show dissatisfaction with their salaries, which does not favor good performance and can even give way to dishonest practices.

The relative salary compression and the lack of merit-based career development in the public sector have similar consequences: qualified workers that value career development leave and those that remain in the public sector are discouraged from making any effort.

Finally, evidence shows that schemes of payment for performance, applied in the appropriate context and with a good design, can favor greater effort. This requires metrics of performance that are relatively easy to measure, difficult to manipulate and consistent with organizational goals. If not, they can be counter-productive. The evidence indicates that these schemes can attract more qualified workers that are more willing to make efforts and even with more intrinsic motivations.

Combining control and transparency for better purchasing. Combining monitoring and oversight mechanisms with greater transparency can generate the appropriate incentives to improve the efficiency of public procurements.

In addition to human and financial resources, policy implementation requires a system of public purchasing capable of providing the necessary inputs in

The accountability of the State to its citizens is an effective tool to improve the quantity and quality of public goods.

sufficient quantity and quality and in a timely manner. Inappropriate control mechanisms or the lack of incentives that promote correct behavior can result in not maximizing the quality or quantity of public goods given the assigned resources.

This can happen because the public employees in charge of public procurements make less than optimal effort or because inefficiency emerges from the characteristics of the system itself, resulting in the waste of resources. Alternatively, inefficiency can be generated by acts of corruption. In both cases not only are public resources misspent, but also the legitimacy of institutions of the State are put at risk.

The evidence suggests three sets of measures to increase the efficiency of public purchasing systems. First, to establish mechanisms of monitoring and oversight allow for detecting and punishing acts of corruption, and consequently discourage them. Audits, for example, reduce the incidence of irregularities in the processes of public purchasing, providing they are not anticipated by the actors. Mechanisms of monitoring are more effective in reducing the incidence than other policies of incentive like increasing the salaries of bureaucrats in charge of making public purchases, although they can be even more effective when they are combined with this type of incentive. This is important because an excess of controls can lead to institutional paralysis if public workers are faced with a constant threat of punishment by institutions of control. Consequently, a balance should be sought between control and autonomy.

Second, encouraging competition among suppliers not only increases the efficiency of the system but also decreases potential profits and the probability of corruption.

Finally, increasing transparency in public procurement systems can reduce corruption and increase efficiency. In particular, making public the results of audits allows for the participation of citizens as a mechanism of external control.

**Promoting citizen participation to improve the effectiveness of accountability.** The accountability of the State to the citizenry constitutes a powerful tool to improve public management. Thus, it is key to achieve a more direct and frequent relationship between citizens and the bureaucracy in charge of the provision of public goods and services.

Citizen participation is an important external control factor that helps to improve the performance of the State. This participation can take the "long accountability route" (pressuring politicians, generally via elections, to control and encourage providers of goods and services) or by the "short accountability route" (interacting directly with suppliers). The two routes should be complementary.

Electoral participation in Latin America is relatively high. However, the available non-electoral routes are underutilized for several reasons, among them lack of knowledge about their existence or functioning, a perception of the limited effectiveness of these mechanisms and of the State responding to demands, or of the high costs of interaction with the State.

New mechanisms and tools have emerged as promising alternatives for encouraging more and better citizen participation. New information and communication technologies reduce the costs of coordinating among citizens for collective action as well as the costs of interacting with bureaucrats. There are also a means for the rapid and broad diffusion of information about the performance of the State.

The management of public policies constitutes a permanent source of valuable experiences and learning to increase the effectiveness of the State.

Managing knowledge and generating learning for better management. The management of public policies constitutes an ongoing source of experiences that can become valuable knowledge and learning to improve the effectiveness with which public resources are employed.

These opportunities to generate knowledge are most often not taken advantage of, in part because the process of generating knowledge in the area of public management requires submitting initiatives to rigorous evaluations and decision-makers may not have incentives to do this.

Evaluating a policy can result in important benefits for those who formulate policies, the responsible agency or government, other decision makers and ultimately all of society. A larger pool of knowledge should result in more effective initiatives. However, there are also higher risks that, unlike the benefits, are concentrated in those responsible for the use of public funds, whether in terms of loss of political support or loss of reputation.

How then to strengthen the generation of knowledge about the use of public resources? Efforts toward increasing expected benefits or reducing the costs of evaluating have the effect of increasing the probability that authorities are open to undertaking evaluations.

However, the generation of knowledge does not necessarily mean that this knowledge is applied in the management of resources. For knowledge to become learning an institutionality is necessary that favors decision-making based on the best available evidence, with the objective of achieving more and better public services. More autonomy, a more favorable environment for innovation, an adequate communicational culture and the availability of resources to carry out the proposed changes are some of the factors that favor decisions for change.

#### **Conclusions**

The necessary State capacities to improve the design, implementation and learning from policies involve many elements. They include hiring schemes and civil service regulations that select public employees and workers that have the required technical skills and aptitudes for the assigned work, and that also encourage them to maximize their efforts. It is also important that the necessary financial resources are assigned, not only to sustain these staff hirings, but also the public procurements that facilitate access to the inputs required for the production of public goods and services. These public hirings and purchases should be subject

to regulations and internal control organisms that ensure efficiency and the good use of resources. As well, public management can be improved in terms of efficiency and efficacy through accountability and citizen participation. To strengthen citizen participation it is necessary to disseminate adequate information about the performance of the State and empower the citizenry to make their participation more effective. Likewise, state capacities can be refined by establishing monitoring and evaluation mechanisms that allow for learning from experience and generating knowledge that serves to improve the design and implementation of public policies.

Governments in the region are aware that the deficit in state capacities limits their effectiveness in responding to the demands of citizens and that this problem must be addressed adequately. Evidence of this are the efforts in recent years to establish performance indicators both in the management of budgets and the implementation of specific public programs and services. This focus attempts to orient government action toward the achievement of results, and to do this, to generate more "micro" indicators that are adapted to the production of public good and services (indicators of inputs, processes, outputs and outcomes). This is an important first step in the objective of constructing a more effective and transparent State.

However, there is still a long way ahead. First, the adoption of this style of public management in the region is still incipient. Few countries are adopting it and where it is adopted there is limited coverage in terms of budgetary items and the levels of government involved (with the possible exception of Chile). Second, these practices allow for detecting flaws in the different stages of the production cycle of a specific public service or good and, consequently are better than aggregate measures. In many cases they continue to represent indicators of results (e.g. the number of scholarships awarded, the total of resources used, etc.) without reporting on the presence or absence of determined public capacities (e.g. the level of effort made by employees, the presence or absence of key inputs, etc.).

To know what are the determinants (capacities) that explain their results, public agencies and institutions should strengthen their processes of qualitative and quantitative evaluation. Although Latin America countries have advanced in establishing institutions that promote evaluation throughout public administration, to make evaluations into a true management instrument, the public employees that carry out initiatives should be involved. Both evaluator and evaluated should cooperate with the goal of generating knowledge that can be applied to improve the capacities of the state and the quality

# THE BUREAUCRACY IN LATIN AMERICA: COMPETENCE, MOTIVATION AND INCENTIVES

**Chapter 2** 

#### Chapter 2

# THE BUREAUCRACY IN LATIN AMERICA: COMPETENCE, MOTIVATION AND INCENTIVES<sup>1</sup>

"If you pick the right people and give them the opportunity to spread their wings and put compensation as a carrier behind it you almost don't have to manage them".

Jack Welch

#### Introduction

All public policies are implemented through a bureaucracy. Consequently, to understand the capacity of the State to implement public policies it is necessary to understand the bureaucracy. Limited technical capacities or the lack of appropriate incentives can result in the failure of initiatives that in another context would be successful. In contrast, motivated public employees committed to the aims of public organizations can be factors of success in implementation: the bureaucracy is fundamental.

On average, the bureaucracy in Latin America represents 12% of the labor force, ranging from 8% in El Salvador to close to 20% in Argentina and Venezuela. And the salaries of bureaucrats account for around one third of government spending in the region. This evidently implies a significant budgetary effort. However, although the quality of the public services is not independent on the size of the bureaucracy, its composition is more important, as are the norms and procedures that guide, encourage or limit the actions of bureaucrats.

A good bureaucracy certainly has qualified, honest and motivated public servants. But as well as good bureaucrats, a good bureaucracy requires a structure of incentives that stimulate efforts to improve performance. The compensatory conditions established in the labor contract are key because they determine the mean levels of remuneration and the dynamic of this remuneration over the course of working careers, as well as determing whether remuneration influences workers' performance. In this sense, compensation mechanisms, with their effects on attracting and retaining bureaucrats and on performance, are a key instrument for a bureaucracy of quality.

This chapter explores areas for improving the quality of the bureaucracy in Latin America by improving compensation schemes. We seek to contribute to the debate about the importance of the bureaucracy for the State through a systematic evidence-based analysis of the public and private sector compensation schemes in the countries of the region and their importance in the selection of bureaucrats and the correct provision of incentives.

<sup>1.</sup> This chapter was prepared under the direction of Fernando Álvarez and Pablo Brassiolo, with the research assistance of Paola Pérez and Carlos Rodríguez.

The employment contract of public sector workers contrasts with that of private sector workers in several aspects: it is more secure, more stable throughout economic cycles, and offers more non-wage benefits. As well, working hours are shorter and in general salaries are better. However, salaries tend to increase less as the worker progresses through his/her career and are less related to performance.

The gap between public and private salaries is the first focus in this chapter. On average, public sector workers receive higher salaries than private sector counterparts, a difference that is maintained even after discounting the effect of the higher levels of education in the public sector, as well as other characteristics of the workers. Do salaries in the public sector promote the good selection of workers and clear incentives to make effort? Some clues say that they do not. For example, the salary differential between the public and private sector are reduced with education and becomes negative for highly educated workers, which is a problem for attracting and retaining these workers in the public sector.

Thus, the analysis points to the dynamic of salary growth, while the evidence shows that salaries in the public sector tend to grow very little over time. This suggests that a potentially attractive option at one point in the career of a worker can cease to be attractive once he/she has accumulated experience and learning or has discovered his/her real potential. Once again, this could be an obstacle to retaining the best and could generate dissatisfaction among those that remain.

As well, the potential of tying the compensation of bureaucrats to performance has been studied. Can a pay for performance scheme help the public sector in selecting better bureaucrats and in encouraging effort? In general these schemes are not common in the public sector, but when they do exist they imply higher salaries for the affected workers, in part because of the characteristics of the workers that are attracted and in part because of the effort they make. Nevertheless, these schemes also have their risks. Good design and application in the appropriate context are the keys to the success of these schemes.

Finally, it is worth noting that efforts were made in this chapter to measure certain aptitudes, motivations and skills of workers based on the 2014 CAF Survey, conducted in 10 of the main cities in the region.<sup>2</sup> Two experiments were carried out in the framework of the survey aimed at evaluating how information about the public/private sector salary gap and the relatively scarce use of pay for performance schemes in the public sector in the region can affect preferences for employment in the public sector. The work was also supported with national household survey data from the Socioeconomic Database for Latin America and the Caribbean (SEDLAC), which was pro-

<sup>2.</sup> The survey was conducted in Bogotá, Buenos Aires, Caracas, Mexico City, Panama City, La Paz, Lima, Montevideo, Quito and São Paulo, with samples of 1,000 urban households in every city, with the exception of Panama City where 600 interviews were conducted.

cessed in a study commissioned especially for this report and prepared by Arcidiácono et al. (2014).<sup>3</sup>

A good bureaucrat should be competent and have integrity and motivation for public service.

#### The good bureaucrat

A good mathematics teacher should know about mathematics and how to teach mathematics. However, a good policeman does not have these skills, or even a good English teacher. A doctor in physics could be an excellent scientist and at the same time a terrible physics teacher. The correspondence between the qualifications of a public functionary and her/his tasks is central to improving the bureaucracy. The suitability of the bureaucrat is the number one requisite.

A corrupt functionary exploits a budget. A corrupt agency looses effectiveness<sup>4</sup> and legitimacy<sup>5</sup>. A company that pays bribes can continue polluting the environment. A public project that ceases to be profitable because of corruption is not carried out. Impunity and acceptance of dishonest conduct and the absence of internal control mechanisms are a mix that can easily lead dishonest public employees to corruption, thus affecting development.<sup>6</sup> The number two requisite of a good bureaucrat is integrity.

Finally, a teacher will be a good teacher if he/she loves teaching and is committed to this cause. People do their jobs for two types of motivations: extrinsic motivations, related to monetary or other compensation; and intrinsic motivations, originating in the pleasure, interest or sense of purpose that one derives from a particular activity. The intrinsic motivations of a bureaucrat can emerge from his or her preference for working in the public sector, the desire to contribute to the mission of public organizations, or the inclination to help the beneficiaries of these organizations in sectors like health or education (Delfgaauw and Dur, 2010). Requisite number three for a good bureaucrat is motivation.

According to Perry and Wise (1990) motivation for public service is understood as "the willingness of individuals to respond with interest exclusively

<sup>3.</sup> The Socioeconomic Database for Latin America and the Caribbean (SEDLAC) is a joint project of the Center for Distributive, Labor and Social Studies (CEDLAS) of the Universidad Nacional de La Plata in Argentina and the Latin American Poverty and Gender Group of the World Bank. This work employs data from 15 countries in the region - Argentina, Bolivia, Brazil, Chile, Costa Rica, Colombia, Ecuador, Honduras, Mexico, Panama, Peru, Paraguay, El Salvador, Uruguay and Venezuela- for the period between 1992 and 2012.

<sup>4.</sup> Ferraz et al. (2012) showed that corruption in the educational area of municipalities in Brazil has a negative impact on the performance of students, because teachers in corrupt municipalities receive less training and fewer resources like computers and laboratories.

<sup>5.</sup> The lack of trust in the police or the justice system that predominates in many Latin American countries, for example, reduces the potential of programs to combat crime that require citizen cooperation (see CAF, 2014).

<sup>6.</sup> See Olken and Pande (2012) for a review of studies that analyze the impact of corruption on efficiency in developing countries.

in serving public organizations or institutions".<sup>7</sup> According to these authors, persons highly motivated for public services have a more marked altruistic orientation and greater interest in social service. This is good news because when these motivations exist, it has significant implications for the selection, remuneration and retention of human resources in public organizations.

First, when there are intrinsic motivations, workers are more satisfied, stay longer in their jobs, develop their skills in their career and accumulate abilities that allow them to perform better. Moreover, as they derive more satisfaction by working in public organizations, they may even be willing to work for less compensation (Perry and Wise, 1990; Dixit, 2002).

Second, motivation for public service can mitigate common problems of agency in labor relations (Perry *et al.*, 2010; Besley and Ghatak, 2005; Bénabou and Tirole, 2006). If there is a good correspondence between the worker's preferences and his/her tasks, it is less necessary to introduce pecuniary incentives, the latter being costly (Besley and Ghatak, 2005). In fact, workers motivated for public services are willing to make more effort and contribute more to the institutional mission when their tasks have social meaning or content.<sup>8</sup>

How these three desirable characteristics come together in the provision of different public goods and services is not very clear. For example, honesty and ethical conduct seem to be most important in occupations where there are more opportunities for corruption, as is the case of the administration of customs, tax collection and licensing. However, just as a healthy diet requires the presence of different food groups, a good bureaucrat combines suitability, honesty and motivation for public service.

#### The Latin American bureaucrat

How does the typical Latin American bureaucrat compare to typical worker in the formal private sector? And how does he/she compare with bureaucrats from other regions of the world? As this chapter shows, the Latin American bureaucrat has distinctive characteristics in several respects.

<sup>7.</sup> There are other definitions of "motivation for public service" but in all cases they involve a preference for activities that benefit others and contribute to the wellbeing of the society. As well, there are related concepts like "altruism" (Rainey and Steinbauer, 1999; François, 2000) and "pro-social motivations" (Grant, 2008).

<sup>8.</sup> Petrovsky (2009) reviewed this literature, referring basically to developed countries.

<sup>9.</sup> The comparison is with the formal private sector because the public sector is fundamentally a formal employer. Workers are considered to be in the formal private sector when they work for private firms with at least five employees. This definition of formal employment follows the "productive" criteria that use the size of the firm as an important variable to distinguish between formal and informal firms (ILO 1991; Arcidiacono et al., 2014). Nevertheless, it may be more appropriate to compare the public sector to larger and more efficient private sector firms rather than simply firms with five or more workers.

# TECHNICAL CAPACITIES, COMPETENCE AND DEMOGRAPHIC CHARACTERISTICS

The *technical capacities* of workers are defined by their educational level, cognitive and non-cognitive abilities and work experience. But to be effective, they should be suitable for their jobs. This is precisely what is defined as job competence, that is, the suitability to do a job effectively by having the needed qualifications. With respect to the demographic characteristics of the bureaucracy, it is also interesting to consider the age and gender of workers, given that the public sector should exemplify the principles of equality of opportunity and work equity. As well, the gender composition of the bureaucracy can affect the portfolio of public policies that are implemented. For example, Funk and Gathmann (2015) show that a greater presence of women among policy-makers favors increased spending on environmental protection and reduced military spending.

Beginning with their technical capacities, public employees are better educated than workers in the rest of the economy. On average, 46% of public sector employees in the region have completed higher education, which is more than double the percentage of formal private sector workers (Table 2.1, p. 58). In Peru, a notable 67% of public employees have higher education; followed by Colombia, Ecuador and Bolivia, with 60% of public employees with higher education. At the other extreme, only 27% and 30% of public employees in El Salvador and Honduras, respectively, have higher education.<sup>12</sup>

However, more education does not always mean more intelligent. The 2014 CAF Survey included a test that provided an intelligence score between 1 and 12. The average score for public sector workers was 7, while the average for formal private sector workers was 6.7.13

In terms of demographic characteristics, the average age of public employees in almost all the countries in the region is 40 years (37 in Paraguay and 43 in Peru, on average), which is five years older than the average in the formal private sector.

On average, 46% of public sector employees in the region have completed higher education, which is more than double that in the private sector.

<sup>10.</sup> There are many definitions of professional competence; for a discussion, consult Vargas, F. (2004).

<sup>11.</sup> The composition of public employees in terms of these characteristics can be influenced by how these characteristics are associated with a greater or lesser preference for the public sector. More educated workers or more skilled workers may prefer to work in the private sector if their abilities are better remunerated. Older workers may prefer the public sector because it provides more stable employment and better non-monetary benefits, above all, retirement benefits (Falaris, 2004; Jovanovic and Lokshin, 2004); or may not prefer the public sector if it does not offer good career possibilities, and consequently does not reward their accumulated experience. Women may prefer public employment because of the shorter working hours and the greater facility to reconcile family and working life; and because of greater vocation for professions that are over-represented in the public sector, like those in education and health care (Voinea and Mihaescu, 2012).

<sup>12.</sup> The country ranking changes if we consider the education gap between public and private sector workers. The country with the greatest education differential in favor of the public sector is Costa Rica, where the percentage of public employees with higher education is 3.4 times as high as that of the formal private sector. The situation is similar in Honduras and Uruguay, where the ratio is almost 3 times that of the private sector. At the other extreme are Bolivia, Chile, Panama and Peru, all with a percentage of public employees with higher education that is less than twice that in the formal private sector (Table A.1).

<sup>13.</sup> The difference, although small, is statistically significant at 5%.

Half of them are women. Brazil has the highest percentage of women in the public sector (58%), while El Salvador and Peru have the lowest (45%). In all cases, the percentage of women is higher than that in the formal private sector, which on average is only a third.14

Table 2.1 Technical skills, competencies and demographic characteristics in Latin America

	Formal private sector	Public sector
Completed higher education (% of the total) <sup>a/</sup>	20	46
Crystallized intelligence index (scale of 1-12)b/	6.7	7.0
Average age (years) <sup>a/</sup>	35	40
Women (% of the total) <sup>a/</sup>	34	51
Appropriate qualification (% of the total) <sup>b/</sup>	81	79
Overqualified (% of the total) <sup>b/</sup>	11	12
Underqualified (% of the total) <sup>b/</sup>	5	6
Requires different training (% of the total) <sup>b/</sup>	4	4
Received training during the last year (% of the total) <sup>b/</sup>	35	48
a/ National Household Survey data processed by Arcidiáo o/ 2014 CAF Survey.	cono et al. (2014).	
Source: the authors, with data from Arcidiácono et al. (	2014) and the 2014 CAF Survey.	

The percentage of women in the public sector has gone from 40% at the beginning of the 1990s to 51% at present. While this notable increase in large part reflects the major entry of women into the labor force, it exceeds the increase in the formal private sector, which was from 30% to 34%15, as well as any increase in the informal private sector.

Finally, what can be said about the competence of public sector workers? Data from the CAF Survey do not show major mismatches between the qualifications of workers and the requirements for their tasks, at least in the opinion of the workers themselves. On average, 79% of public employees in the main Latin America cities say they are adequately qualified for their jobs, which is well in line with the 81% of workers in the formal private sector that state the same.16 The rest is divided in the two sectors in 12-11% that think that they are over-qualified, 6-5% that admit they need more training, and 4% that think that their training was not appropriate for their work.<sup>17</sup> Nevertheless, public employees have more opportunities for training offered by their employers, with 48%

<sup>14.</sup> The data per country is presented in Table A.1.

<sup>15.</sup> Among the possible explanations of greater participation of women in the public sector is the greater flexibility offered for reconciling work and family, as well as the policies of positive discrimination implemented in many countries in the region.

<sup>16.</sup> In fact, these percentages are not statistically different.

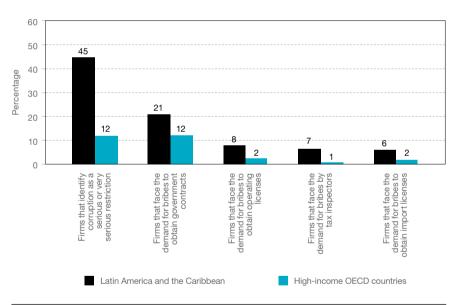
<sup>17.</sup> With a breakdown by educational level, a certain decoupling appears among more educated workers, a smaller percentage say they have the right qualifications, while a larger percentage consider themselves overqualified.

stating they have taken a training course in the last year, much higher than the 35% of workers in formal private sector.<sup>18</sup>

#### **INTEGRITY**

Corruption is perceived as an important problem by different social actors. According to the World Bank Business Survey, 45% of businesses in the region consider corruption a serious limit for their development compared to only 12% in high-income countries in the Organization for Economic Cooperation and Development (OECD). There is also a much higher percentage of firms that resort to bribery in different contexts in their interaction with the public bureaucracy, like obtaining a government contract or an operating or import license and paying taxes (Chart 2.1).

**Chart 2.1** The problem of corruption from the perspective of firms from different regions of the world<sup>a/</sup>



a/The countries included in the Latin American and Caribbean block are: Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Santa Lucia, San Vicente and the Grenadines, Surinam and Venezuela. The high-income OECD countries are: Chile, the Czech Republic, Estonia, Germany, Greece, Ireland, South Korea, Poland, Portugal, Spain and Sweden.

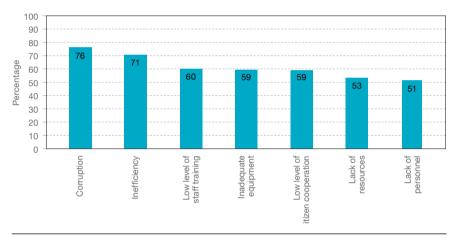
Source: the authors, with data from World Bank Enterprise Surveys (most recent year for each country for January, 2015).

Some 45% of companies in the region identify corruption as a serious limiting factor to their development, in contrast to only 12% in high-income OECD countries.

<sup>18.</sup> This difference in the level of training between the public and formal private sector is partly due to differences in the composition of workers in terms of education in virtue of the typical complementarity between on-the-job training and the formal education of the worker. In fact, if the analysis is restricted to employees with completed higher education, the differences between the two sectors in the percentages of workers that took a training course in the last year goes down (53% in the public sector and 47% in the formal private sector).

Householders also perceive high levels of corruption, with 76% of respondents to the 2014 CAF Survey agreeing or totally agreeing that corruption is a problem for providing quality public services, above the 71% and 60% that respectively see inefficiency and low levels of training of public employees as problems (Chart 2.2).

**Chart 2.2** Perception of the citizenry about problems to offer quality public services in Latin American cities (2014) <sup>a/b/</sup>



a/ The chart reports the percentage of persons that "agree" or "totally agree" with the following: To what extent do you agree that the public sector has the following problems in providing good services: Lack of personnel, low level of staff training, obsolete equipment or lack of equipment, scarce resources, low level of citizen cooperation, corruption and inefficiency.

b/ Cities: Buenos Aires, La Paz, São Paulo, Bogota, Quito, Mexico City, Panama City, Lima, Montevideo and Caracas.

Source: the authors, with data from the 2014 CAF Survey.

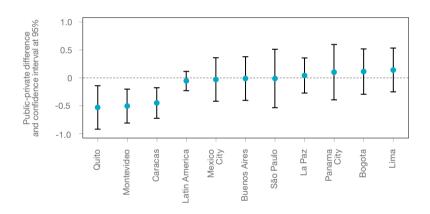
Beyond the institutional factors that can favor corruption in an institution, a country, or a region (Olken and Pande, 2012)<sup>19</sup>, personal factors can lead some individuals and others to be corrupt (Besley, 2005). Given that persons are differentiated by their tolerance to corruption in function of their preferences and values, it is important to attract persons with integrity to public service. What have the countries in the region achieved in this respect?

To assess attitudes about corruption among citizens of the main Latin American cities, the 2014 CAF Survey asked respondents their degree of agreement with the statement "I would never denounce a co-worker for bad conduct or corruption". The guestion has five possible responses ranging from (1) "totally

<sup>19.</sup> Some studies are focused on compensation mechanisms for their effects on encouraging corruption (Van Rijckeghem and Weder, 2001; Di Tella and Schargrodsky, 2004), or their effects on the selection of bureaucrats (Ferraz and Finan, 2009). Other studies emphasize the role of monitoring mechanisms and the existence of sanctions (Olken, 2007), while others analyze the role of punishment through voting (Ferraz and Finan, 2008), an issue that is analyzed in depth in Chapter 4.

disagree" to (5) "totally agree". On average, tolerance to corruption among public employees in the region is somewhat lower than among private sector employees. In particular, 30% of public employees state they completely disagree with the statement, slightly above the 25% of private sector workers. But to compare the two sectors, it is necessary to discount the effect of other characteristics of workers that can be related to tolerance to corruption and the sector in which the worker is located. This occurs, for example, with education. Workers with higher levels of education tend to be less tolerant to corruption and have a higher probability of being in the public sector. When the effect of the observable characteristics of the workers, like gender, age and educational level, are discounted, there are no statistically significant differences between public and private sector employees in most of the cities included in the survey. The exceptions are Quito, Montevideo and Caracas, where public employees are less tolerant to corruption than private sector workers (Chart 2.3).

Chart 2.3 Tolerance to corruption in Latin American cities (2014)a/



a/ The chart reports the difference in conditioned means and confidence intervals at 95% estimated by ordinary least squares for the indicator of tolerance to corruption among public and private sector workers, controlling for the gender, age and educational levels of workers. The indicator of tolerance to corruption is constructed based on responses to the question: To what extent do you agree with the statement "I would never denounce a co-worker for bad conduct or corruption"? and ranges between 1 and 5, where 1 is "totally disagree" and 5 is "totally agree". A higher value of the indicator is interpreted as higher tolerance to corruption.

Source: the authors, with data from the 2014 CAF Survey.

The analysis implies that except for a few cases, the public sector is not attracting workers with more probity than those in the private sector. Given the importance of integrity for bureaucrats, more effort should be made to ensure better selection in this dimension.<sup>20</sup>

<sup>20.</sup> This analysis does not allow for concluding in which cities there is more corruption, which emerges from the interaction between the integrity of public employees and the contexts in which they operate.

Public workers seem to have more social motivation than their counterparts in the private sector in the region as a whole and in half the countries considered.

#### **INTRINSIC MOTIVATIONS**

Are public employees more motivated for public service than employees of the private sector? Two questions from the World Values Survey<sup>21</sup> provide insights into this question. The first asks the degree of agreement with the statement "It is important to do things for the good of society", which is interpreted as a measure of pro-social motivations. The second refers to the degree of agreement with the statement "It is important to help the people nearby; to care for their wellbeing", which can be interpreted as a measure of altruism.<sup>22</sup> The responses are classified in 6 levels, where a higher value indicates a higher level of agreement with the statement in question.

To determine whether public employees are more motivated for public service than their private sector counterparts, we can compare mean responses according to sector of employment, conditioned by certain characteristics of the workers. It is important to condition for the observable characteristics of the workers because, as was shown in the previous section, public employees are more educated, older and more likely to be women, characteristics that can be associated with higher levels of social motivation or altruism.<sup>23</sup> The analysis dealt with the eight Latin American countries included in the last survey wave between 2010 and 2012: Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru and Uruguay.

Controlling for these characteristics, public sector workers appear to be more motivated socially than their private sector counterparts, in the region as a whole and within each country that was considered (Chart 2.4, left panel).<sup>24</sup> The differential in the metric of altruism is also positive for the region and for three of the countries considered, but is only statistically significant for Colombia.

In contrast, in high-income OECD and non-OECD countries<sup>25</sup> the difference in intrinsic motivations between public sector and private sector, subject to the same controls, is much more marked (Chart 2.5). There is much to improve in Latin America in terms of attracting and retaining workers with more social motivations and altruism.

<sup>21.</sup> The World Values Survey is a representative survey of workers around the world, with information about social, cultural and political values, as well as the demographic characteristics of workers. The survey distinguishes between public and private sector employees and contains a series of questions that can be used as measures of pro-social motivations, which can be associated with the decision to work in the public sector.

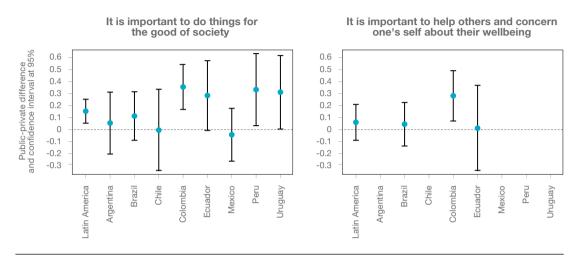
<sup>22.</sup> This measure of altruism has also been used by Dur and Zoutenbier (2015) to analyze the effect of workers' preferences on occupational decisions. However, as a measure of altruism it is somewhat unsatisfactory given that the statement does not refer to helping anyone, but rather to close persons.

<sup>23.</sup> That is, the analysis attempts to determine whether, considering two persons with the same education level, gender and age, the one with more interest in public service or altruism is the one that is also more inclined to work in the public sector.

<sup>24.</sup> The differences, although they are not quantitatively large, are statistically significant in Colombia, Peru and Uruguay at a level of significance of 5% and in Ecuador at a level of 6%.

<sup>25.</sup> This grouping of countries is based on the classifications used by the World Bank.

**Chart 2.4** Differences in motivations between public and private sector workers in several Latin American countries (2014)<sup>a/b/c/</sup>

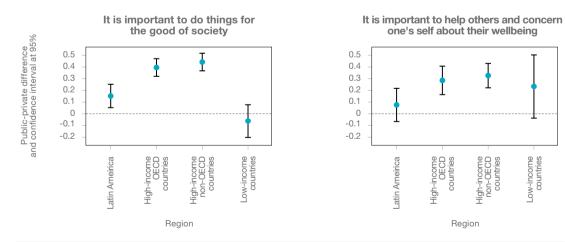


a/The chart reports the differences in conditioned means and confidence intervals at 95% estimated by ordinary least squares in two measures of public service motivations among public and private sector employees, controlling for sex, age and educational level. The two measures of motivation used ranged from 1 to 6, where a higher value of the indicator is associated with higher motivation.

b/The number of observations per country is 737 in Argentina, 1,095 in Brazil, 720 in Chile, 1,339 in Colombia, 335 in Ecuador, 1,046 in Mexico, 822 in Peru, and 790 in Uruguay, which comes to a total of 6,884 cases. The participation of the public sector in the total of workers is 15%. c/The question reflected in the chart on the right was used only in Brazil, Colombia and Ecuador, because of which only the coefficients in these countries are reported.

Source: the authors, with data from the World Values Survey wave 6 (2010-2014).

Chart 2.5 Differences in motivations between public and private sector employees according to the region<sup>a/b/</sup>



a/The chart reports the differences in conditioned means and confidence intervals at 95% estimated by ordinary least squares in two measures of motivations to public service among public and private sector employees, controlling for gender, age and education level. The two measures of motivation used ranged between 1 and 6, where a higher value of the indicator is associated with higher motivation.

b/The set of high-income OECD countries is composed of Australia, Germany, Japan, South Korea, the Netherlands, New Zealand, Poland, Slovenia, Spain, Sweden and the United States. The set of high-income non-OECD countries is composed of Bahrain, Cyprus, Estonia, Kuwait, Qatar, Singapore and Trinidad and Tobago. The set of low-income countries is composed of Ghana, Kyrgyzstan, Rwanda and Zimbabwe. Finally, the set of Latin American and Caribbean countries is composed of Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru and Uruguay.

Source: the authors, with data from the World Values Survey wave 6 (2010-2014).

Intrinsic motivations are an important determinant of the efforts and ethical conduct of workers, in particular in the public sector. The intrinsic motivations of workers are important because they can affect their work performance and ethical conduct. In effect, Perry and Wise (1990) and numerous empirical studies<sup>26</sup> indicate that public employees make more effort (and perform better) when they are more intrinsically motivated, even when the monitoring and extrinsic incentives are insufficient. Brewer and Selden (1998) and Lim Choi (2004) found a positive relationship between the level of commitment of bureaucrats with the public service and their ethical behavior.

Latin America is no exception. Intrinsic motivations are an important determinant of workers' efforts and ethical conduct, particularly in the public sector (Box 2.1). It would be a good idea to use them to identify and select appropriate workers for public service, without abandoning institutional arrangements that encourage effort or more generally condition dishonest practices.

#### Box 2.1 The benefits of intrinsic motivations

The data from the 2014 CAF Survey allows for studying the relationship between intrinsic motivations and the effort and ethical conduct of workers. It contains two measures of intrinsic motivation: 1) "motivation for public service" (Perry and Wise, 1990), understood as "the predisposition of an individual to respond to motives present principally or solely in public institutions or bodies"; 2) "pro-social motivations" (Grant, 2008), which refers to the desire to help others".

Second, the Survey includes several questions about attitudes towards work that can be interpreted as measures of the willingness to make effort. In particular, respondents had to indicate their degree of agreement on scale of 1 (totally disagree) to 5 (totally agree) with a series of statements. The statements were: 1) I help new workers even when I am not obliged to do so; 2) I stay late if it is necessary to help; 3) I make suggestions for improvements; 4) I avoid additional tasks and responsibilities (inverse scale); and, 5) I pursue training to improve my performance at work.

Third, it includes a useful question as a measure of attitudes toward corruption, in particular: To what extent do you agree with the statement: "I would never denounce a co-worker for misconduct or corruption."

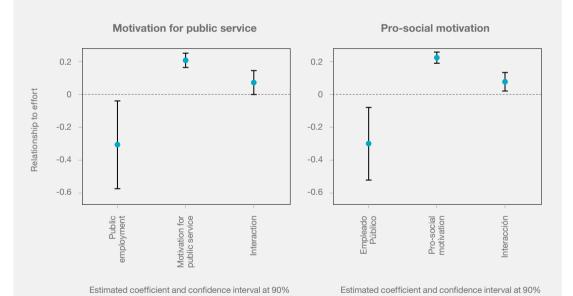
To analyze the relationship between intrinsic motivations of workers and their willingness to make an effort, an equation was estimated by ordinary least squares in which the willingness to make effort (measured as the simple average of responses to the five questions described above) is the variable to be explained and intrinsic motivations, as well as a series of control

<sup>1.</sup> See the appendix for a more detailed description of these constructs.

variables like gender, age, marital state, number of children, education, seniority in the job and city of residence, are the explanatory variables.

The results confirm that intrinsic motivations are an important determinant of the efforts workers make, in particular in the public sector. Chart 1 shows the results when the measures "motivation for public service" (left panel) and "pro-social motivations" (right panel) are used. On average, public employees are less willing to make an effort than formal private sector employees (first coefficient of both panels, from left to right). On the other hand, more intrinsically motivated employees, for whichever of the two measures of motivation, show more willingness to make an effort, and this is valid for both the public and private sectors (second coefficient). Finally, the association between motivations and effort is stronger in the public than in the private sector (third coefficient). That is, having intrinsically motivated employees is important for any organization, but especially for public organizations.

Chart 1 Intrinsic motivations and willingness to make an effort in one's work in Latin American cities (2014)<sup>a/b/</sup>



a/ The chart reports the differences in conditioned means and confidence intervals at 90% estimated by ordinary least squares for the indicator willingness to make an effort, controlled for sex, age, marital status, presence of children under six years of age, education level and city of residence.

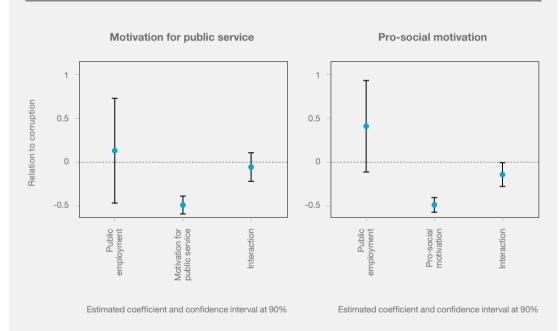
b/ Cities: Buenos Aires, La Paz, São Paulo, Bogota, Quito, Mexico City, Panama City, Lima, Montevideo and Caracas.

Source: the authors, with data from the 2014 CAF Survey.

What about the relationship between intrinsic motivations and tolerance to corruption? In a similar statistical exercise, an equation was estimated by ordinary least squares in which the

variable to explain is the indicator of tolerance to corruption and the explanatory variables are the measures of motivation, together with the aforementioned control variables (Chart 2). The results indicate firstly that there are no differences between public and private sector employees in terms of tolerance to corruption (first coefficient). Second, both greater motivation for public service (left panel) and greater pro-social motivation (right panel) are associated with less tolerance to corruption (second coefficient). Finally, it is not clear if intrinsic motivations have a differential in the public sector (third coefficient). Firstly, higher motivation for public service reduces tolerance to corruption in a similar manner in the public and private sectors. At the same time, higher pro-social motivation reduces tolerance to corruption, especially if the worker is in the public sector.

**Gráfico 2** Motivaciones intrínsecas y tolerancia hacia la corrupción en ciudades de América Latina (2014)<sup>a/b/</sup>



a/The chart reports the differences in conditioned means and confidence intervals at 90% estimated by ordinary least squares for the indicator tolerance to corruption, controlling for the sex, age, marital status, presence of children under 6 years of age, educational level and city of residence.

b/ Cities: Buenos Aires, La Paz, São Paulo, Bogota, Quito, Mexico City, Panama City, Lima, Montevideo and Caracas.

Source: the authors, with data from the 2014 CAF Survey.

Definitively, intrinsic motivations are an important determinant of the willingness to make effort and of ethical conduct; the latter measured as the disposition to tolerate corruption.

Source: the authors

# The civil service and the good bureaucracy

The previous section provides a good view of the typical Latin American bureaucrat. However, as seen in the introduction, a good bureaucracy is more than its bureaucrats; it has an appropriate organizational structure and a battery of standards and procedures that guide, encourage and limit the actions of bureaucrats. Even though intrinsic motivations can promote making effort, it is worth having a structure of incentives in place that, as well as attracting better bureaucrats, contributes to aligning their actions to public objectives. A good bureaucracy requires a combination of the correct persons and the correct incentives.

The articulating axis of these incentives is the civil service system, that is, "the set of institutional arrangements through which public employment and the persons it integrates are linked and managed. These arrangements include written or informal standards, structures, cultural guidelines, explicit or implicit policies, processes, practices and diverse activities with the aim of ensuring the appropriate management of human resources" (Velarde *et al.*, 2014). A good bureaucracy emerges on the basis of a good civil service.

The systematic discussion about the modern principles of the civil service regime begins with the "Weberian model", which emphasizes the selection and promotion of bureaucrats on the basis of their technical competencies, that is, it encourages professionalism and merit-based human resource management. More recently, the model proposed by the New Public Management School suggests introducing mechanisms to align incentives for bureaucrats with organizational objectives, such as pay schemes linked to performance.<sup>27</sup> Finally, some authors emphasize the role of autonomy as a fundamental aspect to take into account in organizational design.<sup>28</sup>

Velarde *et al.* (2014) provide a global analysis of the current situation of civil service regimes in the region and the reform processes undertaken in the last decade or so in some countries based on a common methodology.<sup>29</sup> The resulting diagnostic suggests that while the region has had a positive evolution in recent years, there is still much to improve, in particular in relation to performance management, development and compensation (Box 2.2, see p. 68).

A good bureaucracy requires a combination of the correct persons and the correct incentives. The articulator of these incentives is the civil service system.

<sup>27.</sup> The New Public Management School proposes a private management model for the public sphere that, in certain aspects, contrasts with the Weberian paradigm. In particular, it favors flexible structures (compared to hierarchies) and it is more centered on the citizenry (more than on tasks and functions), with a focus on results and performance-based evaluation (rather than compliance with rules and orders). This focus has acquired force in many developed countries.

<sup>28.</sup> Recent studies highlight the role of autonomy in the quality of government, indicating that the right level of autonomy increases the capacity of the bureaucracy (Fukuyama, 2013). The limited autonomy of public sector management positions has been highlighted as a characteristic of the civil service in Latin America (Longo, 2001). The World Value Survey allowed for approximating autonomy with the following question: On a scale from 1 to 10, how much independence do you have to carry out your work? It was found that a worker in Latin America with a management profile has less autonomy if he/she works in the public sector than in the private sector. Likewise, public sector managers in other regions have more autonomy than their counterparts in Latin America, although the differences are not statistically significant.

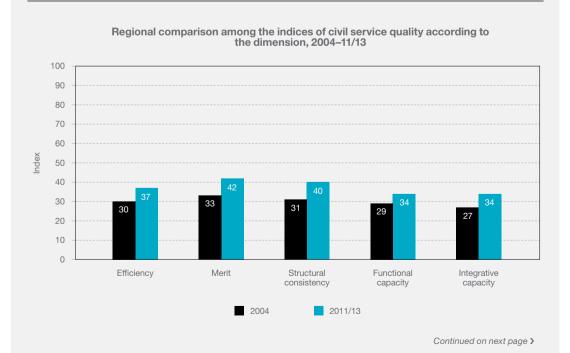
<sup>29.</sup> In a study commissioned especially for this report, lacoviello and Chudnovsky (2015) analyzed the political economy of reform processes in four countries in the region: Argentina, Chile, the Dominican Republic and Peru.

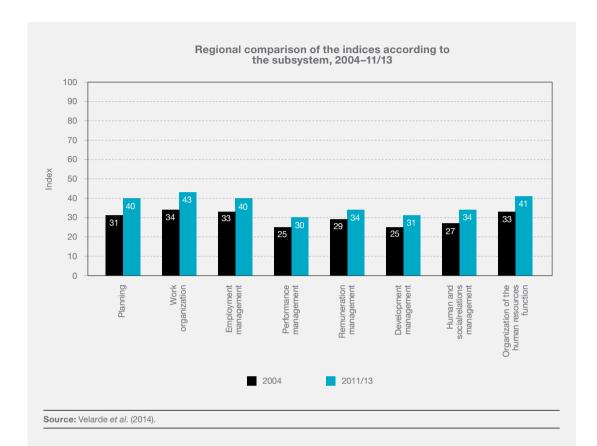
#### Box 2.2 An overview of civil service systems in Latin America

A recent work characterizes the civil service systems in the countries of the region in the context of the principles endorsed by the 2003 Ibero-American Charter of Public Function (see Velarde *et al.*, 2014). To this end, a qualitative assessment was employed with 33 critical points, each linked to one of five dimensions of institutional quality and to one of eight subsystems. The study was applied in 16 countries in the region, with information for 2004 and 2011/2013, depending on the country.

The five dimensions of quality are: merit (guarantee of professionalism and degree of impartiality), efficiency (optimization of investment in human capital), functional capacity (influences the behavior of the bureaucracy), integrative capacity (harmonizes expectations and interests, promotes a sense of belonging and reduces conflicts) and structural consistency (solidity and systematic integration, comprising the development of management proceses, their coherence and the development of directing bodies). Among the eight subsystems, beginning at the upper level, is the subsystem human resource planning as a governing body that defines strategic policies for management of resources in different subsystems. At the intermediate level are the subsystems of work organization (job and qualification description), staff management (hiring and firing), performance management, remuneration management and development management. Finally, a last level includes the subsystems human and social relations management and the organization of the human resources function. Chart 1 summarizes the results, with the ideal value normalized at 100.

Chart 1 Index of Civil Service Quality - 2004 vs. 2011/13





In the last decade civil service systems in the region have improved in terms of the different dimensions of quality and the different subsystems. The composite index in the region went from 30 to 38. Nevertheless, there remains much to improve, in the management of performance, development and compensation.

Source: the authors, based on Velarde et al. (2014)

How can Latin American civil service systems improve? The rest of this chapter, rather than make an exhaustive analysis of the components of these systems, puts one of the key elements under the looking glass, the compensation scheme embodied in the employment contract, and analyzes its effect on the quality of the bureaucracy through the selection of bureaucrats and incentives for better performance.

# WHY DOES THE EMPLOYMENT CONTRACT MATTER? A CONCEPTUAL FRAMEWORK

Both public and private sector labor relations can be understood as an agent-principal problem. In this framework, the employer (principal) delegates the fulfillment of a sequence of actions to the employee (agent) in ex-

A good payment scheme can promote good selection and encourage workers to carry out desired actions.

change for a sequence of pecuniary or other compensations throughout the working relationship. These compensations can depend on the performance of the worker in fulfilling his/her tasks.<sup>30</sup> The compensation scheme determines: 1) the mean levels of compensation; 2) temporal salary dynamics, which shape career incentives; and 3) salary dispersion across states of nature, which can give rise to pay for performance schemes.

The agent-principal problem is affected by information asymmetries. On the one hand, the agents are heterogeneous (for example, among aspirants for a job some are more suitable, motivated and honest) and the principal does not know which aspirants have such characteristics. Consequently, agents can "disguise their type" to take advantage of information asymmetries in a classic adverse selection problem. Although the principal can introduce mechanisms to extract this information, such mechanisms are often imperfect, costly or impractical. At the same time, it is difficult to observe fully the efforts and actions of agents. Consequently, agents can take advantage of information asymmetries and make as little effort as possible in an example of a classic moral risk problem.

A good pay scheme can favor good staff selection and encourage workers to carry out desired actions. A bad scheme can attract undesirable workers, along with causing problems of discouraging the retention of good workers and encouraging low levels of effort and other undesired actions. In effect, the design of the employment contract, and in particular the pay scheme, is key in the context of these problems of information and for improving the bureaucracy through better selection of bureaucrats and better incentives to improve performance.

## THE EMPLOYMENT CONTRACT FOR PUBLIC WORKERS IN LATIN AMERICA

The employment contract for public workers in Latin America contrasts in several respects from that of private sector workers (Table 2.2).<sup>31 32</sup>

<sup>30.</sup> It can also depend on certain probabilistic events like having a child, accidents, reaching retirement age, among others. The parties implicitly internalize possible transitions to unemployment and/or other jobs, that is, the possibility of being dismissed and of using current employment as a trampoline for other jobs.

<sup>31.</sup> In addition to the characteristics highlighted in Table 2.2, it is interesting to note that employment and salaries in the public sector vary less than those in the private sector with the vagaries of economic cycles. For an analysis of the evolution of public and private employment and salaries throughout the economic cycle in Latin American countries, see Arcidiácono et al. (2014).

<sup>32.</sup> The information broken down by country is presented in the appendix.

**Table 2.2** The contract in practice: Some characteristics and differences between employment in the public and formal private sectors in Latin America

Characteristics of the contract	Formal private sector	Public sector
Percentage of workers with a permanent contract (%) <sup>a/</sup>	71	96
Seniority (months) <sup>a/</sup>	58	124
Job stability as a motivation for current jobb/ c/	3.98	4.21
Hours worked per week <sup>a/</sup>	47	42
Monthly salary <sup>a/ d/</sup>	667	918
Hourly salary <sup>a/d/</sup>	3.9	5.9
Gini coefficient (hourly salary) <sup>a/</sup>	0.387	0.369
Percentage of workers with retirement rights (%) <sup>a/</sup>	66	84
Percentage of workers with the right to health insurance (%) <sup>a/</sup>	67	83
Social benefits as a motivation for current jobb/	3.64	3.77
% of workers with pay according to individual performance (%) <sup>b/</sup>	30	22
% of workers with pay according to institutional performance (%) <sup>b/</sup>	24	20
Does your employer offer training courses? (%)b/	40	52
During office hours	63	57
Sharing office hours - non-office hours	17	19

a/ Data from the national household surveys processed by Arcidiácono et al. (2014). Countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Honduras, Mexico, Panama, Paraguay, Peru, Uruguay and Venezuela.

Source: the authors, with data from Arcidiácono et al. (2014) and the 2014 CAF Survey.

First, employment in the public sector is more secure<sup>33</sup>, with a higher percentage of workers with permanent contracts (96% versus 71% of formal private sector workers).

Second, public sector workers have more seniority in their jobs. The average seniority of public employees in Latin America is 124 months; almost double that of formal private sector workers (58 months).<sup>34</sup>

Third, public sector workers work fewer hours. A typical public employee works 42 hours a week, five hours fewer than a typical private sector worker.

b/ 2014 CAF Survey: Cities: Buenos Aires, La Paz, São Paulo, Bogota, Quito, Mexico City, Panama City, Lima,

Montevideo and Caracas.

of The indicator of job stability as a motivation for current employment is constructed based on the response to the question, "What is the reason you took your current job? Job stability?. The index ranges between 1 and 5, where 1 is "totally disagree" and 5 is "totally agree".

d/ In dollars at parity with 2005 purchasing power.

<sup>33.</sup> See for example Clark and Postel-Vinay (2009) and Luechinger et al. (2007).

<sup>34.</sup> This comparison should be interpreted with caution. The surveys ask how long respondents have been working in their current employment, but do not define with precision the scope of the concept of current employment. For example, a public employee that changes from one agency to another but maintains the same employer (the State), could interpret this as a change in employment or as a continuation of the same employment as before. In the latter case, the worker would be reporting seniority in the public sector rather in his/her current employment.

Fourth, they earn more. The typical public sector worker in Latin America makes US\$ 918 per month (expressed in parity of buying power), 38% more than formal private sector workers (US\$ 667). 35 36 This gap exists in all the countries in the region and is even greater when we take into consideration the difference in hours worked. 37

Fifth, and related to the above, public sector workers in Latin America are located high on the socioeconomic scale. The typical public employee is located in percentile 76 of the distribution of per capita family income, and 45% of public employees are in the quintile with the highest incomes in the population, compared to only 29% of formal private sector workers (Arcidiácono et al., 2014).

Sixth, public salaries are more equitably distributed. On average in Latin America, the Gini coefficient is 0.369 for public employees, 0.387 for formal private sector workers, and 0.494 for informal sector workers (Arcidiácono et al., 2014).

Seventh, public sector workers have more non-salary benefits, such as medical insurance and retirement pensions. On average, 84% of public employees in the region state they have the right to retirement benefits and 83% to health insurance, compared to approximately two thirds of formal private sector workers.<sup>38</sup>

Eighth, pay for performance schemes are less common in the payment systems for public sector workers. Some 30% of formal private sector workers in the main cities in the region state that they receive bonuses in function of their productivity, and 24% report receiving bonuses in function of the performance of their organization. The percentages in the public sector are 22% and 20%, respectively.

<sup>35.</sup> This differential has been amply studied in the literature. See for example Gregory and Borland (1999) for a review of this literature up to the present; Giordano et al. (2011), Lucifora and Meurs (2006), Christofides and Michael (2013) for countries in Europe; Panizza (2001) and Navarro and Selman (2014) for Latin American countries. The studies show that the gap persists even after controlling for differences in the observable characteristics of the workers, is greater among women than among men, and decreases in the upper levels of salary distribution, even being negative for the most qualified workers.

<sup>36.</sup> Comparing public and private salaries has limitations that should be taken into consideration. Hiring conditions in general, and the rules to determine salaries in particular, are different in the two sectors. Public employees are subject to specific legislation that regulates the mechanisms and procedures for the selection of workers and the criteria for promotion and remuneration, among other aspects of the labor relationship. As well, there is more strict compliance with these regulations in the public than the private sector. The mechanisms of collective bargaining and the presence of unions are also very different. Finally, the public sector specializes in productive activities that are not done by the private sector. All these institutional characteristics of the two sectors can result in difference in the mean salaries of public and private sector employees.

<sup>37.</sup> In effect, the average hourly wage of public sector workers in Latin America is 54% higher than that of private sector workers. The gap ranges from 17% in Venezuela to 97% in Costa Rica (Table A.5). As a reference of developed countries, Lucifora and Meurs (2006) found an hourly wage gap (without conditioning) on the order of 11% in France, 28% in Italy and 16% in Great Britain. Arcidiacono et al. (2014) estimated a gap of 16% for the United States.

<sup>38.</sup> According to the 2014 CAF Survey, public workers tend to give more importance to non-salary benefits as an attractive feature of their current employment.

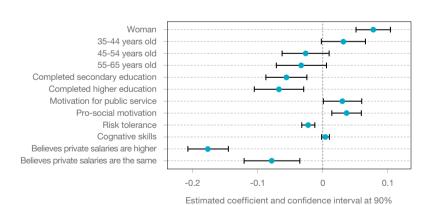
Finally, public sector workers have more access to training courses, with 52% stating that their employer offers them training courses, compared to 40% in the private sector. And in 57% of the cases the courses are during office hours, compared to 63% in the private sector.

In synthesis, public sector workers generally enjoy more employment stability, fewer working hours, higher salaries and more access to non-wage benefits like the right to retirement and health insurance than private sector workers.

Given these conditions, what kind of person prefers employment in the public sector? Chart 2.6 shows the results of an exercise to identify the demographic and socioeconomic characteristics and the perceptions that better explain the preference for public sector employment, and in particular the response to following question from the CAF Survey: "If you had to look for work in the coming months, would you prefer to look for work in the public or private sector?"

On average, those that expressed greater preference for the public sector are women and/or older, with variable cognitive skills (the coefficients are not economically or statistically significant). They have not completed high school or attended university, have strong public service or social motivations, but low tolerance to risk and a perception that salaries in the public sector are higher than those of the private sector.

**Chart 2.6** Determinants of the preference for public employment in Latin American cities (2014)<sup>a/b/</sup>



a/ The chart reports the coefficients and confidence intervals at 90% estimated by ordinary least squares where the dependent variable takes the value of 1 if the person indicates that if he/she had to seek work in the coming months, he/she would prefer to look mainly in the public sector, and the value of 0 if the respondent indicates she/he would prefer to seek work in the private sector. The omitted category is formed of men, between 25 and 34 years of age, with a low level of education (incomplete secondary or less), who believe that public salaries are higher than those paid in the private sector. The regression controlled for gender, age and the educational level of the workers. The sample includes all the persons that responded to the question, independent of their occupational situation.

b/ Cities: Buenos Aires, La Paz, Saõ Paulo, Bogota, Quito, Mexico City, Panama City, Lima, Montevideo and Caracas.

Source: the authors, with data from the 2014 CAF Survey.

Compared to private sector workers, public sector workers on average have more job stability, work fewer hours, receive higher salaries, and have more access to non-salary benefits, like the right to retirement benefits and health insurance.

# Improving the bureaucracy through the salary and career structures

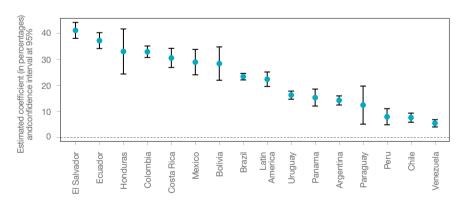
A first step to evaluate the degree to which it is possible to improve the quality of the bureaucracy by means of payment policies is to understand the determinants of the public-private salary differential and then assess its implications, as well as the implications of the temporal salary profile, for selection and incentives.

#### WHY PUBLIC EMPLOYEES ARE PAID MORE

As seen above, public sector workers have a higher mean educational level and more work experience than their formal private sector counterparts, two attributes related to productivity.

To isolate these effects, Arcidiácono *et al.* (2014) used data from household surveys in the region and estimated an hourly salary equation, with a binary variable indicative of belonging to the public sector and controls for a series of observable characteristics. They found that after discounting the effect of more education and work experience, the public-private hourly wage gap was reduced from 54% to 22%, ranging from 5.5% in Venezuela to 41.1% in El Salvador (Chart 2.7). The gap doubled during the 1990s, going from 10% in 1992 to 21% in 2000, and then remaining almost constant until 2012 (Chart 2.8).<sup>39</sup>

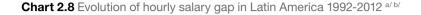
Chart 2.7 Conditioned hourly salary gap in several Latin American countries<sup>a/</sup>

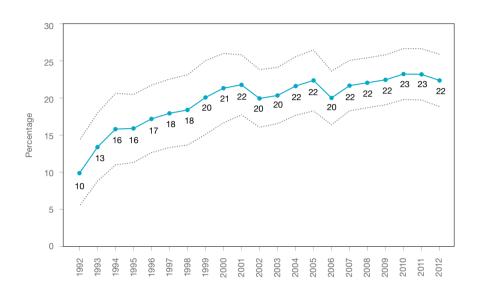


a/ The chart reports the coefficients and the confidence intervals at 95% estimated by ordinary least squares, where the dependent variable is the logarithm of hourly salary for the main occupation. The salary differential between the public and private sectors is given by the coefficient of a binary variable that identifies the sectors, controlling for the gender, age and educational level of the workers.

Source: the authors, with data from Arcidiácono et al. (2014).

<sup>39.</sup> The results found for the 1990s are consistent with those of Panizza (2001), who, using the same estimation method and data source (but with a different sample of countries), found a salary gap of 14% in favor of public sector workers between 1993 and 1999, which falls to only 4% if workers from the informal private sector are excluded.





a/Controlled for the gender, age and educational level of the workers.
b/ Countries: Argentina, Bolivia, Brasil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Honduras, Mexico, Panama, Paraguay, Peru, Uruguay and Venezuela.

Source: the authors, with data from Arcidiácono et al. (2014).

#### Box 2.3 Oaxaca-Blinder decomposition of the salary gap between the public and private sector

An alternative way of analyzing the effect of the characteristics of workers on the observed salary gap is Oaxaca-Blinder decomposition (Oaxaca, 1973; Blinder, 1973). This method allows for breaking down the wage differential between public and private sector workers into two components, plus a residual term. The first component is explained by individual characteristics (e.g. gender, education) and attributes of the employment (type of contract, non-salary benefits), while the second component, sometimes termed the unexplained component, reflects the differences between the two sectors in the returns of these characteristics.

The results of the decomposition show that in the majority of countries in the region, the characteristics of workers and employment attributes explain the major part of the wage differential between public and private employees (Table 1). On average, 64% of the wage differential in the region is explained by these characteristics and attributes, while the remaining 36% is explained by differences in the returns of these characteristics and attributes in the two sectors.

**Table 1** Oaxaca-Blinder decomposition of the hourly salary gap between the public and formal private sectors in Latin American countries<sup>a/</sup>

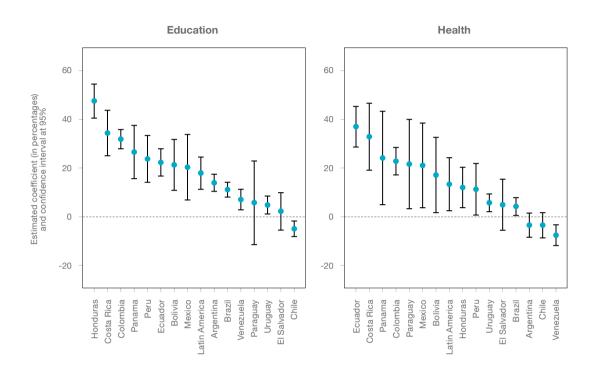
Country	Year	Salary gap (%) –	Decomposition (%)		
Country			Explained	Unexplained	
Argentina	2012	26	59	41	
Bolivia	2012	35	74	26	
Brazil	2012	54	62	38	
Chile	2011	30	78	22	
Colombia	2012	101	66	34	
Costa Rica	2012	95	60	40	
Ecuador	2012	74	45	55	
Honduras	2012	79	46	54	
Mexico	2012	73	56	44	
Panama	2012	60	67	33	
Peru	2012	40	58	42	
Paraguay	2011	42	76	24	
Uruguay	2012	44	58	42	
Venezuela	2011	13	87	13	
Latin American average		55	64	36	

a/ The sample is composed of workers between 20 and 60 years of age that work at least 30 per week.

Source: the authors, with data from Arcidiácono et al. (2014).

Arcidiácono et al. (2014) also resolved another problem that impedes the comparison of public and private sector wages, namely the differences in workers' occupations, the tasks performed and the goods and services produced in the two sectors. As these things are distributed unequally between the two sectors, they can bias the estimation of the wage gap. To avoid this bias, the authors estimated the wage gap again with the aforementioned controls, except in specific sectors like education and health care, where the technology of production is not very different between the two sectors. They found that in the majority of the countries in the region there is a gap between public and private sector salaries, even in similar activities. Public sector workers in the education sector, for example, make on average 20% more than their counterparts in the private sector; and public workers in the health sector make, on average, 17% more (Chart 2.9).

Chart 2.9 Hourly salary gap in the the education and health sectors in several Latin American countries<sup>a/</sup>



a/The chart reports the coefficients and confidence intervals at 95% estimated by ordinary least squares, where the dependent variable is the logarithm of the hourly salary in the main occupation. The salary differential between the public and private sectors is given by the coefficient of a binary variable that identifies the sectors, controlling for the gender, age and educational level of the workers.

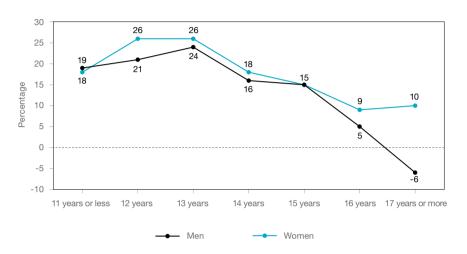
Source: the authors, with data from Arcidiácono et al. (2014).

Finally, Arcidiácono *et al.* (2014) addressed two more questions: How does this public-private wage gap behave among men and among women? And how does the distribution of skills among workers vary over time? The authors found that, firstly, the wage differential in favor of the public sector is greater among women than among men (17% versus 14%); and second, for both men and women the differential varies non-linearly across the distribution of workers' educational levels, first increasing with the level of education until reaching maximum values with around 12 or 13 years of education, and then decreasing until becoming negative among men with 17 or more years of education (Chart 2.10, p. 78).<sup>40</sup>

<sup>40.</sup> Differences in the characteristics of the workers, apart from gender and education, were not controlled for in the comparison.

There is a premium salary for public sector workers in Latin America; the difference is greater for women than for men; varying in function of educational levels, increasing initially and decreasing later on.

**Chart 2.10** Hourly salary gap (condicioned) by gender and education level in some Latin American countries<sup>a/</sup>



a/ Countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Honduras, Mexico, Panama, Paraguay, Peru, Uruguay and Venezuela.

Source: the authors, with data from Arcidiácono et al. (2014).

In summary, there is a premium salary in Latin America for working in the public sector, which is maintained even after taking into account variables like gender, educational level, work experience and sector of employment. The premium is higher among women than among men, and varies in function of the educational level of the worker, first increasing and then decreasing.

Are there other factors that explain this differential in favor of public employees? In effect, are there individual characteristics of the workers that are not observed in the data but affect the productivity of the worker and can be correlated to the decision to work in the public sector: innate ability, the quality of education, social-emotional skills, and even luck. What does the literature say?

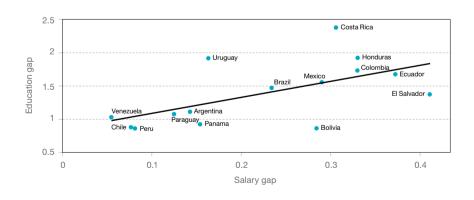
Siminski (2013) investigated the presence of these characteristics with an econometric model that controls for the selection of the workers and concluded that there is not a premium for working in the public sector. The salary differential in favor of public employees observed in the lower part of the salary distribution is because these workers have more unobservable skills, while the opposite occurs with workers in the upper part of the salary distribution. Arcidiácono et al. (2014) conducted a similar exercise with longitudinal data from Argentina, Brazil and Mexico, in which the effect of unobservable characteristics that remain unchanged over time were discounted, and found that there is a premium salary in the public sector—minor, but positive and statistically significant, even when controlling for these characteristics.

It appears that at least a part of the premium salary in the public sector is explained by institutional factors of the sector, such as characteristics of hiring and the mechanism for fixing salaries, above all in the case of less qualified workers. This suggests that the public sector is inefficient, in the sense that less qualified workers received a premium that is not associated with higher productivity. Likewise, because the differential decreases and even reverses in the case of more qualified workers, it appears that it is difficult for the public sector to attract and retain such workers.

## SALARY STRUCTURE AND THE QUALITY OF THE BUREAUCRACY

The salary structure has important implications for the pool of public employees that are attracted. For example, Katz and Krueger (1991) analyzed how educational levels of federal public employees in the USA in determined occupations differ from the educational levels of private sector workers in the same occupation in function of salary differentials between the two sectors in each state. The authors showed that in states where the salary differential is high, the relative educational level of public sector workers is higher. Thus, a premium salary in the public sector for certain levels of education and work experience can result in the self-selection of more educated workers in the public sector. In effect, the countries in Latin America with a greater public-private salary differential attract more educated workers to the public sector (Chart 2.11).<sup>41</sup>

**Chart 2.11** Salary and education gaps for the public sector in several Latin American countries<sup>a/</sup>



a/The chart reports the correlation between the salary gap, calculated in Mincer equations, and the education gap in the public sector, calculated as the quotient between the percentages of workers with completed higher education in the public and private sectors.

Source: the authors, with data from Arcidiácono et al. (2014).

<sup>41.</sup> For example, the salaries of public workers in Brazil are 23% higher than those of private sector workers for the same gender, educational level and working experience. The percentage of employees with completed higher studies is 39% in the public sector and 16% in the private sector, which yields an education gap of 144%.

The salary level offered in the public sector is an instrument that can affect the selection of bureaucrats and provide incentives for better performance. However, as the desirable characteristics of a good bureaucrat represent a mix of aspects like technical skills, motivations and ethical conduct, finding the right salary level for each occupation can be a complex task. An increase in public sector salary levels (and consequently in the average differential with respect to the private sector) could attract workers with more qualifications and reduce the incentives for corruption.<sup>42</sup> At the same time however, higher salaries can attract workers with less intrinsic motivation for public sector employment. Thus, the public sector is faced with a dilemma, if it offers very low salaries, the pool of candidates improves in terms of motivations for public service but could deteriorate in terms of qualifications, and at the same time could not serve to discourage corrupt practices. If higher salaries are offered, more qualified candidates will be attracted and the incentives for corruption will be reduced, but at the cost of attracting persons less motivated for public employment.<sup>43</sup> What does the evidence say?

Dal Bó et al. (2013) conducted an experiment in the framework of a community development program of the Mexican government that required hiring 350 public employees to work in resource-poor communities in 167 municipalities. The experiment consisted of offering higher salaries in randomly selected communities. The applicants were evaluated in two dimensions: technical qualification (measured by their IQ, personality tests and past salaries) and motivations (approximated by measures of integrity, social inclinations and motivation for public service). The results show that where the salary offer was higher, it attracted a better pool of candidates, both in terms of qualifications and motivations. In effect, there is no evidence of a dilemma between the qualifications and motivations of candidates when deciding on compensation policy.<sup>44</sup>

Beyond these results, the reversion of the salary gap in upper part of the skill distribution suggests that the public sector has problems of recruitment and retention of more qualified workers. To test this hypothesis, an information experiment was conducted in the framework of the CAF survey, which consisted of providing information about average salaries and salaries for high-performance workers to a randomly selected part of the sample. The results suggest that the public sector effectively has difficulties competing with the private sector in attracting the most qualified worker, and that this

<sup>42.</sup> The idea that corruption can be combatted by improving public sector salaries is based on the argument that better salaries increase the cost of delinquency, understood as what one would lose in the case of being discovered and dismissed.

<sup>43.</sup> This reasoning supposes that motivations do not correlate (or correlate negatively) with workers' skills. Dal Bó et al. (2013) presented a theoretical model that formalizes these ideas. Likewise, for a theoretical formulation of the interaction among a premium salary in the public sector, workers' motivations and incentives to corruption, consult Macchiavello (2008).

<sup>44.</sup> In another experimental study in Zambia, Ashraf et al. (2014a) analyzed the importance of intrinsic and extrinsic motivations in attracting applicants for jobs in the public health system, and reached similar conclusions to those of Dal Bó et al. (2013). The jobs in which extrinsic motivations have relatively greater importance attract more qualified candidates, without this implying a deterioration in the pool of candidates in terms of pro-social motivations.

problem is attenuated in the case of activities that attract persons with high intrinsic motivations.

# SALARY GAP AND PREFERENCE FOR THE PUBLIC SECTOR: EXPERIMENTAL EVIDENCE BASED ON THE CAF SURVEY

An information experiment carried out in the framework of this report analyzed how workers' skills interact with their motivations and salary levels in determining their preferences for public employment. The experiment consisted of providing information about salary levels in the public sector to a randomly selected part of the respondents to the 2014 CAF Survey. The information provided was the salary differential in the public sector, calculated on the basis of official statistics for the average of workers and for higher-performance workers. The experiment was conducted in the cities of Bogota, La Paz, Montevideo and Quito. On average, public sector workers in these cities earn more than those in private sector, but this differential is reverted for workers in the top income decile that are considered high-performance. For example, in Bogota the information card read: "According to official statistics, in your city for every 100 dollars made in the private sector, 120 dollars are made in the public sector. It also important to know that as the performance of a worker increases, this difference is reverted, such that for every 100 dollars made by a high-performance worker in the public sector, 127 dollars is made in the private sector". 45 Workers were then asked in which sector they would prefer to look for work if they had to in the coming months.

In principle, if the information about salaries is relevant for workers, those that receive the information should be more willing to seek employment in the public sector if they consider themselves to be an average performance person, and in the private sector if they consider themselves to be high performance. This hypothesis can be evaluated by first classifying workers in function of their potential performance, and then estimating the effect of the information through a linear regression model.

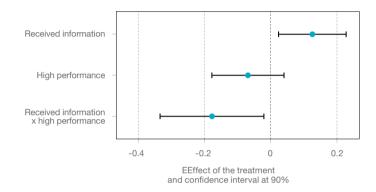
The first was done by estimating the probability that a worker is in the top decile of the wage distribution of his/her city, in function of gender, age, education level and cognitive abilities; and classifying 25% of workers as "high performance" with higher predicted probability.

The result of the linear estimation for men is presented in Chart 2.12 (see p. 82). Medium-or low-performance workers that receive the information (workers of this type receive higher salaries in the public sector) show more disposition to seek work in the public sector (coefficient of the variable "received information"), while high-performance workers that received the information (that can opt for a higher salary in the private sector) are less interested in seeking em-

<sup>45.</sup> In the cases of La Paz, Montevideo and Quito, the average worker makes 16%, 7% and 22% more in the public sector than in the private sector, respectively, while high-performance workers make 6%, 14% and 6% more in the private sector than in the public sector, respectively.

ployment in the public sector (coefficient of the variable "Received information x high-performance").46

**Chart 2.12** Effect of information about salaries on preferences for the public sector in some Latin American cities (2014)<sup>a/b/c/</sup>



a/The chart reports the coefficients and confidence intervals at 90% estimated with a linear regression model through ordinary least squares, in which the dependent variable assumes the value of 1 if the worker reports a preference for seeking employment in the public sector and 0 if he/she prefers to work in the private sector. Among the independent variables are an indicator of having received the information, an indicator that the worker belongs to the high performance group and the interaction between the two, as well as a variable that controls for the sector to which the worker belongs. To classify the worker as "high performance" a non-linear model (probit) is estimated of the probability of the worker being in the upper decile of the salary distribution, in terms of the gender, age, education level and cognitive skills of the worker. The 25% of workers with higher probability are classified as "high performance". The treatment consisted of providing information about salary differentials for a medium performance worker (higher in the public sector) and for high performance workers (higher in the private sector).

b/The regression is calculated based only on male workers.

c/ Cities: La Paz, Bogota, Quito and Montevideo

Source: the authors, with data from the 2014 CAF Survey.

Do the impacts of information depend not only on the potential performance of the worker but also on his/her intrinsic motivations? To evaluate this possibility, a model was estimated in which the variable of the treatment interacts with the performance indicator and an index of the intrinsic motivations of the worker.<sup>47</sup> Chart 2.13 presents the marginal effects of the information for different combinations of performance and intrinsic motivations.

The effect of the information among workers that can be considered high-performance is negative when the worker has low intrinsic motivation and is statistically

<sup>46.</sup> The impact of information on the preference for work in the public sector is not observed in the case of women. A possible explanation of this is that the information about salaries is less relevant (in relation to other characteristics of the job) in defining preferences for one or another occupation.

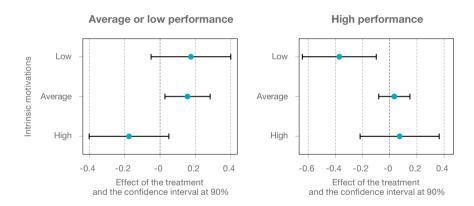
<sup>47.</sup> The intrinsic motivation index is a simple average of the variables "motivation for public service" and "social motivation" employed previously in this chapter. One index containing the information for the two variables is used to simplify showing the results.

indistinguishable from zero for workers with medium to high levels of motivation. <sup>48</sup> In effect, high-performance workers with low intrinsic motivations are less likely to seek public sector employment when they know that they would obtain lower salaries, while low-performance workers are more likely to seek public sector employment when they learn that the average salary of the sector is higher, in particular, if their intrinsic motivations are medium to low.

In conclusion, this exercise suggests that the public sector salary (high salaries for average worker but too low for more qualified workers) can make the recruitment and retention of highly skilled workers difficult, although this effect is attenuated in the case of intrinsically motivated workers. In other words, more skilled workers are attracted to the public sector only to the extent that they are intrinsically motivated to work in these types of institutions.

The salary structure of the public sector can hinder the recruitment and retention of highly skilled workers, although this effect is attenuated in the case of intrinsically motivated workers.

**Chart 2.13** The effect of information about salaries on preferences for the public sector: the importance of intrinsic motivations in some Latin American cities (2014)<sup>a/b/c/</sup>



a/ The chart reports the marginal effect of the treatment on the probability of preferring to seek employment in the public sector for different combinations of the educational level, performance and intrinsic motivations of workers. The treatment consisted of providing information about the differential of average salaries (higher in the public sector)and for high-performance workers (higher in the private sector). The effect of the treatment is estimated with a linear regression model using ordinary least squares, where the dependent variable has a value of 1 if the worker reports a preference for seeking employment in the public sector and 0 if the preference is for the private sector. The independent variables include the interaction between the indicator of the treatment, the indicator that the worker is high-performance, the education level of the worker and his/her intrinsic motivations, as well as a series of variables that control for the sector in which the individual works. The results are similar if a non-linear regression model, like the probit or logit model, is used.

b/The regression is calculated based only on male workers.

c/ Cities: La Paz, Bogota, Quito and Montevideo.

Source: the authors, with data from the 2014 CAF Survey.

<sup>48.</sup> Workers are classified as having low, medium or high intrinsic motivations depending on whether the standard deviation obtained is below, around, or greater than the mean, respectively.

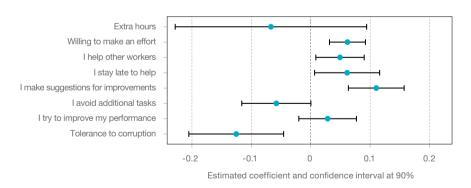
Some 16% of public employees with higher education are dissatisfied with their salary levels, compared to 12% in the private sector. This could translate into a low level of effort, a poor work environment and even give way to practices of corruption.

### SALARY REMUNERATION AND INCENTIVES FOR BETTER PERFORMANCE

The relatively low wage compensation the public sector offers more skilled workers not only translates into problems for attracting and retaining talented workers, but also offers few incentives for improving performance. The data from the 2014 CAF Survey suggests that more educated workers in the public sector are dissatisfied with their salaries than workers with similar characteristics in the private sector. In particular, 16% of public sector workers with completed higher education state that they are somewhat or totally dissatisfied with their salaries, compared to 12% of their private sector counterparts.<sup>49</sup> In contrast, no differences were observed among workers with secondary education or less.

Dissatisfaction with salary levels can translate into a low level of effort, in a deficient working environment and even give rise to practices of corruption. Di Tella and Schargrodsky (2003) studied the potential of public salary levels as instruments to reduce corruption in the framework of an anti-corruption policy carried out in the health sector by the government of the City of Buenos Aires, and found that better salaries can be an effective mechanism to dissuade public employees from engaging in corrupt practices, in particular when the better salaries are accompanied by monitoring that increases the risks of punishment.

**Chart 2.14** Relation between satisfaction with remuneration and diverse performance indicators in Latin American cities (2014)<sup>a/b/</sup>



a/ The chart reports the coefficient and confidence interval at 90% of the satisfaction with promotions (measured on a scale of 1 to 5, with 5 indicating that the person is very satisfied) in different regressions estimated with ordinary least squares. The dependent variable for different regressions is shown on the left side of the graph. The regressions controlled for the city, economic sector, gender, education level, general job satisfaction, and other characteristics of the individual.

b/ Cities: Buenos Aires, La Paz, São Paulo, Bogota, Quito, Mexico City, Panama City, Lima, Montevideo and Caracas.

Source: the authors, with data from the 2014 CAF Survey

<sup>49.</sup> It is important to note that this comparison has a downward bias because of the fact that the public sector can have problems retaining workers in this category (for example, if workers dissatisfied with salary levels leave the public sector).

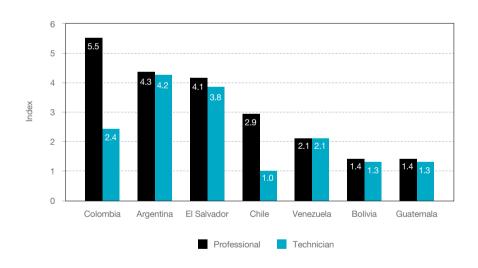
The data from the 2014 CAF Survey confirms the importance of satisfaction with salaries. Workers that are more satisfied with their salaries are more willing to make an effort, show less tolerance of corruption and are less apt to believe that there are more interesting jobs than the ones they have. They also show more willingness to remain after working hours to complete outstanding tasks, although this association is not statistically significant (Chart 2.14).

As well as attracting workers with a good mix of qualifications and motivations, the public sector should try to retain workers over time.

## CAREER PROSPECTS AND THE QUALITY OF THE BUREAUCRACY

In addition to attracting workers with a good mix of qualifications and motivations, the public sector must also retain them over time. A possible instrument for this purpose is a salary structure that is sufficiently steep to compensate workers as they accumulate experience and knowledge in their position. A salary structure that is too flat can make it difficult to retain more talented workers.

**Chart 2.15** Salary compression indices in the public sector for several Latin American countries<sup>a/b/</sup>



a/ The index is calculated as the quotient between the basic salary of the highest and lowest categories of the salary scale. The information sources in each country are the following: Argentina: National System of Public Employment, Decree 2098/2008 (in effect since August, 2014); Costa Rica: General Civil Service Office, Public Administration Salary Scale (Agreement in effect since July, 2014); Guatemala: Government Agreement 543-2013, Ministry of Public Finances (Agreement in effect since January, 2014); Venezuela: Official Gazette N° 40.542 (Agreement in effect since December, 2014); Colombia: Decree 195, Department of Public Administration (Agreement in effect since January, 2014); Peru: Ministry of Labor and Employment Promotion. Transparency Report of December, 2014; Uruguay: National Civil Service Organization, January, 2014; Bolivia: Supreme Decree N° 1989 (in effect since May, 2014); Chile: Remuneration Scale. Transparent Government Law N° 20.285 on Access to Public Information; El Salvador: Public Information Access Law. Ministry of Finance. List of monthly remunerations according to the Salary and Contracts Law, December 31, 2014.

Source: the authors, with official data from each country.

What is the salary structure of the public sector in Latin America like? Chart 2.15 (see p. 85) shows a first index: the salary compression ratio in several countries in the region, that is, the coefficient between the highest and lowest categories of the ladder. Colombia has the highest ratio for professional workers (5.5), followed by Argentina (4,3), El Salvador (4,1) and Chile (2,9). Argentina has the highest ratio for technical staff (4.2), followed by El Salvador (3.8), Colombia (2.4) and Venezuela (2.1).

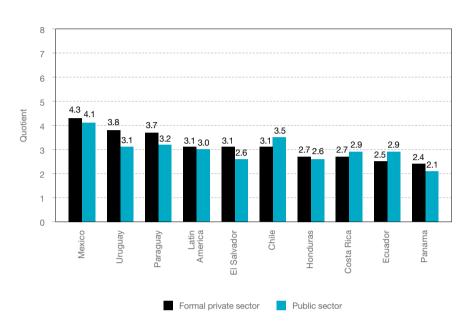
However, this indicator by itself does not allow for determining whether the public sector salary structure is too flat, because of which it is necessary to compare it to the private sector. Chart 2.16 presents the coefficient between the average salary of the 90 percentile and the 10 percentile of salary distribution in the public and formal private sectors for two groups of workers: professionals (intellectuals) and technicians, on the one hand, and administrative support staff, on the other. In the first group, this coefficient is 4.0 in the public sector and 5.5 in the formal private sector for the average of Latin American countries for which there is data. It is lower in the public sector than in the formal private sector in almost all the analyzed countries (the exception is Chile). The coefficient for the second group of workers is lower than that for the first group, and almost the same in the public and formal private sectors: 3.0 and 3.1, respectively. That is, the salary structure is flatter in the public sector than in the private sector, in particular for more qualified workers, which could make for problems of recruiting and retaining such workers.

**Chart 2.16** Quotient between the 90 and 10 percentiles of the salary distribution according to the subsector in several Latin American

#### Professionals, scientists and intellectuals 8 6 5.5 4.9 5 43 42 Quotient 4 2.8 3 2 0 Mexico Latin America Uruguay Ecuador Salvador Sosta Rica Formal private sector Public sector

Continued on next page >

#### Administrative support staff



Source: the authors, with data from SEDLAC (CEDLAS and the World Bank).

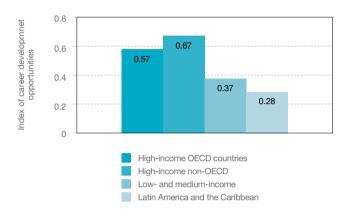
As well, for a salary structure to effectively imply career perspectives, there should be a sufficiently flexible system of raises and promotions based on merit that favors the selection of the most talented. According to data from the 2014 CAF Survey, promotion systems in the public sectors of the region are sufficiently flexible: 37% of public employees in the main cities in the region report having been promoted at least once in the last five years, compared to only 30% of workers in the formal private sector.

Is the criterion of merit used equally in the two sectors? Unfortunately, this does not appear to be the case. Among public sector workers with ten or more years of seniority, 41% agree with the statement "meeting all of one's responsibilities does not increase the probability of promotion" (compared to only 30% in the private sector), and 35% agree, "hard work is not recognized by one's immediate superior" (compared to 28% in the private sector).

Evans and Rauch (1999, 2000) developed a career development index composed of five indicators that reflect the degree to which senior positions are accessible to career public employees. According to this indicator, Latin America is lagging behind, offering fewer career opportunities for public employees than are offered in high-income countries (OECD members and others), and less than in low-income countries (Chart 2.17, p. 88).

These results are compatible with the hypothesis that workers that place more value on career development and monetary remuneration will abandon the public sector after a certain time.

Chart 2.17 Indicators of the quality of the bureaucracy. Average 2000-2013 a/



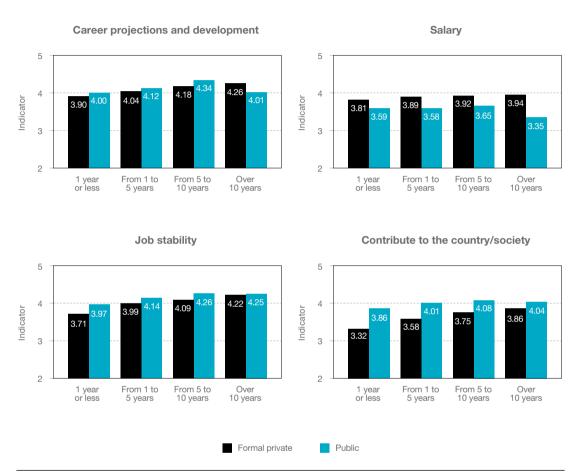
a/The chart reports the average of the index of opportunities for career development for different groups of countries. This index is the result of the weighted average of 5 questions and takes values in the interval [0,1] where a higher score implies that the career in the institution is a more relevant factor in assigning positions in the upper levels of the organization.

Source: the authors, with data from Teorell et al. (2015).

If the public sector does not offer good possibilities for career development, we should observe that workers in public positions with high expectations of professional development gradually abandon their positions, as their expectations are not satisfied in reality. The same occurs with that enter public service motivated by salary. To the degree that the evolution of salaries does not meet their expectations, such workers should be less willing to continue in the public sector. This hypothesis can be evaluated in the light of a question in CAF survey about the importance of different reasons for assuming one's current position and comparing cohorts of workers with different degrees of seniority. In particular, workers were asked their degree of agreement or disagreement with different motives for choosing their current job, such as career development or salary level. The responses are classified on a scale from 1 (totally disagree) to 5 (totally agree). Chart 2.18 shows the averages for four motivations - projection and career development, monetary remuneration, job stability and contribution to the country or the society - in function of the seniority of the worker and the sector they work in.

The results are compatible with the hypothesis that workers that place more value on career development and monetary rewards abandon the public sector after a certain period of time. In particular, when they have 10 or more years of seniority, public sector workers are less in agreement than workers with less seniority that the possibility of making a career or the salary was an important reason for taking the position they did. This does not occur with private sector workers or with public sector workers with respect to other motivations for taking their positions, such as job stability or the possibility of making a contribution to the country or to society.

Chart 2.18 Motives for taking current job according to the seniority in the position in Latin American cities (2014)<sup>a/b/</sup>



a/ An indicator is shown that ranges between 1 and 5, where 1 indicates "totally disagree" and 5 "totally agree"in response to the questions about the worker's degree of agreement with the importance of a determined motive for his/her having taken his/her current job. The higher the value of the indicator, the more in agreement is the worker that the motive was important in his/her decision. The sample was limited to workers with completed higher education.

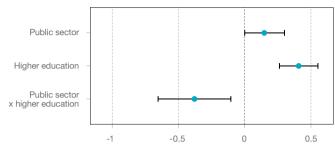
b/ Cities: Buenos Aires, La Paz, São Paulo, Bogota, Quito, Mexico City, Panama City, Lima, Montevideo and Caracas.

Source: the authors, with data from the 2014 CAF Survey.

The relative salary compression and lack of emphasis on merit in career development in the public sector can also translate into less satisfaction with promotions and salary increases. Chart 2.19 (see p. 90) shows the results of a statistical exercise that compares the degree of satisfaction with promotions of public and private sector workers with and without completed higher education. As can be seen, public sector workers without higher education are more satisfied with promotions than their private sector counterparts. However, the interaction coefficient shows that workers in the public sector with higher education are less satisfied with promotions than private sector counterparts.

The relative salary compression in the public sector and the manner in which career development is based relatively less on merit results in less satisfaction regarding promotions and pay raises, which translates into disincentives to make efforts.

**Chart 2.19** Public-Private difference in the level of satisfaction with promotions and raises according to education level in Latin American cities (2014)<sup>a/b/</sup>



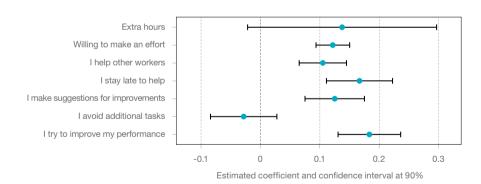
Estimated coefficient and confidence interval at 90%

a/The chart reports the coefficients and confidence intervals at 90% estimated by ordinary least squares in a regression where satisfaction with promotions and raises is the dependent variable, which is registered on a scale from 1 to 5, in which 5 represents very satisfied. Among the independent variables are included an indicator if the respondent works in the public sector, an indicator of whether the respondent has higher education and the interaction between the two, controlling for gender, age and city of residence.

b/ Cities: Buenos Aires, La Paz, São Paulo, Bogota, Quito, Mexico City, Panama City, Lima, Montevideo and

Source: the authors, based on the 2014 CAF Survey.

**Chart 2.20** Relation between satisfaction with promotions and diverse performance indicators in Latin American cities (2014)<sup>a/b/</sup>



a/ The chart reports the coefficients and confidence intervals at 90% of different regressions estimated by ordinary least squares, in which the dependent variables (shown on the left of the graph) are diverse indicators of effort and the independent variable reflects the satisfaction of the worker with promotions and raises. The latter is an index with a value ranging from 1 (dissatisfied) and 5 (very satisfied). The different regressions controlled for the city, economic sector, gender, education level and general job satisfaction of the worker. b/ Cities: Buenos Aires, La Paz, São Paulo, Bogota, Quito, Mexico City, Panama City, Lima, Montevideo and Caracas.

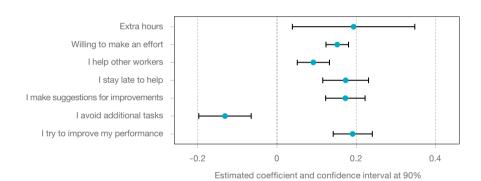
Source: the authors, with data from the 2014 CAF Survey.

The relative dissatisfaction with career development among educated workers in the public sector not only results in problems of retention, but also of motivation. Chart 2.20 shows the degree of association between satisfaction

with promotions and raises and different measures of performance. In general, workers that are more satisfied with promotions and salary raises show more willingness to make an effort, help other workers, make suggestions for organizational improvement, take training courses and stay late if it is necessary.

Finally, Chart 2.21 suggests that it more probable that workers that entered their current employment motivated by the possibilities of career development work extra hours and show greater willingness to make an effort, both in the added index and each of its components. Unfortunately, as can be seen in Chart 2.18, these workers appear to abandon the public sector when, with the passing of time, their aspirations are not satisfied.

**Chart 2.21** Relationship between valuation of promotions and various performance indicators in Latin American cities (2014)<sup>a/b/</sup>



a/The chart reports the coefficients and confidence intervals at 90% of different regressions estimated by ordinary least squares, in which the dependent variables (shown on the left of the graph) are diverse indicators of effort and the independent variable reflects the value that the individual assigns to promotions and raises in obtaining his/her current job. The latter is constructed based on a question asking to the respondent to express his/her degree of agreement with the statement that professional development was a motivation for taking her/his current employment, with a range between 1 (strongly disagree) and 5 (strongly agree). All the regressions controlled for the city, economic sector, gender, education level and general job satisfaction, among other characteristics of the worker.

b/ Cities: Buenos Aires, La Paz, São Paulo, Bogota, Quito, Mexico City, Panama City, Lima, Montevideo and Caracas.

Source: the authors, with data from the 2014 CAF Survey.

# Improving the bureaucracy with pay for performance?

Incorporating pay for performance (PfP) can improve the functioning of organizations through different channels. First, a contract that ties part of the salary to meeting certain objectives can discourage those with less probability of

Incorporating pay for performance (PfP) can discourage those that have less probability of meeting objectives. As well, it can encourage effort provided workers perceive a connection between effort and results, that is, such schemes can attract better workers and align their incentives with those of the principal, attenuating the problem of moral risk.

fulfilling these objectives. Second, pay for performance can encourage effort provided workers perceive a connection between effort and results. In effect, these schemes can kill two birds with one stone: attracting better workers and aligning their incentives with those of the principal, thus attenuating the problem of moral risk.<sup>50</sup>

Is it really like this? For example, Lazear (2000) found evidence in favor of these mechanisms in the case of *Safelite Glass*, a windshield installation company. Between 1994 and 1995 the company changed the method of paying its workers, shifting from hourly wages to a piece-rate system. This change resulted in a 44% increase in per worker output. Around half of this increase is attributable to better incentives, but there is also evidence of the role of selection, more productive workers were hired and less productive ones left.

However, this context is very particular. First, there is a clear objective, and performance is easy to measure: more windshield installations mean better performance. Second, there is a strong relationship between the unobserved effort of the worker and the number of installations made. These conditions are not always present in other working situations, especially in the case of public servants. How applicable is PfP, especially in the case of public employment? What are the risks?

One of the most studied risks arises from the "multi-task" nature of many occupations (Holmstrom and Milgrom 1991). If the evaluation of results is related to only some of these tasks, possibly because of difficulties in measuring others, the worker can direct his/her efforts to these tasks at the cost of others. Moreover, as we shall see further on, inadequate design of the scheme can encourage workers to engage in undesired practices. Thus, the implementation of a PfP scheme can work against the global objectives of the organization.

Another risk arises from the existence of multiple principals (Bernheim and Whinston, 1986). As the bureaucracy is a chain of agent-principal relationships, front-line bureaucrats can perceive different stimuli from different principals, from their immediate boss to the citizenry, and not always in the same direction.

There are risks associated with implementation. The application should be fair, transparent and impartial. To this end, it is necessary to have mechanisms for monitoring and measuring results, which in themselves present complications. There is no value in supervisors favorably evaluating workers for reasons other than their performance, for example out of favoritism. On the contrary, this can lead workers to channel their efforts into undesired objectives like gaining the favor of their supervisors.

<sup>50.</sup> The presence of these mechanisms can also motivate workers to participate in training programs with the aim of improving their competencies and increasing their possibilities of succeeding in their objectives. As well, it can induce organizations to reflect on their strategies and culture of measurement and evaluation.

Another risk of special importance for the public sector relates to the way in which compensatory aspects are complemented with intrinsic values as motivating elements of the work. In this respect, PfP schemes can have two types of effects. First, with respect to staff selection, they can attract or repel workers intrinsically motivated for public service. Second, with respect to incentives, they can undermine the value of activities associated with intrinsic motivations and consequently reduce workers' efforts (see Besley and Ghatak, 2005 and Bénabou and Tirole, 2006).<sup>51</sup>

Pro-social and public service motivations, the willingness to make efforts, intelligence and risk tolerance correlate positively with the preference for pay for individual performance schemes.

#### AN ANALYSIS OF THE CAF SURVEY

Who prefers jobs with PfP schemes? What types of organizations are more likely to implement a PfP scheme? And what are the salary levels when such a scheme exists? Three exercises based on CAF data help in responding to these questions.

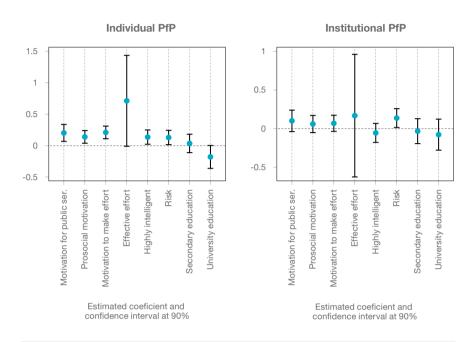
First, a statistical analysis explored the association between some characteristics of the persons and their preferences for this type of scheme, measured on the basis of the response to the following question: ¿To what extent do you agree that part of your salary should be paid according to the performance of each employee (the performance of your institution)? (Scale from 1 to 5). Among the characteristics analyzed are age, gender, seniority in the job, education, tolerance to risk, social motivation and predisposition to make effort.<sup>52</sup> As well, some characteristics of the job were incorporated as controls, such as the economic sector, the size of the firm and whether the job was public or not. Chart 2.22 (see p. 94) presents the results of the exercise.

It was found that pro-social and public service motivations, the predisposition to make effort, inteligence, and tolerance to risk correlated positively with the preferences for pay schemes according to individual performance (left panel). Of these attributes, only tolerance to risk was linked positively with pay for preference according to institutional performance (right panel). No statistically significant association was found between preferences for pay for performance (individual or institucional) and educational level or gender (the latter is not included in the graph).

<sup>51.</sup> The evidence about this risk in particular is mixed. On the one hand, Gneezy and Rustichini (2000a) found that introducing monetary incentives in fundraising programs for schoolchildren reduced the amounts raised. Similarly, Titmuss (1970) found that paying blood donors can reduce donations, and Gneezy and Rustichini (2000b) found that imposing penalties on parents for being late in picking up their children resulted in more lateness. However, these contexts are distinct from those of public administration and consequently the results are not necessarily translatable. Ashraf et al. (2014b) found that introducing incentives (monetary and non-monetary) in a program to sell condoms to prevent HIV had greater impact with socially motivated agents.

<sup>52.</sup> The appendix of this chapter describes the construction of some of these variables.

**Chart 2.22** Relationship between accepting pay for performance and different characteristics of the individual in Latin American cities (2014)<sup>a/b/</sup>



a/ The graphs report the coefficients and confidence intervals at 90% estimated by ordinary least squares, where the dependent variable is the response on a scale from 1 to 5 to the statements: Part of the salary should be paid according to the performance of each employee (the performance of the institution). The variable highly intelligent is binary, with a value of 1 if the person is above the median index of intelligence and 0 if not, and controls city, firm size, economic sector are controled for, as well as the gender and age of the individual and seniority in his/her current employment.

b/ Cities: Buenos Aires, La Paz, São Paulo, Bogota, Quito, Mexico City, Panama City, Lima, Montevideo and Caracas.

Source: the authors, with data from the 2014 CAF Survey.

Second, analyzing responses to the question *In your job do you receive bonuses for individual/institutional productivity or goals*? it was found that the public sector has less propensity to have PfP schemes than large firms (with more than 20 workers).

Finally, we evaluated whether PfP in Latin America implies a premium salary, as Bryson *et al.* (2014) found, for example, in Great Britain. After discounting the effects related to the city and the economic sector, salaries of jobs that include PfP schemes are 16% higher for individual-type PfP and 21.5% higher for institutional-type PfP (see columns [1] and [3] of Table 2.3). This difference could respond to diverse factors, 53 because of which this premium is estimated

<sup>53.</sup> In theory, PfP schemes can imply higher salaries for several reasons. First, they attract more skilled persons with more outside options, for whom higher salaries are required as a condition of their participation. Second, they increase workers' efforts. Third, the premium salary could be explained by the firm-size effect, given that larger firms generally pay higher salaries and are more likely to employ PfP schemes, because the design and implementation of such schemes involve fixed costs that are more easily covered by large firms. And finally, higher average salaries could be explained by the need to compensate person with risk aversion for the greater volatility of their incomes.

controlling for the size of the firm and a series of characteristics of the individual like intelligence, willingness to make an effort, education, motivation, and level of tolerance to risk. The gap falls by 3.3 percentage points (around 20%) for individual pay schemes and by 8.3 percentage points (around 39%) for schemes according to institutional performance. However, in both cases a statistically significant premium is maintained that may be associated with other factors of the firms and of the individual that are not captured in the estimation or with compensation by wage dispersion.

**Table 2.3** Premium salarial in jobs with pay for performance in Latin American cities (2014) <sup>a/</sup>

Variable	Individual bonus		Institutional bonus	
	[1]	[2]	[3]	[4]
Employment gap with PfP	0.1599***	0.1270***	0.2155***	0.1324***
Sector and city controls	Yes	Yes	Yes	Yes
Individual and firm controls	No	Yes	No	Yes
Observations	1,158	1,158	1,151	1,151

a/ Cities: Buenos Aires, La Paz, São Paulo, Bogota, Quito, Mexico City, Panama City, Lima, Montevideo and Caracas.

Source: the authors, with data from the 2014 CAF Survey.

#### PFP IN THE PUBLIC SECTOR: DOES IT WORK?

Hasnain *et al.* (2012) reviewed the empirical literature on pay for performance schemes with a focus on their impact on performance measures.<sup>54</sup> They distinguished between "relatively easy to measure" and "difficult to measure" occupations.<sup>55</sup> As an example of relatively easy to measure occupations are teachers, health care workers and public employees in charge of tax audits, while difficult to measure occupation include notably managerial and administrative functions. Between these two groups, Hasnain *et al.* reviewed 110 investigations, 94 of relatively easy to measure occupations, of which 23 were applications of the scheme in developing countries, and 19 were random experiments. In general, they offered an optimistic vision of these schemes, although they should be interpreted with caution (Chart 2.23, p. 96).

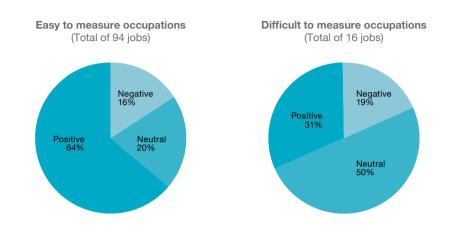
<sup>\*\*\*</sup> denotes significant differences at 1%.

<sup>54.</sup> Although there are other reviews, this work has characteristics that make it especially useful in the context of this chapter. First, it is focused on occupations and sectors of particular relevance for public administration. Second, it allows for differentiating whether the evaluations deal with developed or developing countries typically operating under dysfunctional bureaucracies. Finally, the study not only classifies jobs according to its empirical focus (observational, field- and laboratory-based experiments) and methodological quality (based on external or internal validity), but also according to some characteristics of the occupation. The majority of studies are focused on the channel of incentives rather than that of selection.

<sup>55.</sup> The authors used the classifications of jobs by Wilson (1989); in which relatively easy to measure jobs are "craft jobs" and difficult-to-measure ones are "cope jobs".

The effectiveness of PfP depends firstly on it being applied in the appropriate context.

Chart 2.23 Efficacy of pay for performance schemes



Source: the authors, based on Hasnain et al. (2012).

Some 60% of the 110 studies contribute evidence in favor of PfP. Moreover, considering only the 68 studies classified as being of higher methodological quality, 70% yield a positive result. However, these favorable results are explained fundamentally by the relatively easy-to-measure occupations, which are the majority, and in which the rate of favorable results is 64%. In the case of difficult to measure occupations, there are not sufficient studies available, and in particular studies of quality, to draw conclusions about the effectiveness of PfP, especially in developing countries.

The effectiveness of PfP depends firstly on it being applied in the appropriate context. Hasnain *et al.* suggested that the characteristics of the occupation are critical and that there is more probability of success in sectors like tax administration, education and healthcare. Box 2.4 provides a successful scheme in the education sector.

#### Box 2.4 Pay for performance and absenteeism of public workers

Absenteeism is a possible manifestation of a low level of effort. Unfortunately, it is very common among education and health workers in developing countries. In Peru, for example, Chaudhury *et al.* (2006) documented absenteeism rates of 11% among teachers and 25% among health workers, while the rate of absenteeism in the education sector in Ecuador is 14%.

Fortunately, monitoring systems combined with monetary incentives can reduce absenteeism. Duflo and Hanna (2005) made one of the first evaluations of this type of mechanism for the case of teacher in rural areas of Udaipur, India. The authors designed an experimental intervention that consisted of giving a camera to teachers from a group of randomly selected schools. The teachers were to take two pictures a day of themselves and their students, one at the beginning of the day, and the other at the end. Teachers' pay in these schools was subject to the number of days effectively worked in the month and varied between 500 and 1,300 rupees. In the control schools the pay was 1,000 rupees and the monitoring with cameras was not applied. The absenteeism rate fell from 36 to 18% in the treated school. Moreover, the average pay in the two types of schools was similar; because of which the gains in attendance only imposed additional costs of the cameras and administrative costs. The mechanism was economically effective and applicable to other schools.

Source: the authors, based on Duflo and Hanna (2005) and Chaudhury et al. (2006)

Two things must be considered when assessing the appropriateness of this type of scheme. First, the benefits of implementing the scheme should be compared to its costs, including the costs of design, monitoring and information dissemination, as well as the salary costs associated with compensation for uncertainty about pay. Moreover, it is also important to consider social costs related to unintentional results. For example, in the area of education, if teachers are paid for the results of their students in a mathematics test, they could focus their efforts on this objective and neglect others.

Second, the generalization of impacts must be considered. Continuing with the example of education, ultimately the intent of a PfP scheme is to improve the human capital of students, which is not directly observable and the measurement of which is based on concrete but imperfect instruments like mathematics tests. In this example, the impact is generalized if there are effective improvements in math skills and not just improvements in responding to the specific set of exams through coaching<sup>56</sup> or even cheating (for example, changing answers or scores). One way to evaluate generalization is to have an alternative measurement instrument B that is separate from alternative A, on which the payment or penalty for performance is based. It is argued that the effects are generalizable if the improvements obtained by measurement instrument A are also observed with measurement instrument B. In relation to generalization in the area of education, Neal (2011) documented studies that suggest that PfP schemes tend to generate measured gains through the instrument associated with payments or penalties, and in some but not all cases, these gains reflect certain increases in the human capital of the students. That is, the effects cannot always be generalized.

<sup>56.</sup> Teaching strategies to improve grades in a specific test without real improvement in the subject under study.

# PFP AND THE PREFERENCE FOR THE PUBLIC SECTOR: EXPERIMENTAL EVIDENCE BASED ON THE CAF SURVEY

The great majority of evaluations of these schemes tend to focus on their impact on performance. However, it is possible that these schemes also have an impact on selection, attracting or repelling applicants with certain characteristics. In theory, it can be expected that these schemes attract applicants more disposed to make efforts and with more skills and repel those with a high aversion to risk. With respect to intrinsically motivated workers, the sign of the a priori relationship is more uncertain.

To evaluate the selection channel, an experiment was introduced in the 2014 CAF Survey. A group of surveyed households was randomly selected and given information about the greater presence of pay for performance schemes in the private sector. The experiment was conducted in six cities in the region: Buenos Aires, São Paulo, Lima, Caracas, Panama City and Mexico City.

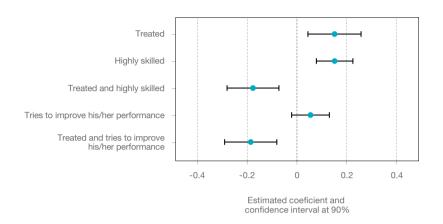
The dependent variable was the preference for public employment measured by the dichotomous response to the following question: *If in the coming months you had to look for work, would you prefer a job in the public sector*? Given the random assignment, differences between the households that received the information (treated) and the other households (control) can be attributed to the information provided.<sup>57</sup>

As well, it can be expected that the treatment affected different agents distinctly according to their characteristics. To explore these heterogeneous effects, dichotomous variables were constructed for social motivation, risk tolerance, education, intelligence and willingness to make an effort. The statistical exercise incorporated these dichotomous variables and their interaction with the treatment. The coefficients for these interactions reflect the heterogeneity in the responses to the treatment. Chart 2.24 shows the results for the coefficients of the treatment variable and for the coefficients of the characteristics in which a heterogeneous effect was found.

<sup>57.</sup> It should be noted that the power of the experiment depends on how surprising the information is for the recipient. To the degree that persons have the perception that there is a low presence of pay for performance in the public sector, the statistical power of the experiment is low. This implies difficulty in identifying relatively small effects.

<sup>58.</sup> A value of 1 is assigned to the dichotomous variable about education if the respondent has a higher level of education. A value of 1 is assigned to the other variables if the respondent belongs to the 50% with a higher index.

Chart 2.24 Pay for performance in some Latin American cities (2014)a/b/c/



a/ The chart reports the coefficients and confidence intervals at 90% estimated by ordinary least squares, where the dependent variable assumes the value of 1 if the worker reports that he/she prefers to seek employment in the public sector and 0 if he/she prefers the private sector. Among the independent variables are the indicator of whether the individual received the information (treatment), an indicator of whether the individual has abilities above the mean (measured through the index of crystallized intelligence skills), if the individual tries to improve his/her performance (measured as individuals that express total agreement with the statement: "I seek training and other things to improve my performance in my work") and the interactions of these variables with the treatment. The regression controls for diverse characteristics like sex, age, whether or not he/she has a university education and city of residence.

b/ The experiment consisted of informing a random set of respondents that pay for performance schemes are more common in the private sector than in the public sector.

c/ Cities: Buenos Aires, São Paulo, Mexico City, Panama City, Lima and Caracas.

Source: the authors, with data from the 2014 CAF Survey.

The coefficient of the variable "treated" reflects the effect of the treatment on the group made up of workers without higher education, with low tolerance to risk, low social preference, low intelligence and low disposition to pursue training to improve themselves. This coefficient is positive and significant with a value of 0.15, that is, the information or treatment makes public employment more attractive for this group of persons.

Is there heterogeneity in the response to this treatment? For some characteristics, there is. In particular for those that reflect intelligence and the disposition to pursue training and improve oneself. In both cases, it was found that the coefficient of interaction is close to -0.2 or even higher in magnitude than the coefficient of the treatment variable. This suggests that the information discourages individuals belonging to the most talented group and those most willing to become better trained. No heterogeneous effect was found according to risk aversion or the degree of intrinsic motivation. However, this could be due to the low power of the experiment. The sign of the interaction with tolerance to risk was as expected. For its part, the link with intrinsic motivations suggests that the presence of pay for performance attracts workers with more intrinsic motivation, in line with the results presented Chart 2.22 (p. 94).

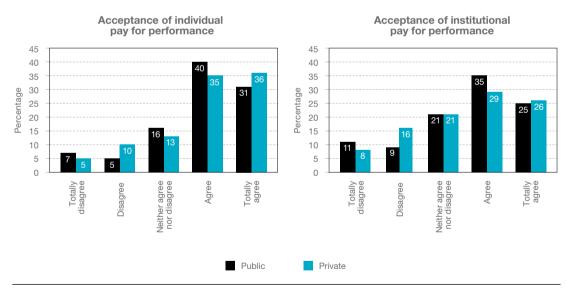
There is potential for introducing pay for performance schemes in some public administration contexts and by this means improve the quality of the bureaucracy.

## A GUIDE FOR THE DESIGN AND IMPLEMENTATION OF PFP SCHEMES

The evidence discussed to now suggests there is room to introduce pay for performance schemes in some contexts of public administration and by this means improve the quality of the bureaucracy. However, success depends critically on good design<sup>59</sup> and appropriate implementation. Even before addressing the design, it is appropriate to consider some questions.

First, an exploratory analysis of the preferences of personnel is recommended with respect to this type of instrument. This reports on their level of knowledge and possible resistance, suggesting an information strategy. The 2014 CAF Survey suggests very generalized acceptance of pay for performance schemes (Chart 2.25). In particular, 71% of public sector workers agree or strongly agree that part of their salary be paid according to their individual performance; and 55% agree or agree strongly that part of their salary be paid according to the performance of their institution.

Chart 2.25 Acceptance of pay for performance schemes in Latin American cities (2014)<sup>a/b/</sup>



a/The graphs report the percentage of persons that "totally disagree", "disagree", "neither agree nor disagree", "agree" or "totally agree" with the statements "Part of salaries should be paid according to the performance of each employee" and "Part of the salary paid by organizations or businesses should be paid according to the performance of the institution where an employee works". b/ Cities: Buenos Aires, La Paz, São Paulo, Bogota, Quito, Mexico City, Panama City, Lima, Montevideo and Caracas.

Source: the authors, with data from the 2014 CAF Survey.

<sup>59.</sup> There is no single and universal design. In effect, we document here a high level of heterogeneity in the characteristics of these programs. The appropriateness of certain characteristics will vary from context to context. Nevertheless, there appear to be certain principles that transcend the contexts, some of which are considered in this report.

Second, it is important to identify whether flaws in the implementation of a program are due to problems of incentives, or if some other factor is responsible, like the lack of resources. For example, a study to evaluate a strategy of a local government in the region to reduce tax evasion verified a low rate of locating tax debtors by public employees of collecting body (four out of ten debtors could not be located). This could be due to a low level of effort on the part of tax officials, but also to problems with the addresses of taxpayers. A consultant was hired to find the taxpayers using the same address database. The consultant reduced the list of unfound taxpayers by half. The analysis suggests that in this context there is space to improve implementation by introducing a pay for performance scheme.

#### THE DESIGN IN PRACTICE

The design elements of a PfP program are varied, as can be appreciated from Table 2.4. What options have been adopted most often? What are some of the mistakes that have been made? To answer these questions we reviewed 74 PfP programs in the sectors of education (21 programs), health care (32 programs) and tax administration (21 programs).

Table 2.4 Choice of parameters in designing pay by performance programs

On what basis?	Who?	How large? What type?	Individual or collective?	Standard of comparison
Qualitative or quantitative evaluation. In the latter case it is possible to focus on tasks or results.	Who does the measuring? Supervisor Human resources Peers External agency  To whom is it applied? Directors vs. teachers Supervisors vs. Supervised	What fraction of salary is fixed and what fraction depends on performance  Monetary or non-monetary rewards?	According to individual or group (team) performance or according to the performance of the organization?	Pre-established goals
				Minimum compliance
				Performance relative to history
				Performance relative to internal or external peers
				Competitions
				Pay by percentiles
				Pay by outpupt

<sup>60.</sup> The list of jobs consulted is based on Hasnain et al. (2012), De Wulf (2004) and Neal (2011). This is available on request.

The evaluation system should be based on easily measurable indicators that are relevant to the goals of the institution and linked to the activities of workers.

#### On what basis?

The starting point in the design of a PfP scheme is to decide which processes and objectives (or results) are key for the organization and which measureable tasks are linked to success in meeting these objectives. The evaluation system should be based on easily measurable indicators that are relevant for the goals of the institution and linked to the activities of the worker.

The measurement can be qualitative, based on the subjective opinions of supervisors or beneficiaries, or based on quantitative metrics of a more objective character. A scheme based exclusively on subjective indicators runs great risks of failing, especially if it lends itself to a partial handling by the evaluator. 61 Quantitative metrics can be classified as one of two types: of results or of inputs. The results tend to be strongly related to the raison d'etre of the organization, but they depend not only on the actions taken by the organization, but also by external factors. Examples of indicators of results are the scores from standardized exams in the case of education and the level of tax evasion in the case of a tax collection agency. Input indicators, based on tasks or actions according to the productive process of the organization, contribute to achieving the results. Examples of input indicators are the hours worked in the education sector, the number of patients attended in the health sector and the number of coercive processes initiated in the tax administration sector. The evaluation system can certainly combine different metrics

More than 70% of the programs reviewed are focused on objective measurements, and this is true in all sectors (Chart 2.26). Almost all the rest combine objective and subjective measurements and categorize them as mixed. Only two of the programs are based exclusively on subjective measurements. <sup>62</sup> The predominant objective measures are indicators of results in the areas of education (basically scores in standardized tests) and taxation (amounts of money collected or evaded) and indicators based on inputs in the health sector <sup>63</sup> (for example, patients attended or procedures executed). <sup>64</sup>

<sup>61.</sup> This can also apply to objective indicators, but is more plausible if the evaluation is subjective.

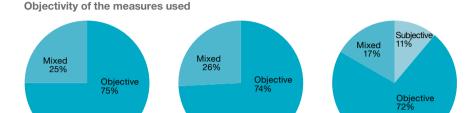
<sup>62.</sup> This is the case of the schemes in the tax administration sector in Morocco and Brazil. Employees in Morocco were evaluated according to five categories: general results obtained; professional knowledge; work quality and team spirit; sense of responsibility and constancy. In Brazil, dedication and commitment to the objectives of the institution; knowledge about their tasks and self-learning; quality of work; creativity; public relations and discipline and relations with peers were evaluated. It is interesting that both processes incorporated mechanisms to attenuate problems arising from the subjectivity of the scale. The program in Morocco applied rotating managers to avoid nepotism, conducted surveys on satisfaction with the evaluations and assigning human resource personnel to help with the system, while in Brazil it was possible to appeal the evaluation results.

<sup>63.</sup> Miller and Babiarz (2013) also documented a predominance of input indicators in the health sector.

<sup>64.</sup> Attendance has been used as an input indicator for teachers in education (Duflo et al, 2012) and visits to taxpayers in the tax sector (Burgess et al., 2010). In the health sector, measures of results have been used such as increased weight among children attending nurseries (Singh, 2011), or the results of medical tests (hemoglobin and cholesterol) for patients assigned to different medical services (Vaghela et al., 2009)

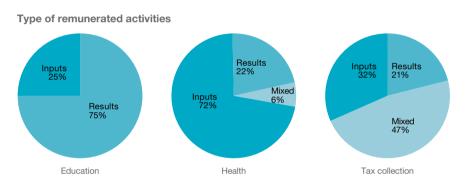
Tax collection

Chart 2.26 Characteristics of pay for performance schemes<sup>a/b/</sup>



Health

Education



a/The three upper graphs report the perentage of programs that consider subjective and/or objective measures in their design. The numbers of programs that have this type of information was 20, 30 and 18 for the education, health and tax collection sectors, respectively.

b/The three lower graphs report the percentages of programs that have as the object of evaluation measures of "inputs", "results" or both. The number of programs that had this information was 20, 23 and 19 for the education, health and tax collection sectors, respectively.

Source: the authors, based on a document review.

Several factors can influence the selection of one option or another. Although in principle payment according to results can appear to be the most convenient, sometimes it can be very costly or impractical to have reliable measures of results. In other cases, although measures of results are available, they can be relatively disconnected from the actions of the worker owing to external factors, which requires trying to discount the role of these.

In any case, the measures should be relevant *vis-à-vis* the mission of the organization. Lack of relevance not only makes for unproductiveness, but also gives rise to problems of legitimacy, as Gavagan *et al.* (2010) documented in the health sector.

Care needs to be taken in cases where persons are responsible for multiple tasks (Holmstrom and Milgrom 1991). In these contexts, rewarding staff for

one task can draw them away from other important functions. Encouraging improvements in nutrition (Vermeersch and Kremer, 2005) or in reducing the incidence of anemia among students (Sylvia *et al.*, 2013), for example, have resulted in less effort in educating students. And in these contexts, the problem can persist even after incorporating multiple tasks in the measurement scheme if there is no concordance between the effort required, the rewards given and the importance of these goals for the organization.

Finally, many organizations already have systems of measurement that do not imply adopting pay for performance, but rather are used for institutional monitoring and evaluation. Using these systems for pay for performance could result in perverse incentives that could contaminate them, which is why some authors suggest separating instruments used for pay for performance from those used to evaluate the organization (Neal, 2011).

#### Who does what?

In designing a PfP scheme, it is necessary to define who should be doing the measuring and who should be measured: supervisors, supervised or both. Efforts should be made to avoid unfair measurements and measurements that fail to represent real performance, which can occur even when objective measures are used. For example, Kremer and Chen (2001) documented how, in a program in Kenya to reward teachers for good attendance, the directors in charge of monitoring ensured that the teachers of their school obtained the reward by altering attendance records. Likewise, Jacob and Levitt (2003) documented how Chicago schoolteachers that receive incentives according to the performance of their students in exams were changing the test answers of their students. One way to prevent this type of cheating is to assign external agents to administer the exams.

In more than 70% of the programs reviewed in education and health care, the Ministries of Education and Health were respectively in charge of undertaking evaluations, while in the majority of tax administration programs, managing or supervising bodies were responsible, probably owing to the generalized use of subjective metrics and the fact that objective metrics still tend only to be known internally. In some cases, self-evaluation is also used, as occurs in some health centers in Rwanda (Meessen *et al.*, 2006), complemented by random audits to avoid cheating; and evaluations conducted by beneficiaries, as is the case of secondary students in some schools in the United States with responsibility for evaluating their teachers (Eberts *et al.*, 2002).<sup>65</sup>

Should service providers or their supervisors be given incentives? The advantage of giving incentives to supervisors is that they have more scope for innovating, encouraging cooperation and ensuring the best possible corre-

<sup>65.</sup> At the end of each quarter students were surveyed about the quality of education provided by their teachers. The students evaluated their teachers in 15 categories. Teachers that obtain a score of 4.65 out of 5 in these categories in all their classes (weighted by the percentage of attendance in each class) over four quarters receive a salary increase of 5% plus a 10% bonus.

spondence between the individual and tasks, resulting in more productivity. In practice however many PfP schemes reward the service provider with the view that it is the provider's efforts that definitively affect compliance with the goals of the organization. It is also common that both providers and supervisors are given incentives, as has been done in the Danish department of tariffs and taxes since the 1990s (De Wulf, 2004).

Optimal size depends in every case on how tasks are associated with results, of the valorization of results by the organization and workers' risk tolerance, among other factors.

#### How large? What kind?

Although it might be expected that the greater the pay incentive, the more effort can obtained from workers, several factors can make large bonuses counterproductive. First, the higher the proportion of performance-linked pay schemes, the more volatile are salaries, which can make higher average salaries a necessity. The premium salary verified among employees that work under PfP in Latin America is consistent with this compensation. Similarly, Eichler and Levine (2009) documented how the implementation of a PfP scheme in a health program in Haiti required the provision of more funding by the US Agency for international Development (USAID) for the executing agency to accept the project. Second, the Yerkes-Dodson law in the field of psychology establishes that very high bonuses can produce excessive stress and anxiety, with negative effects on performance (Hasnain et al., 2012).

In practice, the size of the bonus varies widely, including within sectors. For example, in the taxation sector, De Wulf (2004) documented a range between 30% and 100% of the base salary in Chile, a level of up to 15% of the base salary in South Korea, and a range between 1% and 18% of total pay in the Philippines. In healthcare, there are cases in which the pay for performance has a ceiling of 3% of total salary (Gavagan et al., 2010), and others that reach 25% of annual income (Doran et al., 2006). Finally, in the education sector there are cases of pay for performance with a range between 3 and 7% of the base salary (Fryer, 2011) and cases with a range from 25% to more than 100% (Vegas and Umansky, 2005).

The optimal size depends in each case on how the tasks are associated with the results (that is, what the function of the firm is), of how the results are valued by the organization and the level of tolerance to risk of the workers, among other factors. The large dispersion in size suggests that in some cases the size is not appropriate. In effect, Fryer (2011), Rosenthal *et al.* (2005) and Gavagan *et al.* (2010) attributed the failure of some programs to the definition of an excessively low bonus, which in the case of the programs evaluated by these authors did not exceed 10% of base income.

Finally, given that recognition and valuing of their work is important for persons, can non-monetary incentives work? Miller and Babiarz (2013) presented qualitative evidence that suggests that both monetary rewards and certificates of recognition can successfully motivate workers, and Ashraf *et al.* (2014b) quantitatively documented how public recognition can motivate effort more than monetary incentives in certain contexts.

Rewarding good group performance has the advantage of promoting cooperation but it is a weak incentive for promoting individual effort.

#### Individual or collective?

Another important decision in the design of a PfP is whether the performance measurements and associated payments are linked to collected or individual results. Rewarding good group performance has the advantage of promoting cooperation, but is a weaker incentive to promote individual effort, given it can encourage free-riding, above all in large groups (see Vigdor *et al.*, 2008, for an example in education). For their part, systems that reward individual performance eliminate the problem of opportunism, but can introduce hostile and uncooperative practices.

In practice both types of measurements are common, even within the same sector. For example, the scheme for evaluating educational performance in Mexico (*Carrera Ministerial*) establishes rewards for teachers, while the in Chile (National System for Evaluating School Performance, SNED) establishes rewards for educational bodies (Vegas and Umansky, 2005). Combining the two approaches could be a good strategy, according to experiences explored here. They are common in tax administration, and with much variation in the proportion of individual/unit reward. In Romania, for example, 70% of the bonuses are determined according to individual performance, while in South Africa it is 50% and in Iran, 10% (De Wulf, 2004).

#### Standard of comparison

Finally, independent of the criteria for measuring performance, who does the measuring, and who is being measured, the measurement must be transformed into pay. The mechanism to make this transformation can vary greatly and it is crucial to avoid perverse incentives and undesired actions. It is often linked to standards based on absolute measurement values, pre-agreed targets, relative comparisons to certain comparable groups, historical values, or metrics resulting from statistical models.

A first possible mechanism is "piece-rate pay", in which remuneration is simply a multiple of the measure on which the evaluation is made (whether a result or an input). In principle, this mechanism does not appear to be as applicable to the public sector as, for example, industrial manufacturing. Nevertheless, there are some successful experiences, such as one documented by Duflo *et al.* (2012), in which teachers in India receive 50 rupees per day of additional attendance over 20 days of monthly attendance and are fined 50 rupees for every day they miss. Li *et al.* (2014) studied a case in the health sector in Canada in which clinics were evaluated according to the number of patients contacted to arrange preventive medical appointments with a bonus of 6.60 dollars per patient. Kouides *et al.* (1998) studied a case in the United States in which doctors were evaluated according to the number of patients over 65 years of age that they vaccinated, paying them a bonus of eight dollars per vaccination, and an increase of 0.18 or 1.16 dollars if they reached a rate of immunization of 70% or 85% of the target population.

A common alternative in the public sector consists of setting a range of goals and payments according to this range. For example, teacher pay incentive pro-

gram, POINT in Nashville, TN (2006-2009) provided bonuses of \$5,000, \$10,000 or \$15,000 to teachers if they exceeded historical thresholds of 80%, 90% or 95%, respectively, in the distribution of the "value-added" metric.<sup>66</sup>

These mechanisms have the disadvantage that, while they introduce very strong incentives for persons that are slightly below the threshold, they do not encourage persons that are well below the threshold or those that have significantly exceeded it. This does not occur with per-unit schemes that tend to impose linearity between performance and pay that in general is inappropriate (Laffont and Tirole, 1993).

Both mechanisms have an additional disadvantage, which is the uncertainty with respect to the number of units that will be reached or the number of person that exceed each threshold, which implies uncertain salary costs. An alternative mechanism that avoids this problem is based on ranking. A first option is pay by percentile, that is, according to the position on a performance index scale, as Barlevy and Neal (2012)<sup>67</sup> suggest. A variant of these schemes with ranking is a type of competition in which bonuses are given to the workers in the top n positions of a performance scale. Competition mechanisms, like that of ranges, do not offer incentives to persons that think they have a low probability of being among the winners. Payment by percentile or position can generate incentives for all personnel, but may appear somewhat complex and therefore weaken incentives.<sup>68</sup>

One factor that should be considered when defining a standard for comparison is the fact that not all workers compete under the same conditions. Ideally, a pay for performance scheme should recognize that different students, patients and debtors represent different potentials/levels of difficulty and offer rewards that reflect this. A paradigmatic example is the use of standardized tests to assess teachers or schools, given that student performance in these tests not only depends on the quality of the teacher, but also on their family environment. Thus, measuring teachers with different students using the same yardstick is unfair and inefficient, given that it does not encourage teachers of students from difficult family backgrounds and low possibilities of success in such tests. It can also create problems for the schools of such students to attract and maintain good teachers. Consequently, PfP schemes should take into account the heterogeneity of conditions when setting standards. In fact, many schemes do this, as is the case of SNED in Chile, which groups schools according to the characteristics of the student population, recognizing the environment and background of the student can affect performance (Vegas and Umansky, 2005).

A common alternative in the public sector is to construct ranges of goals and establish payment according to these ranges.

<sup>66.</sup> In the area of evaluating teachers, the "added value" is a common performance metric that seeks to isolate the contribution of teachers in the learning process by comparing the grades of a group of students in a determined school year to those of the same students in previous years and those of other students in the same school year.

<sup>67.</sup> The mechanism is intended for evaluating teachers. Firstly, a group of comparable students is constructed for each student according to the prior academic record and family environment, among other characteristics. At the end of the year each student is ordered according to his/her performance compared to the relevant group. The average of this position among students of a classroom (or of a school) represents the performance index for the teacher (or the school). The bonus payment is proportional to this index.

<sup>68.</sup> Fryer (2011) argued that the complexity of PfP systems can work against the effectiveness of the programs.

Unfortunately, arbitrary methods of standard relativization are sometimes employed that result in inadequate correction (Neal, 2011).

The design of this aspect of pay for performance schemes is vital to avoid, or at least not exacerbate undesired situations, some of these noted above. A common error is setting too a high a standard (see Neal, 2011), which could have been the problem in the POINT program, which did not have an impact despite its large bonuses (Springer *et al.*, 2011). Similarly, setting standards exclusively in function of the performance for the proceeding period can give rise to what is called the ratchet effect, that is, encouraging individuals to regulate their performance at below their potential, avoiding that an exceptional performance in one year will raise the standard too much in the following year.

Another of the most common and serious problems that emerge from fixing the standard is the manipulation of the sample on which the measurement is made or on which effort is exercised. For example, if the bonus is paid in function of the average score of students in a standardized exam, teachers can discourage the attendance of the poorest students; if it were paid in function of the number of students that exceed a certain threshold, the teacher could focus on the students with more probability of reaching the target at the expense of the others. Similar situations can arise in other sectors. For example, Shen (2003) studied the case of an incentive program for doctors with drug-abusing patients and argued that the doctors could try to attract less sick patients in order to obtain better results upon release.

Several mechanisms can contribute to alleviating some the aforementioned problems. To avoid incentives to teachers that discourage the attendance of low performance students, a minimum grade could be assigned to these students, while using the average grades for the complete class can prevent teachers from focusing on only the students with highest potential (Muralidharan and Sundararaman, 2011).<sup>69</sup> Alternatively, equality measure can be rewarded (without discouraging increased average yield) or penalizing unequal measures, such as the number of students below a certain threshold or the gap between the best and poorest performances.

The problem of the design and implementation of a pay for performance scheme is complex but at the same vital. Obviously, the concrete characteristics of the appropriate design vary according to the circumstances and a good design is the result of reflection and learning. Nevertheless, there appear to be key principles that transcend the specific context. It is important to have objective and clear measurements that are strongly connected to the institutional mission. The bonus should be sufficiently attractive to make a difference and the standards of performance should be reachable and at the same time challenging. The scheme should be transparent and easy to understand and administer. Appropriate external factors should be incorporated that can influence mea-

<sup>69.</sup> Muralidharan and Sundararaman (2011) point out that this metric does not guarantee uniform effort. If the return on effort is concave (convex) for student potential (as measured by notes at the beginning of the period), teachers will be encouraged to focus on weaker (stronger) students, but no student will be completely neglected.

surements beyond the evauated activities. It should also be kept in mind that the design can exacerbate or ameliorate undesired actions. Finally, but no less important, the legitimacy of the system should be ensured. Workers should see the system as fair, impartial and coherent in the sense that it remunerates works for observable tasks considered vital.

## **Conclusions**

The quality of the bureaucracy is a determinant of the capacity of the State. In this chapter we analyze the compensatory structures of the public sector in countries in the region and their effect on the quality of the bureaucracy through the channels of selection and incentives.

It is argued that a good bureaucrat is suitable, honest and intrinsically motivated. Latin American bureaucrats have been documented as being, on average, more qualified than the typical private sector employee, with more intrinsic motivation and, in some cases, with less tolerance of corruption. However, this is not sufficient to draw definitive conclusions. Comparison with the formal private sector can be uninformative, while comparison with more developed regions is not encouraging.

The analysis of the pay structure of the public sector makes evident certain differences from the conditions of public sector employment. Three features stand out. First, there is a wage differential in favor of the public sector, which is greater among women and that persists even after discounting the effect of the characteristics of the workers, such as their education and work experience. The differential decreases as the level of qualification of the worker rises, to the point of becoming negative among men with higher levels of education. Second, public sector salaries increase too slowly over professional careers and the advances of workers up the hierarchical ladder are not always determined by individual merit. Third, the mechanisms of pay for performance are relatively little used compared to what is happening in the private sector.

These characteristics of the public sector pay scheme have implications in terms of the type of workers that are attracted and retained and of their performance. Firstly, the reversion of the salary gap in the upper distribution of skills generates problems of recruitment and retention of more qualified workers. This effect, however, can be attenuated in the case of intrinsically motivated workers. As well, the relatively low salaries that the public sector offers to more qualified workers generates dissatisfaction and, as a consequence, does not promote good performance and can even give rise to dishonest practices.

Secondly, the relative salary compression in the public sector and the lack of merit-based career development results in dissatisfaction with the lack of promotions, in particular among more qualified workers. This translates into the loss of workers that value career development, as well as discouraging more effort among those that remain in the public sector.

Finally, there is evidence that pay for performance schemes, applied in the appropriate context with a good design, can favor better performance. Their success depends critically on having easy-to-measure metrics that are difficult to manipulate and coherent with organizational goals, otherwise the adoption of PfP can be counterproductive. Likewise, the evidence also indicates that these schemes can attract more qualified workers, with a better disposition to work and intrinsically motivated.

The results suggest that there is room for improving the quality of the bureaucracy through compensatory schemes. In general terms, making the salary structure more flexible and linking salary and career development to the competencies, abilities and efforts of the worker can attract better bureaucrats and provide better incentives for better performance. The political economy of this type of reform implies major challenges that have not been studied here.

Two final considerations: Firstly, because workers differentiate themselves through attributes that are relevant to the public sector work but are not easily observed, the question arises whether it is feasible to have instruments that allow for examining these attributes during the selection process of the personnel. Among these are intrinsic motivations, tolerance for dishonest behavior, and certain non-cognitive or socioemotional abilities that can contribute to improving the services provided by the State. While the contract can be viewed as a mechanism to achieve good staff selection, it is possible that determined changes in pay can improve the pool of candidates in one dimension but make it worse in another, which make complimentary mechanisms very valuable. Along this same line, it can be very interesting to determine how malleable these attributes are, for example, through training, or how they evolve in function of the working environment and institutional performance. Furthermore, there are other ways to improve the quality of the bureaucracy in addition to pay schemes that have not been studied here. These include the organizational structure, autonomy at both the agency and individual levels, and systems of monitoring and control.

## **Appendix**

# Measures of motivation, aptitudes and preferences in the 2014 CAF Survey

Motivation for public service (Perry and Wise, 1990) is defined as "the will-ingness of an individual to respond to motives present principally or solely in public institutions or bodies". Motivation for public service is associated with a preference for working in public institutions and with better individual performance in such organizations. As well, public organizations can require fewer extrinsic incentives to attract workers with these motivations. The measurement is based on a reduced construct of ten items developed by Coursey and Pandey (2007):

- 1. "Politics" is a dirty word.
- 2. I don't care much for politicians.
- 3. The give and take of public policy-making does not appeal to me.
- 4. I unselfishly contribute to my community.
- 5. Meaningful public service is very important to me.
- **6.** I would prefer seeing public officials do what is best for the whole community even if it harmed my interests.
- 7. I consider public service my civic duty.
- 8. It is difficult for me to contain my feelings when I see people in distress.
- **9.** I am often reminded by daily events how dependent we are on one another.
- **10.**I have little compassion for people in need who are unwilling to take the first step to help themselves.

**Pro-social motivation (Grant, 2008):** This is defined as the desire to help others. It is measured on basis of a scale of 8 items developed by Ashraf *et al.* (2014a):

- 1. Supporting other people makes me very happy.
- 2. I do not have a great feeling of happiness when I have acted unselfishly.
- 3. When I was able to help other people, I always felt good afterwards.
- 4. Helping people who are not doing well does not raise my own mood.
- 5. I do not feel that I have to perform selfless acts towards others.
- 6. I feel I must stand up for other people.
- 7. I do not regard it as my duty to act selflessly.
- 8. I feel a strong duty to help other people in every situation where it is possible for me.

**Willingness to make efforts:** This contains several questions about attitudes toward work that can be interpreted as measures of the willingness to make efforts. In particular, the respondent should indicate how much she/he is in agreement with a series of statements on a scale from 1 (totally disagree) to 5 (totally agree). The statements were:

- 1. I help new workers, although I am not obliged to do so.
- 2. I stay late if it is necessary to help out.
- 3. I make suggestions for improvements.
- 4. I avoid additional tasks and responsibilities (inverse scale).
- 5. I seek training to improve my performance at work.

**Risk tolerance:** The level of tolerance to risk has been measured with questions to determine if the individual must have all the necessary information before making a decision, or he/she prefer a job with a fixed salary or one with a higher potential income, but with a degree of uncertainty. The person is evaluated on a scale from 1 (low risk tolerance) to 4 (high risk tolerance).

Individuals are offered two alternative incomes, one with a fixed value and the other that can vary from month to month between a lesser and greater value, and are asked the following question: "Suppose that you are the only source for your family income and you have to choose between two jobs, which alternative would you choose?" if the individual chooses the risky alternative, he/she is classified as having a high tolerance to risk (value equal to 4), while if she/he chooses the certain pay a second risky alternative is offered. If this second alternative is accepted it is classified with a tolerance value of 3 (medium-high tolerance), and if it is not accepted, a third risky alternative is offered with an even higher expected result. If the subject accepts this option, he/she receives a risk tolerance score of 2 (medium to low risk tolerance). If he/she does not accept this option, the subject is classified as having a low risk tolerance (value equal to 1).

**Brief Verbal Conceptualization Test (Brenlla, 2007):** Verbal conceptualization is defined as the capacity of the individual to generalize, make abstractions and find relationships among verbal concepts. It is based on the similarities and differences of objects the test subject has assimilated, in the facts or ideas that surround him/her and in her/his skills to order and classify the similarities. In turn, they demand the use of memory, understanding and the capacity for associative and inductive thought.

This test evaluates the ability to produce verbal concepts inductively. It is designed for use in the context of surveys. The task consists of making inferences, based on the presentation of stimuli (in this case two concepts, for example "table – chair"), the relationship or rule that joins them and is expressed verbally (response: "both are furniture"), which supposes putting into practice the three basic steps of inductive reasoning: coding, inference and mapping.

The test consists of a selection of items of the "Analogies" sub-test of the Wechsler Adult Intelligence Scale III (WAIS-III).<sup>71</sup> The items were selected taking the first and last items of those considered easy, the first two items with moderate difficulty and the first two items from maximum difficulty. The selected items were:

<sup>70.</sup> This is a type of verbal competence. Verbal competencies allow for communication among people and comprehension and interpretation of linguistic information.

<sup>71.</sup> This test consists of 19 items that are ordered by increasing difficulty.

- 1. Dog lion
- 2. Boat car
- 3. Table chair
- 4. Democracy monarchy
- 5. Egg seed
- 6. Vapor fog

The responses are classified as "abstract correct"; "correct but functional or concrete" and "incorrect". For example, for the item dog – lion, responses like "they are animals", "quadrupeds" or "mammals" receive 2 points (abstract correct). In contrast, the responses "they have hair", "they have teeth", "they have claws", are scored with 1 (correct but functional or concrete but functional) and answers like "they are aggressive" or "dangerous" are treated as incorrect and receive a score of 0. The scoring of the test is the simple sum of all the coded items, the score of which can be 0 (incorrect), 1 (correct but functional or concrete) and 2 (abstract correct). Consequently, the total score can range between 0 and 12. Non-responses are eliminated because there are no criteria defined for assigning another value.

**Table A 2.1** Demographic characteristics and educational level of public employees in Latin American countries

City	Vaar	With higher education (%)		Average ag	e (years)	Women (%)	
City	Year	Public employment	Formal private	Public employment	Formal private	Public employment	Formal private
Argentina	2012	49	23	41	37	53	34
Bolivia	2012	57	30	40	34	47	30
Brazil	2012	39	16	40	34	58	37
Chile	2011	46	25	41	37	54	36
Colombia	2012	59	22	41	34	48	38
Costa Rica	2012	42	12	41	34	50	32
Ecuador	2012	58	22	42	35	46	33
Honduras	2012	30	10	38	32	53	34
Mexico	2012	46	18	40	34	48	32
Panama	2012	41	21	42	35	54	35
Peru	2012	67	36	43	34	45	35
Paraguay	2011	42	20	37	33	50	30
El Salvador	2012	27	12	40	34	45	34
Uruguay	2012	35	12	42	36	52	41
Venezuela	2011	50	24	39	35	55	35
Latin Amer average	ican	46	20	40	35	51	34

**Tab A 2.2** Qualification of the worker and job requirements according to the sector for Latin American cities (in percentages) (2014)

qualified	Inade Over- qualified	equate qualific		0 :: 11	Inade	quate qualific	ation
qualified		Under-	Different	0 1 11			
00.0		qualified	qualified Over- Under- from	Suitably qualifed	Over- qualified	Under- qualified	Different from required
88.2	5.9	5.9	0.0	87.8	5.6	5.6	1.1
76.2	10.5	4.8	8.6	71.1	14.0	2.6	12.3
59.5	35.1	5.4	0.0	69.2	22.1	4.8	3.9
84.4	4.4	6.7	4.4	89.0	6.3	2.6	2.1
80.0	6.7	6.7	6.7	81.4	6.0	8.4	4.2
69.5	15.3	11.9	3.4	85.1	7.5	3.2	4.3
72.6	15.7	5.9	5.9	71.8	17.0	4.9	6.3
82.6	10.1	7.3	0.0	84.2	8.5	5.3	2
82.3	10.4	4.2	2.1	87.6	9.3	1.8	1.3
81.6	14.5	0.0	4.0	79.0	9.4	7.3	4.4
79.7	11.3	5.6	3.4	81.0	10.7	4.6	3.8
	59.5 84.4 80.0 69.5 72.6 82.6 82.3 81.6 <b>79.7</b>	59.5     35.1       84.4     4.4       80.0     6.7       69.5     15.3       72.6     15.7       82.6     10.1       82.3     10.4       81.6     14.5       79.7     11.3	59.5     35.1     5.4       84.4     4.4     6.7       80.0     6.7     6.7       69.5     15.3     11.9       72.6     15.7     5.9       82.6     10.1     7.3       82.3     10.4     4.2       81.6     14.5     0.0	59.5       35.1       5.4       0.0         84.4       4.4       6.7       4.4         80.0       6.7       6.7       6.7         69.5       15.3       11.9       3.4         72.6       15.7       5.9       5.9         82.6       10.1       7.3       0.0         82.3       10.4       4.2       2.1         81.6       14.5       0.0       4.0         79.7       11.3       5.6       3.4	59.5       35.1       5.4       0.0       69.2         84.4       4.4       6.7       4.4       89.0         80.0       6.7       6.7       6.7       81.4         69.5       15.3       11.9       3.4       85.1         72.6       15.7       5.9       5.9       71.8         82.6       10.1       7.3       0.0       84.2         82.3       10.4       4.2       2.1       87.6         81.6       14.5       0.0       4.0       79.0         79.7       11.3       5.6       3.4       81.0	59.5       35.1       5.4       0.0       69.2       22.1         84.4       4.4       6.7       4.4       89.0       6.3         80.0       6.7       6.7       6.7       81.4       6.0         69.5       15.3       11.9       3.4       85.1       7.5         72.6       15.7       5.9       5.9       71.8       17.0         82.6       10.1       7.3       0.0       84.2       8.5         82.3       10.4       4.2       2.1       87.6       9.3         81.6       14.5       0.0       4.0       79.0       9.4         79.7       11.3       5.6       3.4       81.0       10.7	59.5       35.1       5.4       0.0       69.2       22.1       4.8         84.4       4.4       6.7       4.4       89.0       6.3       2.6         80.0       6.7       6.7       81.4       6.0       8.4         69.5       15.3       11.9       3.4       85.1       7.5       3.2         72.6       15.7       5.9       5.9       71.8       17.0       4.9         82.6       10.1       7.3       0.0       84.2       8.5       5.3         82.3       10.4       4.2       2.1       87.6       9.3       1.8         81.6       14.5       0.0       4.0       79.0       9.4       7.3         79.7       11.3       5.6       3.4       81.0       10.7       4.6

**Table A 2.3** Job training in the pubic and private sectors in Latin American cities (in percentages) (2014)

0	Entire	sample	Employees with higher education				
City	Formal private sector	Public sector	Formal private sector	Public sector			
Buenos Aires	26.9	38.4	35.6	43.5			
La Paz	42.0	49.6	55.1	53.4			
São Paulo	33.1	48.8	53.4	53.0			
Bogota	39.3	64.5	49.7	69.6			
Quito	35.2	49.9	22.9	42.4			
Lima	43.6	47.7	58.6	58.0			
Montevideo	31.9	53.0	54.5	52.2			
Caracas	37.5	46.6	55.7	52.1			
Panama City	40.0	56.2	42.2	71.8			
Mexico City	52.7	49.2	51.6	58.2			
Total	37.8	47.6	51.4	55.3			
Fuente: elaboración p	Fuente: elaboración propia con datos de Encuesta CAF 2014.						

Table A 2.4 Characteristics of employment contracts according to the sectors for Latin American countries<sup>a/</sup>

		Perma contra		Seniority position (		Hours wo		Right to re		Right to insuran	
Country	Year	Public employment	Formal private sector	Public employment	Formal private sector	Public employment	Formal private sector	Public employment	Formal private sector	Public employment	Formal private sector
Argentina	2012	s.d.	s.d.	109	81	38	44	90	79	91	79
Bolivia	2012	88	47	106	63	42	49	82	43	77	40
Brazil	2012	s.d.	s.d.	123	55	38	43	92	89	0	0
Chile	2011	95	91	125	73	43	45	91	88	89	85
Colombia	2012	99	79	129	48	46	51	98	79	96	89
Costa Rica	2012	n.d.	n.d.	131	53	46	49	99	82	99	82
Ecuador	2012	100	84	142	82	42	44	95	67	16	7
Honduras	2012	98	87	104	43	43	50	22	4	s.d.	s.d.
Mexico	2012	87	59	115	47	44	51	60	50	82	61
Panama	2012	n.d.	n.d.	131	55	43	46	n.d.	n.d.	0	0
Peru	2012	100	64	146	41	44	48	85	60	69	39
Paraguay	2011	100	54	113	59	43	52	79	42	97	82
El Salvador	2012	n.d.	n.d.	99	52	42	47	90	62	94	62
Uruguay	2012	n.d.	n.d.	180	70	42	44	100	93	96	92
Venezuela	2011	n.d.	n.d.	112	45	40	43	90	80	90	80
Latin Amer average	ican	96	71	124	58	42	47	84	66	83	67

a/ n.d.: No data available.

Source: Arcidiacono et al. (2014).

Table A 2.5 Salary gaps between the public and private sectors in Latin American countries<sup>a/</sup>

	_	IV	lonthly wag	e <sup>b/</sup>	ŀ	lourly wage	b/	Gini co	efficient
Country	Year	Public sector	Formal private sector	Difference (%)	Public sector	Formal private sector	Difference (%)	Public sector	Formal private sector
Argentina	2012	1,010	910	11	6.9	5.4	29	0.326	0.325
Bolivia	2012	826	718	15	5.7	4.0	42	0.361	0.391
Brazil	2012	1,007	645	56	7.7	5.0	53	0.531	0.535
Chile	2011	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.450	0.468
Colombia	2012	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.367	0.416
Costa Rica	2012	1,497	798	88	8.5	4.3	97	0.361	0.377
Ecuador	2012	1,047	618	69	6.5	3.6	78	0.302	0.306
Honduras	2012	788	512	54	5.0	2.8	79	0.374	0.379
Mexico	2012	963	672	43	6.6	3.7	76	0.449	0.451
Panama	2012	1,083	837	29	6.7	4.8	39	0.389	0.401
Peru	2012	672	635	6	4.3	3.6	19	0.389	0.413
Paraguay	2011	795	669	19	5.2	3.5	51	0.355	0.357
El Salvador	2012	795	488	63	5.1	2.7	87	0.312	0.347
Uruguay	2012	879	667	32	5.6	3.9	45	0.298	0.388
Venezuela	2011	567	502	13	3.4	2.9	17	0.268	0.256
Latin Ameri average	can	918	667	38	5.9	3.9	54	0.369	0.387

a/ n.d.: No data available. b/ In dollars, 2005 purchasing power parity.

Source: Arcidiacono et al. (2014).

**Table A 2.6** Existence of payment for performance schemes according to the sector in Latin American cities (in percentages) (2014)

	Formal pri	vate sector	Public sector			
City	Bonuses for individual productivity	Bonuses for institutional productivity	Bonuses for individual productivity	Bonuses for institutional productivity		
Buenos Aires	14	11	3	2		
La Paz	35	28	28	26		
San Pablo	31	26	23	20		
Bogota	25	20	31	30		
Quito	27	21	9	9		
Lima	30	24	10	10		
Montevideo	23	13	15	9		
Caracas	51	45	42	34		
Panama City	59	52	24	24		
Mexico City	37	29	43	41		
Total	30	24	22	20		
Source: the authors, with data from the 2014 CAF Survey.						

# PUBLIC PROCUREMENT: AUTONOMY VERSUS CONTROL

**Chapter 3** 

## **Chapter 3**

## PUBLIC PROCUREMENT: AUTONOMY VERSUS CONTROL<sup>1</sup>

"Everybody's business is nobody's business". Russell Hardin

#### Introduction

Public procurement is as old as the public sector. The oldest public procurement order that has been found dates back to 2,800 B.C. and was an Egyptian order for 50 jars of aromatic oils (Coe, 1989). In our continent the first codes that regulated systems of public procurement were established in the United States at the municipal level, well before the state and federal levels, and the first service that was contracted was the printing of documents (Page, 1980). Since then public procurement systems, like States themselves, have been transformed by questions of efficiency and scale. Governments have always relied on the private sector to supply them with most of the goods and services they need to implement their policies. This makes the public sector one of the main buyers of inputs in economies throughout the world, often with significant consequences for the assignment of the public and private resources of the economy.

Given its nature, public procurement has unique characteristics that differentiate it from private procurement. Firstly, these acquisitions have direct effects on the implementation of policies, and consequently the capacity of the State. Through this channel public procurement affects the general welfare because it helps in carrying out such policies and providing services that are of general and not particular interest.

Nevertheless, the incentives for the agents that carry out public procurements are not necessarily aligned with the general interest, that is, with maximizing the quality and quantity of public goods given the resources assigned. This imbalance can result in these agents making less effort, leading to the waste of resources and leaving opportunities for the misappropriation of funds, giving rise to corruption. The latter not only implies less availability of resources for the supply of goods and services, but can also reduce the legitimacy of the State with the costs that these can have in terms of citizen participation and public management.<sup>2</sup>

The problem of incentives is less evident in the private sector since it is easier in the private sector to define results, such as sales or profits, and to link them, at least partly, to the remunerations workers receive. In contrast, in the public sector it is difficult to imitate the pay schemes used in the private

<sup>1.</sup> This chapter was prepared under the direction of Luis Quintero, with the research assistance of Carlos Rodríguez.

 $<sup>2. \ \ \</sup>text{The effect of citizen participation on the management of services is analyzed in Chapter } 4.$ 

Policy-makers can face a possible trade-off between giving more autonomy to agencies and imposing supervision and control schemes to avoid budget overruns and misuse of public funds.

sector because, for example, shares cannot be handed out to bureaucrats to improve their performance, the objectives are more difficult to measure and improvements do not necessarily imply more resources for the State (see Chapter 2).

One way to resolve the problem of incentives is by establishing supervision and monitoring schemes that, given the inherent complexity of the public procurement process, can introduce rigidities and additional costs in the provision of services. In particular, this can cause delays in making public goods available to beneficiaries and result in higher costs if public employees do not have the flexibility to choose the most competitive suppliers (e.g. if there are minimal capital requirements that suppliers must meet). The fear among public workers of being subject to sanctions or judicial action by control bodies can paralyze the operation of the system.

Consequently, policy makers can face a possible dilemma or trade off between giving different agencies more autonomy to make decisions about public procurement or imposing oversight and control schemes to avoid overpricing and misuse of public funds (corruption). This apparent conflict can be less significant if schemes are adopted to make procurement systems more transparent and competitive, for example, through the use of electronic portals to report on and centralize operations. These initiatives can reduce the risks of inefficiency or corruption without increasing controls or overly restricting autonomy.

The rest of the chapter is organized in the following form: Firstly, we make a descriptive review of the magnitude of the public procurement sector in Latin America. We then review the conceptual arguments that emphasize the importance of these procurements in the implementation of policies, the problems of incentives they pose and the challenges they imply for the design of monitoring schemes. We then analyze the recommendations emerging from international practices in the area and the common characteristics of schemes currently in force in Latin America. Finally, empirical evidence is analyzed from academic studies assessing the effectiveness of these systems.

# The dimension of public procurement in Latin America

States are generally the largest buyers in their countries, which means that public procurement occupies an important place in both public expenditure and gross domestic product (GDP). These procurements provide the necessary inputs for the normal provision of public goods and services.

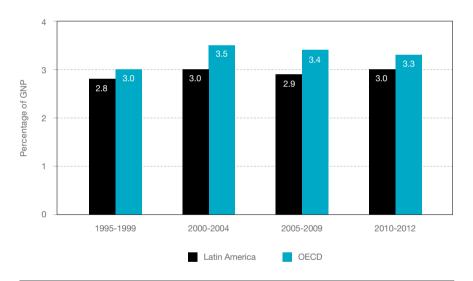
The scale of public procurement is such that the State has advantages in establishing prices and creating markets. In some cases, the State is the only buyer in the market (this is the case for the procurement of armaments

or inputs in education and health care as these services can be exclusively public). This allows for using mechanisms for specific procurement (e.g. auctions) to obtain these products at lower prices. In other cases, public procurement can generate new markets by introducing demand for products and services that otherwise do not exist in a country (Edler and Georghiou, 2007).

On average, Latin American countries spend around 3% of GDP on public procurements, which is slightly less than the 3.3% spent by OECD countries.

Public procurement accounts for around 3% of GDP in Latin American countries, which is slightly lower than the 3.3% for OECD countries (Organization for Economic Cooperation and Development). As well, these percentages seem to be stable over time (Chart 3.1) .<sup>3 4</sup>

**Chart 3.1** Importance of public procurements in the Gross Domestic Product (GDP),  $(1995-2012)^{a/}$ 



 $a/The\ chart\ reports\ the\ average\ for\ every\ five\ years\ in\ each\ region.$  These figures exclude the procurements of public service companies.

Source: the authors, based on World Bank data (2015).

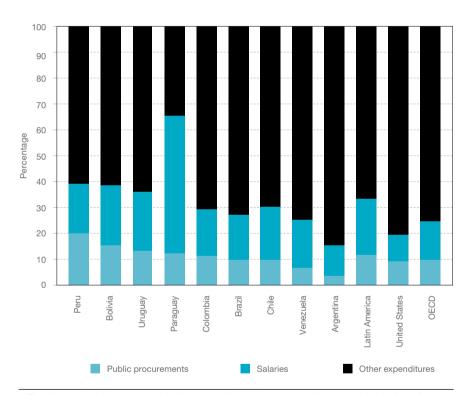
Public procurement represents on average 12% of the public budgets of Latin America countries. The figure is somewhat lower for relatively more developed countries, while the average for OECD countries is 10% and 9% for the United

<sup>3</sup>. The world average is around 4% of GDP. In all cases, the figures exclude the procurement of public service enterprises.

<sup>4.</sup> Using data from the World Bank (2015) about public procurement in 210 countries over two decades, a coefficient can be obtained of the correlation between GDP and the weight of public procurement as a percentage of the first of 0.45.

States (Chart 3.2). $^5$  The importance of public procurement in public spending in Latin America varies moderately from country to country. While public procurement represents 4% of public spending in Argentina, it reaches 20% in Peru. By way of comparison, the chart also shows the percentage of public spending on the salaries of public employees. In general, the amount of financial resources the countries direct to procurement of inputs is less than what is paid as salaries for public workers. $^6$  7

Chart 3.2 Importance of public procurements within public expenditures (2002-2013)<sup>a/</sup>



a/ The chart reports the disaggregation of average public expenditure for different countries. It shows the average for 12 years (2002-2013) with the objective of eliminating cyclical effects.

Source: the authors, based on World Bank data (2015).

<sup>5.</sup> The Caribbean countries, which are not in the graph, present levels above the average.

<sup>6.</sup> Among the countries reviewed in the graph, Peru is an exception, where the participation of public procurements in public spending slightly exceeds that of salaries for public workers.

<sup>7.</sup> For several reasons it is difficult to draw conclusions about the appropriate distribution of resources in the public budget based on comparing the relative participation of different items. Among these are the fact that relative participation is affected by differences in the hours worked, salary levels, the efficiency of public procurement systems, as well as differences in the methods of budgetary accounting that do not always allow for direct comparison.

In addition to their magnitude, public procurements are characterized by covering a great number of sectors. Table 3.1 shows the distribution of public procurements according to the sector in Chile, Argentina and Mexico. Two observations stand out. First, public procurements cover a large number of sectors of very different natures. Some sectors supply basic and homogeneous products, while others deal in more complex and differentiated products, and others require tailored services provided by highly qualified labor. Even within the same sector, disaggregated, the goods and services that are procured are very heterogeneous. For example, in the area of office services and materials, procurements range from pens to electronic control systems for the entry and exit of personnel, while in the area of military equipment; they range from boots to consultancies by technical experts. This heterogeneity is important for the design of a public procurement system because of the need for flexibility to deal with homogeneous goods and routine procurements, like that of pens, as well as complex goods that require assessment by experts and which purchase is sporadic, like software for controlling communications.

Public procurements are characterized by covering a great number of sectors, with a high degree of heterogeneity in the type of good acquired, both among the sectors and within each one.

The composition of public procurements by sectors varies significantly from country to country. Mexico spends more than a third of its public budget on construction supplies and services and close to a quarter on professional, educational and recreational services. For its part, Chile focuses on pharmaceutical, laboratory and medical, and construction supplies and office services and materials. In the case of Argentina, the main areas are maintenance, repair and cleaning, followed by pharmaceutical, laboratory and medical supplies and food products. This variety, resulting from differences in the type of public goods and services provided by governments and the way in which these goods and services are produced, highlight again the need for flexible systems that can serve different sectors and products.

**Table 3.1** Distribution of public procurements by sector for Argentina, Chile and Mexico (in percentages)<sup>a/</sup>

Sectors	Argentina	Chile	Mexico
Fuels and lubricants	2	2	1
Military and security equipment	3	2	1
Machinery, chemicals and other production inputs	9	4	10
Food products	13	4	0
Professional, educational and recreational services	7	12	24
Transportation and storage services	3	8	2
Office services and materials	3	12	2
Maintenance, repair and cleaning supplies	19	6	3
Electronic, informatic and telecommunication supplies	8	6	11
Pharmaceutical, laboratory and medical supplies	16	25	4
Construction supplies and services	3	16	37
Others	13	3	4

a/ The table reports the break down of public procurements among different types of goods for Argentina, Chile and Mexico for the most recent year found.

Source: the authors, with data from ArgentinaCompra, ChileCompra and Compranet (Government of Mexico).

Finally, it is interesting how public procurements are distributed by government entity or agency. In the case of Chile, the ChileCompra portal contains this type of information. Chart 3.3 illustrates the composition of public procurements according to these criteria. The main buyer is the health sector, with 33% of all public procurements in 2014. The majority of procurements classified here are by the Ministry of Health. Following this in importance are procurements by municipal governments (27% of total procurements in 2014), the central Government and universities (26%). The latter case includes purchases by several ministries, such as Education, Justice, Economy, Development and Tourism, as well as non-ministerial acquisitions such as those made by the Universidad de Chile. Public procurements by the armed forces represented 9% of the total in 2014, and included procurements by the Ministry of Interior and Public Security and the Ministry of National Defense. The remaining public procurements in that year were made by Public Works (5%, the Ministry of Housing and Urbanism being one of the main bodies grouped here) and the legislative and judicial bodies (1%).

Legislature and judicial 1%
Public works 5%

Municipalities 27%

Armed forces 9%

Central Gov. and universities 26%

Chart 3.3 Public procurements by type of institution in Chile (2014) a/

a/ The chart reports the percentage of procurement orders corresponding to each type of public institution in Chile for 2014.

Source: the authors, with data from ChileCompra.

## Public procurement and state capacity

## PUBLIC PROCUREMENT AS AN INPUT IN THE PRODUCTION OF GOODS AND SERVICES

Public procurement plays a fundamental role in the capacity of the State to implement public policies. For example, to put a nutrition policy into practice based on community dining rooms for children from low-income families, it is necessary to acquire tables, to rent or purchase the sites, utensils and cleaning implements.

As well, it is necessary to acquire these goods with indicated frequency and at prices that respond to the program's budget. Without an adequate public procurement system, well-intentioned policies can end up with dining rooms without food and school buses without gasoline, illustrating the failure of the State in the provision of basic goods.

Public procurements play a fundamental role in the capacity of the State to implement public policies.

In a "function of production" focus of public goods and services (see Chapter 1), the goods and services that make up public procurements can be seen as inputs as important or more so than the bureaucracy (Bardhan, 2002). Thus, better functioning of public procurement has a positive effect on the quantity of public goods produced given limited resources. By obtaining inputs at a lower cost an efficient public procurement system can multiply the impact of State actions and resources. In this sense, advances in the public procurement system can improve the productivity of every public functionary, because of which it can have a similar effect to that of developing the skills of the Government's bureaucratic body (Bardhan, 2002).

The effect of public procurement on policy implementation is difficult to quantify, especially because the system does not exist in a vacuum, but rather interacts with different institutional, social and economic environments. The public procurement system influences and is influenced by the internal, market, legal, political and socioeconomic environments (Thai, 2001):

- The internal environment refers to the ability of a public procurement scheme to meet its own objectives. This concept is analogous to the capacity of the State, but limited to the internal functioning of the public procurement system. This dimension is strongly influenced by the quality of the bureaucracy that carries out procurements and the design of the system.
- The market environment refers to the number of potential suppliers and the level of competition that the State can promote among them to maximize efficiency, which in turn determines the price and quality of public goods and services that the State can access. Public procurement can induce higher efficiency by increasing the scale of the market (Lember et al., 2011).
- The legal environment refers to the regulations that affect the practice of public procurements. This framework goes beyond the public tender laws, including the regulations that govern the development, production, and distribution of products, as well as conflict resolution in commercial contracts and oversight and monitoring.
- The *political environment* refers to the interactions of the different groups involved in public procurement: individuals, organizations, the private sector, professional associations, and interest groups.

<sup>8.</sup> The focus on public procurement as an input in production function of public goods has been common in the legal and economic literature on this theme (Childs et al., 1994 and Lineberry, 1977).

<sup>9.</sup> Similar to what an increase in capital does in a typical production function.

• Finally, the *environment of social and economic forces* refers to the public policies that require public procurements and their impact. The needs for procurements and the public budget determine their magnitude. As well, public procurement can affect the social and economic reality: an effective system of public procurement helps the State to implement its policies, and if these policies are effective, procurement has an impact on the social reality. For example, the National Center for Chronic Disease Prevention and Health Promotion (CDC, 2011) in the USA highlights the procurement of food products as a principal determinant of success in the implementation of many health policies.

Finally, it is important to stress that public procurements involve many actors and dimensions. Thus, for example, it is not enough to establish legislation about public procurement if the bureaucracy that executes this legislation is not competent. In turn, public procurements in large measure determine the capacities of the bureaucracy. The interaction of the public procurement system with the aforementioned environments and with the different actors involved in policy implementation (the politicians that formulate and design policies, the bureaucracy, other actors involved in evaluation and citizens) determines its impact on the capacity of the State.

## PROBLEMS OF INCENTIVES IN PUBLIC PROCUREMENTS

The magnitude of public procurements makes them a desirable market and a potential source of profits. If this is combined with a system that offers few incentives for public employees to act responsibly with the public budget, we have a recipe for a system that wastes resources and has a propensity for corruption. It is important to distinguish between the waste of resources and corruption. In the first case, higher costs or prices paid for certain goods (or lower quality goods acquired at the same price) is the result of flaws in the system, such as a low level of competition among suppliers, or the lack of effort by public employees, but where higher costs do not constitute an opportunity for private gain, whether monetary or in-kind, for the individuals that manage these schemes. When higher costs are related to the private incomes of authorities and government employees we are clearly dealing with acts of corruption. Nevertheless, both are related to the problem of incentives that predominates in transactions with imperfect information and where the interests of the public institution, for example a hospital, that requires inputs, such as disposable gloves, are not aligned with those of the public employees that manage such procurements.

Although corruption generally receives more media attention, the waste of resources can be a source of equal or even greater costs. In the case of Italy, Bandiera *et al.* (2009) found significant differences in the prices paid by different government bodies for the same goods or services, which was mainly due to the waste of resource and not to corruption (in 83% of the cases higher costs were due to waste and in 17% to corruption).

As noted above, both waste of resources and corruption can be framed within the problem of misalignment of resources. There is waste because the agents responsible for procurements do not have incentives to make the greatest possible effort to protect resources; there is corruption not only because there are no incentives, but also because there are incentives to misappropriate funds.

Both waste of resources and corruption can be framed within a problem of misalignment of incentives.

In general terms, this misalignment of incentives can be seen in the framework of the "agent-principal" problem (see the discussion in Chapter 2). In the area of public procurement, employees are the agents, while the State, or ultimately the citizenry, is the principal (Laffont and Martimort, 2002). The problem of agency is greater in public sector procurement than in the private sector because of the nature of the principal. On the one hand, the State is not a tangible person, and on the other hand, citizens are very disperse, have little information about the process and do not feel complete ownership over public resources: given they belong to everyone, they belong to no one in particular. This makes oversight more difficult. As well, the characteristics of the public sector make it unlikely that strategies will be adopted like those used in the private sector to solve agency problems like the introduction of pay for performance.

Thus in the last 30 years, pay for performance has increased significantly in the private sector (Shue and Townsend, 2014), while in the public sector, given its nature, it is less common (see Chapter 2).<sup>10</sup> Although the effectiveness of pay for performance is still under discussion, it is clear that the idea underlying the design of this type of mechanism is alignment of incentives.

If the problem of incentives in public procurement is not resolved and this gives rise not only to inefficiencies and waste, but also to significant acts of corruption that can negatively affect citizens' perception of the legitimacy of the State. The perception of diminished legitimacy of the State affects citizen participation both in the use of public programs (opting for private production when it is available) and in terms of their participation in giving suggestions to improve policies and to oversee the good performance of suppliers, an aspect that, as we will see in Chapter 4, is also important for the good management of services.

The problem of agency thus occupies a central place in determining the good functioning of the process of public procurements. The solution is not evident, but it is clear that thought is required in the design of systems that align incentives of public employees without the need of resorting to excessive controls and monitoring that reduce the autonomy of public institutions, unnecessarily increasing the operating costs of the system. However, a balance between autonomy and control is difficult to achieve. For example, Rasul and Rogers,

<sup>10.</sup> Pay for performance is very important for high-level positions. For example, in 2012, approximately 75% of executive officers received pay in shares, which acts similarly to pay for performance, and 60% in 2013, of total payment among firms in S&P 500 (*Equilar Annual Report*, 2013, 2014). According to data from the 2014 CAF Survey, 30% of workers in the formal private sector in the main cities in the region receive pay according to individual performance, compared to only 22% in the public sector. However, 24% of workers in the public sector receive pay according to the performance of their institution.

Thought is required for the design of systems that align the incentives of agencies without the need for excessive controls and monitoring that would reduce the autonomy of public agencies. 2013 showed that excessive control can be counterproductive and that the loss of autonomy can negatively affect the productivity of public servants and the effectiveness of policy implementation. As will be seen in the next section, the introduction of elements to increase the competitiveness and transparency of the system, for example, through the use of electronic portals to inform and centralize operations, can make this conflict less restrictive.

## Public procurement systems in Latin America

The laws governing public procurements in the countries in the region are complex and different. Hundreds of pages determine the particular cases in which one or another regulation applies. Following Castilla (2015), a public procurement system is composed of

- i. A public procurement law
- ii. An executing agency for procurements,
- iii. An oversight body,
- iv. A body that resolves disagreements,
- v. Procurement tools and methods.

The public procurement law establishes procedures for the State to acquire goods and services from the private sector and generally includes regulations about the role that different components can play. These aspects include the establishment of executing and controlling agencies and procedural details for the procurement mechanisms and provision of information. Table 3.2 shows a list of these laws for the region.

The executing agencies provide services to the different executive bodies of the State in the procurement of goods and services to implement public policies. In general, these agencies do not define the budget or the public policies to be implemented. These are determined by legislative bodies in general terms and then developed in detail by executive bodies like ministries. Although executive bodies can make some direct low cost and routine purchases of goods and services, the tendency in many countries is currently to centralize the procurements of ministries and public institutions in a single executive agency that concentrates most acquisitions. This agency can aggregate technical, legal and logistical capacities that can serve the multiple organisms of the States, thus reducing costs and increasing efficiency. Some examples of these agencies are: Chile Compra, which has been operating formally since 2003 and was established as a decentralized public service under the Ministry of Finance; Colombia Compra Eficiente, established in 2011, which plays the role of a central coordinator; Agencia de Compras y Contrataciones del Estado, in Uruguay, which recently inaugurated a virtual store that coordinates national procurements; and the Servicio Nacional de Contratación Pública (SERCOP), which coordinates procurements at the national level in Ecuador.

 Table 3.2 Public procurement systems for Latin American and Caribbean countries

Country	Public procurement law	Electronic public procurement portal
Argentina	Decreto Delegado Nº 1023/2001	Argentina Compra (http://www.argentinacompra.gov.ar)
	Decreto Nº 436/2000	
Bolivia	Decreto Supremo Nº 181 (Normas Básicas del Sistema de Administración de Bienes y Servicios)	
Brazil	Ley 8666-93	Compras Governamentais (http://www.comprasgovernamentais.gov.br/)
Chile	Ley de Compras Públicas Nº 19.886 - 2003	Chile Compra (http://www.chilecompra.cl/)
Colombia	Ley 80 - 1993	Colombia compra eficiente (http://www.colombiacompra.gov.co/)
Costa Rica	Ley N° 7494 (Ley de contratación administrativa)	Comprared (https://www.hacienda.go.cr/)
Ecuador	Ley Orgánica del Sistema Nacional de Contratación Pública (LOSNCP)	Sistema Oficial de Contratación Pública (http://portal.compraspublicas.gob.ec)
El Salvador	Ley de Adquisiciones y Contrataciones de la Administración Pública	COMPRASAL (https://www.comprasal.gob.sv/comprasal_web/)
Guatemala	Ley de Contrataciones del Estado. Decreto 57 - 92.	GuateCompras (http://www.guatecompras.gt/)
Haiti	Loi fixant les règles générales relatives aux Marchés Publics et aux Conventions de Concession d'Ouvrage des Services Publics (2009)	Commission National des Marchés Publics (http://www.cnmp.gouv.ht/)
	Ley de Contratación del Estado	HonduCompras
Honduras	Reglamento de Ley de Compras Eficientes y Transparentes a Través de Medios Electrónicos	(http://www.honducompras.gob.hn/)
Mexico	Ley de adquisiciones arrendamientos y servicios del sector público (LAASSP) - 2000 (last reform in 2012)	Compranet (https://compranet.funcionpublica.gob.mx/web/login.html)
Nicaragua	Ley Nº 737. Ley de Contrataciones Administrativas del Sector Público.	Nicaragua Compra (http://www.nicaraguacompra.gob.ni/)
Panama	Ley N° 22 de Contrataciones Públicas (27th July 2007).	Panamá Compra (http://www.panamacompra.gob.pa/)
Paraguay	Ley N° 3439	Dirección Nacional de Contrataciones Públicas (https://www.contrataciones.gov.py/)
Peru	Reglamento de la Ley de Contrataciones del Estado DS. N° 184-2008-EF	Organismo Supervisor de las Contrataciones del Estado (http://portal.osce.gob.pe)
Dominican Republic	Ley N° 340-06 sobre Compras y Contrataciones con modificaciones de la Ley N° 449-06	Compras Dominicana (http://www.comprasdominicana.gov.do/)
Trinidad and Tobago	Central Tenders Board Ordinance (1961)	
Uruguay	Ley 9542 - 1975	Agencia de Compras y Contrataciones del Estado (Uruguay) (http://www.comprasestatales.gub.uy/)
Venezuela	Decreto con Rango, Valor y Fuerza de Ley de Contrataciones Públicas Nº 5.929 - 2008	Servicio Nacional de Contrataciones (Venezuela) (http://www.snc.gob.ve/)
Source: the auth	nors.	

The oversight body, generally the Comptroller, verifies the efficient and effective use of public resources and directly or indirectly conducts routine and exceptional investigations into the use of funds applied through the public procurement system. Examples of oversight bodies are the *Auditor General* of the Republic in Colombia, the *Comptroller General of the Republic*, in Chile and the *Comptroller General* in Uruguay.

The Comptroller is the highest fiscal control agency of the State. It generally has national and sub-national agencies under its authorities. The oversight agency protects public resources to strengthen the State through efficiency and efficacy.

The work of the oversight agency goes beyond supervision of public procurements and generally includes: 1) evaluating the results obtained in the management of resources, following principals of efficiency, efficacy, equity and environmental sustainability; 2) studying the financial states of State bodies and their compliance with periodic budgetary plans; 3) establishing the fiscal responsibility of public servants and of the particulars that cause harm to public resources; 4) imposing pecuniary sanctions, although in many systems these are imposed by the judicial sector; and 5) recovering lost public resources and public patrimony. The functions of this agency include direct supervision of public procurement and the implementation of measures to prevent the waste of public resources and corruption. For example, it carries out education for public employees and private actors that make transactions with the State as consultants and suppliers; and promote citizen participation in the control and oversight of resources.

Obviously there emerges the difficulty of establishing who oversees the oversight agency. The countries have opted to leave this control to Congress, or in a complementary manner, to the judicial power.

It is fundamental to provide transparency and justice to all the participants in the system, and the establishment of a body that settles disagreements between the State and potential suppliers, or between the State and providers of goods and services once they have been selected. This is particularly important in some sectors where the State is the only buyer. This body is generally composed of administrative courts that in these cases follow public procurement laws and other laws regulating commercial relations with the State. Examples of these laws are the administrative procedural code and the contentious administrative Law 1437-2011 in Colombia; the Law for Public Sector Acquisitions, Rentals and Services in Mexico and Law 1563-2012 in Chile.

As well, given the high cost of these formal efforts to settle conflicts, several States in the region have established arbitration bodies within public procurement agencies. Their jurisdiction is limited by the nature of the conflict, the amount involved and the point in the procurement process in which the disagreement emerges. For example, the public procurement law in Chile established the Public Procurement Court, with jurisdiction limited to conflicts that emerge between the publication of the terms of the tendering process

and the adjudication of the offers. The court's powers are limited to declaring null and void the contested act. Similarly, Ecuador established the Mediation Center of the National Service for Public Procurement as an alternative to judicial bodies to resolve conflicts. Beyond these faculties, in the great majority of cases the Comptroller is responsible for receiving complaints from actors involved in disputes.

Finally, in addition to the public procurement law, there are important regulations that detail procurement tools and modalities. Among the tools are electronic procurement systems that reduce the cost of procurement for the State and transaction costs for all parties, as well as increasing transparency, which reduces waste and corruption and strengthens the legitimacy of the process (Jap, 2007). The predominant procurement methods in the region are bidding or reverse auctions, the framework agreement and estimated value.

Tenders and reverse auctions seek to take advantage of competition among suppliers to achieve the best offer at the lowest price. Through the reverse auction, public bodies chose the supplier that is willing to provide the goods or service in the tender at the lowest price. The technical specifications included in the tender list are usually prepared by the agency that manages public procurements. Reverse auctions are generally conducted under one of two modes: direct or electronically. Under the direct mode, the auction takes place as a public act on a day and at a time and place specified by a public body, in which the bidders present their bids in the presence of each other, a public notary and a special committee. This process often includes the opportunity for every participant to access competing bids, such that it provides mutual oversight among the participants. For its part, the electronic mode can be partial (only the tender information is published) or complete (including the reception and verification of bids through an electronic portal).

The reverse auction is appropriate above all for specific and sporadic purchases, given that it can be complicated and expensive to organize (even under the electronic mode), while it is inappropriate for regular and low-cost purchases. Nevertheless, it is a commonly used method. For example, 56% of all public procurements in Chile are made through reverse auctions (or public tenders, Chart 3.4, see p. 135). In particular, this method is used for 75% of infrastructure projects (Chart 3.5, see p. 135).

The reverse auction has benefits for the buyer because it reduces the price, increases the possibility of selecting a qualified supplier and reduces negotiating time. As well, it implies savings in litigation costs because it is not possible to question the technical specifications set out in the tender documents (Castilla, 2015). It also offers benefits for suppliers, in particular fairer and more transparent competition, clear and complete information about the

The reverse auction is an appropriate mechanism; above all for specific and sporadic procurements. Given that it can be complicated and costly to organize, it is not convenient for regular or low-value procurements.

<sup>11.</sup> The Peruvian Chamber of Construction estimates that since the launching of the electronic reverse auction the negotiation time for contracts has decreased by 50% (Castila, 2015).

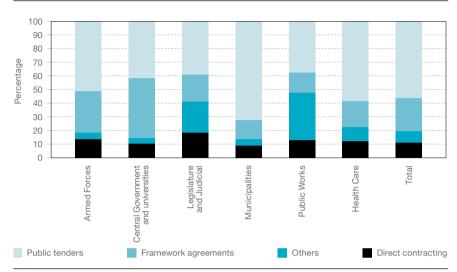
The framework agreement is another method often used for procurements, especially frequent ones. required goods and services and the opportunity to choose to participate only at prices that implied making a profit. Among the possible risks of this method is deterioration of relationships with strategic suppliers, which in the long-term can lead to higher prices and decreased quality of the procured products (Manoochehri and Lindsy, 2008). Currently this mode is often applied to take advantage of information technology, which has significantly transformed the way in which the State makes the majority of its acquisitions. Examples of laws that regulate reverse auctions are Law No. 30225 in Peru the Public Procurement Law of the State of Mexico and Municipalities – Decree No. 85 in Mexico.

The framework agreement is another often-used method, especially for frequent procurements. Under this method, the buyer declares the specifications of the goods or service, and with that they can proceed to contract one or several suppliers. Often it is not necessary to declare the specifications again for each new purchase. The oversight agency for State procurements selects suppliers that public bodies can contract for the provision of goods and services that they require immediately and without the need for a bidding process. The goods and services are usually offered through public catalogues that generally feature multiple suppliers, which means the same goods or service can be offered by different providers. Public bodies reserve the procurement decision and can chose a supplier taking into account variables like price, quality, delivery time, discounts for volume, etc.

Framework agreements are used for a significant percentage of public procurements. For example, they represent 25% of acquisitions in Chile (Chart 3.4), and in large measure consist of purchases of homogeneous goods like offices inputs and pharmaceuticals (Chart 3.5). Examples of regulations of framework agreements in countries in the region are Decree 1510, articles 46 to 49 in Colombia, and article 30, subsection d) of Law N° 19886 in Chile.

Finally, estimated value is another important mechanism in public procurement systems in the region. Under this method, and through different mechanisms of valuation, an expert appraisal is made to determine a maximum price considered to be fair. This is a reference value, resulting from technical considerations and a market study, which is not used for accepting or rejecting offers but rather to determine the parameters to apply in evaluation and monitoring, as well as to determine the budget. Estimated value is common in international legislation and is considered a good practice in the management of public practices. It can be used when there is not much competition in the market, for example, when there is only one potential supplier or when a government agency wants to procure a good or service specifically designed for a project or policy. In these cases, the market value may be unknown, and an auction can allow suppliers to alter their bids. In some cases, as well, the estimated value is used in conjunction with the reverse auction or the framework agreement.

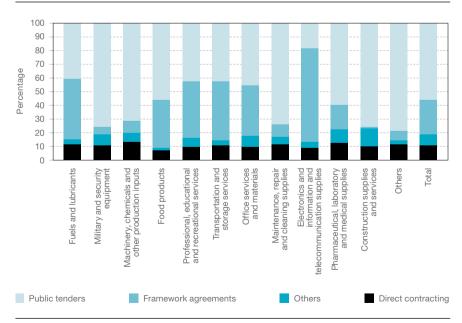
**Chart 3.4** Distribution of public procurements by method of acquisition for different institutions in Chile (2014)<sup>a/</sup>



a/ The chart reports the distribution of procurement orders by method of purchase for different institutions in Chile in 2014.

Source: the authors, with data from ChileCompra.

**Chart 3.5** Distribution of public procurements by the method of acquisition according to the type of product procured in Chile (2014)<sup>a/</sup>



a/The chart reports the distribution of procurement orders by acquisition method for different types of products in Chile in 2014.

Source: the authors, with data from ChileCompra.

Beyond these mechanisms, there are other methods like direct procurements used for a lesser percentage of total procurements (less than 10% in Chile, as can be seen in Chart 3.4). Generally other methods are less competitive, allowing for direct purchasing with the solicitation of prices but not open bidding, or in some cases, direct selection of the provider, because of which this method is used in response to particular situations like emergencies or sensitive or confidential issues. Included in this method are:

- Direct procurements for amounts less than an established minimum,
- Direct procurement of a product from a private tender that is declared void,
- Products or services where public knowledge of the tender could put the objective of the contracting at risk,
- · Contracting with holders of intellectual or industrial property rights,
- · Contracting consulting services that depend on the special faculties of the supplier,
- An emergency or unforeseen event,
- Extension of a contract for supply or services or contracting of connected services,
- Services of a confidential nature,
- Direct contracting with estimated value when there is only one supplier of the good or service.

The architecture described above about procurement systems is fundamental for the acquisition of necessary inputs for policy implementation to be transparent, efficient and effective. As can be seen, a system is necessary that addresses the different needs of public bodies that require the acquisition of products to ensure their good functioning. At the same time, a balance must be established between the flexibility to allow for the reasonable operativeness of the system and control schemes that do not imply extensive and complicated regulations that result in unnecessary delays and higher costs, or that foster acts of corruption and a lack of transparency (Bardhan, 2002).

# Good practices in public procurement and the evidence of impacts

How can public procurements be made more effective? On the one hand, the extensive experience in this area accumulated by developed and developing countries has generated a series of recommendations or good practices that have been gathered by different international organizations or public policy study centers. On the other hand, academic research on the subject, although scarce, has provided empirical quantitative results of studies of policies relating to public procurement systems with the objective of reducing corruption and waste.

#### RECOMMENDATIONS ABOUT GOOD PRACTICES

Many organizations have established guidelines about what constitutes good practices in public procurement systems. These recommendations can be summarized in the adoption of mechanisms that promote competition (like the

reverse auction) and transparency (such as online public procurement tools) and the establishment of reactive and preventive measures against corruption and waste (through control bodies like the comptroller). These recommendations reflect awareness of the agent-principal problem and its consequences. As well, some bodies recommend giving attention to ensuring equitable treatment of suppliers.

The World Trade Organization (WTO) has focused on promoting mechanisms of competition as a solution to problems of corruption and inefficiency. For example, the WTO Agreement on Government Procurement (AGP), signed in Marrakesh on April 15, 1994, 12 incorporated non-discrimination between national and foreign suppliers in purchasing goods, services in general and construction services, as a competition policy to reduce internally offered prices. As well, this agreement suggested that the presence of international competitors decreases the probability of the formation of cartels by national suppliers or any type of collusion between agents of the State and known suppliers, which can result in higher prices than the market minimum. The WTO estimates that as a result of this agreement, member countries have increased the value ten-fold of opening contracting to international competition in the framework of its rules.

Multilateral credit organizations like the World Bank, the Inter-American Development Bank, and CAF have converted their internal procurement practices into policy recommendations for countries. These recommendations take into account quality, cost, and the timely execution of the product, both in projects financed by these institutions and with public procurements in the countries with which they work. In particular, it is recommended to apply equitable and transparent procedures that foster reliable and stable markets that can attract efficient suppliers and contractors, and uphold principals of responsible management and effective use of public funds.

In 2011 the United Nations Commission on International Trade Law (UNCITRAL) published a Model Law on Public Procurement of Goods, Construction and Services. The main objective of this instrument is to provide a model, in particular for developing countries, to formulate a legal framework for public procurement that promotes economy, efficiency, and competition, which in turn encourages integrity, trust, equity and transparency in the procurement process. This framework is also based on the principals of equity, transparency and competition as factors promoting efficiency. In particular, UNCITRAL recommends online public procurement systems given the advantages for promoting these principals.

Finally, in 2003 the OECD established the Procurement Round Table under its Development Assistance Committee (DAC) to make integral evaluations of national systems of public procurement and to facilitate exchange of experiences and good practices among member countries on the themes of

The recommendations are summarized in the adoption of mechanisms that promote competition and transparency and the establishment of reactive and preventive measures against corruption and waste.

<sup>12.</sup> The ACP is a plurilateral agreement in the sense that not all WTO members are participants.

transparency and the efficient use of public resources. Once again, among the conclusions of the first editions of DAC are competition and transparency as basic principles.

A common recommendation made by international bodies is to take advantage of information technologies to increase competition and the transparency of procurement systems, in particular through electronic public procurement portals. It is recommended to combine electronic catalogues, bulk purchasing and electronic reverse auctions as mechanisms to reach a larger number of suppliers (increasing competition) and to simplify procurements (decreasing transaction costs); all of which results in lower prices for the State. As well, these systems allow citizens to access information about the procurement process, which they can use for oversight, with significant effects on the behavior of bureaucrats and public employees elected by popular vote (see Chapter 4). Some Latin American countries have used new information technologies to design novel and flexible procurement mechanisms that have contributed to simplifying procurement processes and resulting in significant time and administrative cost savings for both public bodies and suppliers. Among the countries that have done this is Mexico, with the portal Compranet, which is described in Box 3.1.

#### Box 3.1 Compranet, a successful public procurement portal in Mexico

Before 1995, the Federal Government of Mexico had little or no centralized information about public procurements made by its different agencies, their values or suppliers. As well, procurement processes were costly and prices were too high, acquisitions were disproportionately focused on the capital city, and in general waste of resources and corruption prevailed. With the financial crisis of Tequila in 1995, it was necessary for the Mexican government to make severe budgetary cuts and impose strict controls over public spending. It was in this context that the government introduced Compranet.

Compranet is a public procurement system initiated by the Secretariat of Public Function through the Public Procurement Policy Unit, which centralizes information and communication around the great majority of these acquisitions. Currently, 87% of all public procurement related communication is made through Compranet. Around 3,000 agencies or public procurement units publish their procurement solicitations online, to which suppliers can respond rapidly. Approximately 25,000 suppliers are registered in the system. As well, given that the costs of making offers have decreased, the participation rate of small and medium-sized companies and companies outside the federal district has increased. The different phases of the process are visible in the website. In some cases, the procurement transaction can be conducted online. Although this possibility is limited to 2% of total public procurements, it has been increasing.

Compranet has also contributed to increasing citizen oversight of public procurements. A well-known case was an investigation by the newspaper Milenio in 2001 that, using public

data in Compranet, found high prices in the procurement of some products. The case led to an exhaustive investigation by the Auditor General that resulted in the resignation of three government administrators. The magazine Wired described *Compranet* as having brought about an electronic revolution in Mexico.

Compranet has been recognized by several institutions as a success. The system won the Global Bangemann Challenge award in the electronic business category and was qualified as a successful example of eGovernment for the Development Information Exchange by the Institute for Development Policy and Management (http://www.seed.manchester.ac.uk/subjects/idpm/). However, this latter evaluation highlighted more public availability of information about the cost of managing the system, about investigations into corruption and about new suppliers as areas for improvement.

Source: the authors, based on information from: https://compranet.funcionpublica.gob.mx/; Scheeres (2002) and Ibarra Estrada (2002).

#### THE RESULTS OF IMPACT EVALUATIONS

How much impact do good public procurement practices have? There are serious challenges in measuring the impact of different practices given that changes in public procurement regulations are often not applied randomly and consequently their results are contaminated by other factors that occur simultaneously.

A very widespread approach to reducing corruption is competition among suppliers, which not only increases efficiency, but also decreases the possible profits and the probability of the misappropriation of funds. For example, with a very innovative focus, Tran (2009) used internal records of bribes of an Asian company and assessed the effect of increasing competition on the incidence of illicit payments. These bribes reached 14% of the value of the goods in the initial period when bidding was not obligatory. The author found that, while the use of higher value auctions (which consider both the price and a subjective evaluation of the quality of the offers) did not decrease the incidence of bribery, the use of better priced auctions (comparing only the price of offers that exceed a minimal objectively observable quality) decreased the incidence of illicit payments significantly (at approximately 8% of the value of the goods). It is clear that this type of minimal price auction limits the discretion of public servants in evaluation and increases competition among suppliers.

A second measure that has been employed in response to the problem of agency and its effects on inefficiency and corruption is to establish mechanisms of control and oversight. This focus is less preventive given that it operates once infractions have been committed. Nevertheless, it has been argued that these actions also discourage ex-ante corrupt behavior.

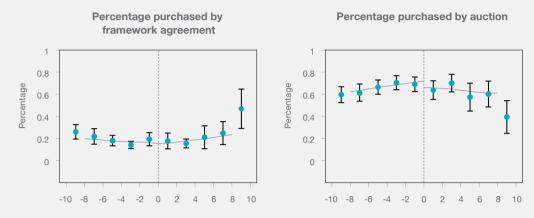
In a study commissioned for this report, Gerardino et al. (2015) used a discontinuous regression analysis to estimate the effect of increasing the probability of auditing public agencies in Chile (see Box 3.2). The study found that agencies effectively react by increasing transparency when the probability of being audited increases, and react in the opposite way when the probability decreases. Litschiq and Zamboni (2011) analyzed random assignment in Brazil and found that increased risk of being audited significantly decreased the percentage of irregular public procurements. Similarly, Di Tella and Schargrodsky (2003) used a quasi-experimental focus to evaluate the effect of an anti-corruption program that consisted of increasing inspections and audits in Buenos Aires, and found that the program succeeded in reducing corruption, which resulted in prices 15% lower for homogeneous goods. Finally, a study by Olken (2007) presents a random experiment in more than 600 Indonesian villages that consisted of increasing government audits from 4 to 100% of public procurements related to transport projects. It was found that this treatment resulted in an 8% decrease in "lost expenditures", measured as discrepancies between official project costs and the costs initially estimated by engineers.

#### Box 3.2 The effects of audits in adopting different public purchasing modalities

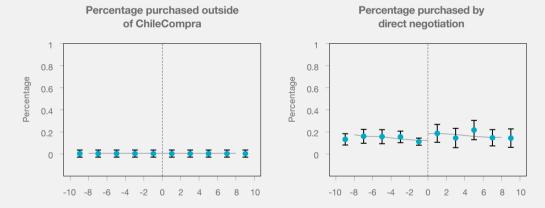
Gerardino et al. (2015) estimated the effect of external audits on corrupt practices in Chile, using fuzzy regression discontinuity, a methodology that takes advantage of the fact that some regulations that define the probability of receiving a determined treatment, in this case an audit, have an arbitrary component and consequently provide a similar framework to that of a quasi-experiment (Imbens and Angrist, 1994). By comparing observations that are close to the treatment threshold, it is possible to observe similar units in all the observable aspects except the treatment itself. For Chile, the comptroller determines the probability of an audit on the basis of the relative importance of the entity and the perceived risk of incurring harmful practices (determined by the Comptroller). The agencies that are just above or below the cutoff that establish the risk categories are then subject to different probabilities of being audited, even though they essentially share the same relevant characteristics. Thus, the differences among them are essentially based on their probability of being audited.

Using information about public procurement of the agency Chile Compra between 2007 and 2013, and information about audits by the Comptroller in 2011, 2012, and 2013, Gerardino et al. found that government agencies react to the risk of being audited by a very original mechanism: given that audits are very rarely carried out in two consecutive years, agencies that have been audited internalize the decreased probability of being audited again and adopt methods more conducive to corruption, like direct procurement. In particular, agencies shift around 20% of their procurements to less transparent methods (Chart 1). The authors concluded that audits do have an effect on the actions of agencies, but that audited agencies react strategically, temporally adopting methods more conducive to corruption.

Chart 1 Impact of receiving an audit on the distribution of public procurements by the method of acquisition for Chilean institutions (2012) a/ b/ c/



Distance to the cutoff between high and medium level of relative importance



Distance to the cutoff between high and medium level of relative importance

Source: Gerardino et al. (2015).

a/ The chart reports the coefficients and confidence intervals at 95% estimated through the design of a discontinuous regression for the percentage of public procurements made through the three general public procurement methods established in ChileCompra (framework agreements, tenders and direct negotiation) and those made outside ChileCompra, for a post-audit period.

b/The horizontal axis shows the relative importance of the audited organizations by region for 2012. The relative importance is assigned by the audit according to the weight of the institution within the public sector measured by the size of its budget, the size of social transfers, etc. For the audited institutions, the post-audit evaluation period consists of the months since the audit, while for unaudited institutions it consists of the months from September to December. The vertical line in zero marks the threshold established by the audit and determines which institutions are audited (positive values) and which do not (negative values).

c/lt can be observed that institutions that were audited (positive side of the horizontal axis) increased the percentage of procurements that were made by direct negotiation (lower right panel) and decreased the percentage of procurements by tenders (upper left panel), with no observable effects on the percentages of procurements by framework agreements and procurements outside of ChileCompra (upper panels and lower left panel).

These results, however, should not be interpreted as a carte blanche to increase controls to the maximum. It is possible that government workers in the region can see themselves as paralyzed by the constant threat of punishment by oversight bodies.<sup>13</sup> Even if their behavior has been honest, these investigations present risks to public employees given that they can be initiated because of actions taken by error or out of carelessness or due to the actions of subordinates. As well, even when investigations do not result in punishment, they can imply significant costs in terms of reputation, time and effort. Consequently, public employees can try to avoid any risk and opt to make fewer public procurements than would be optimal. This in turn can result in fewer public policies being implemented because of the threat for public workers of being involved in a disciplinary or judicial investigation by a control body. Thus, in these cases a certain degree of autonomy or flexibility, in particular in relation to public procurements, may be necessary for the good performance of public employees and of services, even when this implies a wider field of action for waste or corruption.14

What does the empirical evidence say? In a recent study, Rasul and Roger (2013) evaluated the performance of public servants in 4,700 projects in Nigeria and studied whether they are affected by the control and oversight practices of their organizations. They found that an increase (of a standard deviation) in the measure of autonomy for public servants corresponded to an 18% increase in completed projects. In contrast, an increase (of a standard deviation) in monitoring corresponds to a 14% decrease in completed projects.

A third measure in the struggle against corruption, the impact of which has been evaluated empirically, has been to increase transparency, for example, publishing the results of audits and allowing the participation of citizens and other agents of the private sector in uncovering wrongdoing (and in some cases in political punishment). In a study on the effect of the publication of audits in Brazil, for example, Ferraz and Finan (2008) found that electoral punishment in response to fraud in public procurements reduced the probability of reelection for mayors by 17 percentage points (see Chapter 4).

Finally, another type of initiative to increase transparency that has been evaluated empirically is to establish websites. Lewis-Faupel *et al.* (2014) used regional and temporal variation to evaluate the impact of adopting electronic procurement systems in India and Indonesia. While they did not find evidence that prices decreased, they did find increased quality of the goods and services acquired. In particular, independent evaluations showed improved quality of construction in India and shorter completion time of tendered public works in Indonesia, two fundamental aspects that constitute part of the motivation for adopting these systems. This study then contributes evidence on one of the

<sup>13.</sup> This possibility has emerged from anecdotal evidence based on discussions with public employees from the region that state that strong controls become a source of preoccupation that at times can result in persons not taking necessary actions, in particular in the area of public procurement.

<sup>14.</sup> This possibility has been justified by different theoretical analyses; for example, see Miller, 2005.

channels through which online procurement systems have an impact on performance, which refers to the entrance of higher quality suppliers that are not local and otherwise would not have participated in the process.

In summary, the results obtained from the aforementioned studies suggest that measures that increase control and supervision of public procurement reduce inefficiency and the incidence of corruption, but can also imply loss of flexibility and autonomy of public institutions, which in turn can have negative consequences on the provision of services and the completion of projects. However, this apparent conflict can be partially resolved through initiatives that increase the transparency of transactions, which would serve to control possible inefficiencies and misappropriation of funds without necessarily increasing formal controls and regulations.

Increasing the control and supervision of public procurements can reduce inefficiency and corruption but can also imply loss of flexibility and autonomy. This apparent conflict can be alleviated by initiatives to increase the transparency of transactions.

### **Conclusions**

Public procurement is a fundamental input for the implementation of public policies and consequently plays a determining role in the capacity of the State. In this sense, public procurement occupies an important place in terms of its magnitude in economies: in the countries of the region they represent around 3% of GDP and 12% of public spending. In addition to their magnitude, these procurements cover a wide number of sectors and types of products and services, which increases the complexity of the necessary system. The design of an effective public procurement system should take into account the characteristics that differentiate it from a private system, especially because its effects on public policies make it of general interest and the use of public resources raises problems of misalignment of incentives and corruption.

The governments of the region have internalized these complexities and have established systems that include oversight bodies, independent procurement agencies and different procurement methods; elements focused on dealing with the particular difficulties of this sector. Despite important advances, the systems in the region can be strengthened greatly by learning from the best international practices and the results of empirical studies that assess impacts. In relation to the former, these recommendations can be summarized in strengthening equity, transparency and competitiveness within systems. Equity refers to fair treatment of the different suppliers of goods and services that are contracted. This objective is generally achieved through open treatment of information. Closely related to this is transparency, which calls for systems in which different parties can access as much information as possible. As well as increasing competition, transparency can resolve problems of waste and corruption. Finally, measures that increase competition allow governments to achieve better quality at lower prices, while at the same time different suppliers are witness to the transparency of the process. Greater competition is achieved with the establishment of procurement mechanisms like auctions that provide various offers, and with systems for disseminating information to larger numbers of suppliers, like online procurement systems. These systems occupy

a place of particular importance in policy recommendations and have been adopted by the majority of governments in the region.

In relation to the results of empirical studies, despite the difficulties involved in measuring the causal effects of policies on the efficacy of procurement systems, and of the problems involved in measuring phenomena like corruption and waste, efforts to strengthen monitoring and oversight have a positive effect in reducing waste and procurement prices. The same occurs with the adoption of more transparent information systems. As well, these measures increase the legitimacy of the system and in many cases result in citizen participation becoming a force in improving its functioning by raising the cost of corruption and waste through their vigilance.

Excessive control and monitoring measures can decrease the autonomy of public employees and reduce their performance, which suggests that there should be a balance between autonomy or flexibility and control. The evidence points to the effect of making the procurement system more transparent and competitive. For example, the use of electronic portals can make this conflict less restrictive. That is, the risks of inefficiency or corruption can be reduced without increasing controls excessively or overly restricting autonomy. These aspects should then constitute one of the pillars on which policies are constructed in relation to intervention in public procurement.

# THE POWER OF CITIZEN PARTICIPATION

**Chapter 4** 

## Chapter 4

# THE POWER OF CITIZEN PARTICIPATION<sup>1</sup>

"The job of a citizen is to keep his mouth open". Günter Grass

#### Introduction

It has been said that character is doing the right thing when nobody is looking.<sup>2</sup> But this is because when someone is watching, people behave better. Citizen participation can be an important external control factor to improve the performance of the State in its role as provider of goods and services.

The most generalized way in which citizens participate in political life in modern democracies is through elections. Nevertheless, there are many links in the chain that joins electoral participation with better performance by the State, and these links are not always in good condition. Voting is an effective mechanism of external control when a well-informed public rewards or penalizes those who govern according to their performance and when those who govern have the incentives and the capacities to react to this feedback. Unfortunately, the messages that citizens send through their votes do not always reach the real providers of public goods and services. This occurs because the production and provision of these goods and services are in the hands of the bureaucracies of the civil service, which are composed in great part by public employees that are not elected by voters (for example, employees of the public administration, teachers, or nurses). That is, the traditional problem facing citizens in delegating to politicians that do not necessarily pursue the same objectives as they do, is that decisions about the design and implementation of public policy unfolds in the context of considering the participation of providers as a third and important actor to give citizens the public goods and services they demand.3

Many routes of non-electoral participation, such as complaints, allow for partly reducing the problem of alienation of objectives between citizens and providers by giving citizens more direct control over what providers do.<sup>4</sup>

<sup>1.</sup> This chapter was prepared under the direction of Lucila Berniell and Dolores de la Mata, with the research assistance of Agustina Hatrick and Diego Jorrat.

<sup>2.</sup> Attributed to J. C. Watts.

<sup>3.</sup> In the first case, problems of alignment of objectives between citizens and politicians are presented, while in the second case relates to the lack of alignment of objectives between politicians and providers.

<sup>4.</sup> The term "long accountability route" in the literature refers to the control citizens exercise over providers through rewards or penalties (for example, positive or negative votes) to politicians, while the "short accountability route" refers to the set of mechanism that allow citizens direct control over providers (World Bank, 2004).

Two requirements must be fulfilled for external control to be effective. First the State has to produce and make known information that faithfully characterizes its performance, and do this in a timely manner so citizens can use this information as an input to participate. Second, citizens must effectively use this information to express their satisfaction or dissatisfaction with the public services they have received and expect that politicians and providers have the capacities and incentives to respond satisfactorily. However, problems can emerge in each step in this process of accountability.

In the first stage, at the moment of giving information, both public employees and politicians can calculate that is inconvenient to make certain aspects associated with their functions transparent. As well, it is possible that they lack the technological capacities or human capital to provide information of quality to citizens. Added to this is the fact that the actions of State encompass multiple dimensions so that any attempt to summarize its performance with determined information will leave out important aspects. This point is especially important when the target for the information is the average citizen for whom processing large volumes of complex information is too difficult a task. Some civil society organizations, like NGOs, universities or mass media bodies play a role of processing public information and making information more accessible to citizens. But there are also threats to this role when interest groups intervene with incentives to provide biased information.

In the second stage, when citizens already have the appropriate information at hand to participate, problems of incentives and capacities can also appear, but in this case for the citizenry. In relation to incentives, active participation in public life can be costly and in most cases it has the characteristic of promoting the public good, so that many citizens may decide not to assume the cost of participating and sit by and wait for benefits from the participation of others. As well, participation requires collective action and the cost of coordinating activities can be very high. In terms of capacities, processing timely and relevant information to assess the quality of public services is nothing trivial, which impedes the participation of a large percentage of the population.

This chapter explores the difficulties that mechanisms of external control present in both stages in Latin America. The evidence suggests that Latin American States have problems of capacities and incentives for providing information for the citizenry. The lack of capacities is reflected, for example, in the limited use of promising tools for bringing information to a wide audience at a low cost, such as ICT tools, or the limited dissemination of information from the administrative records generated from the activities of the State. To investigate the question of incentives to provide information at the level of subnational governments, an experimental intervention was designed that provides some insights about the under-provision of information in the context of the threat that such information would be used to penalize the State's for its performance. The different factors, beyond access to information about the State's performance, that can stimulate or limit the effective participation of citizens are analyzed using diverse surveys on political culture and citizen participation. Finally, through systematic analysis based on the best recent empirical evidence, we investigate interventions that

have successfully overcome obstacles in the two stages of accountability. The evidence suggests that while in some cases adequate information is given about the State's performance, in other cases it is essential to empower citizens in other dimensions to make their participation more effective.

## A conceptual framework

Accountability involves: 1) the citizenry, composed not only of individual citizens, but also of civil society organizations; 2) politicians or elected public employees; and 3) providers that manage the production and supply of public goods and services to the citizenry. These three agents interact in two major stages (Figure 4.1, p. 152).

In Stage I the State provides certain information, in some cases deliberately and other cases not. If citizens receive the information they need in a timely and useful manner they can incorporate it into their assessment of the performance of the State. An example of the deliberate provision of information is the statistics of the academic performance of students in the public education system. An example of information provided unintentionally is streets with potholes, based on which citizens can perceive the quality of roadway maintenance through their own experience of this service.

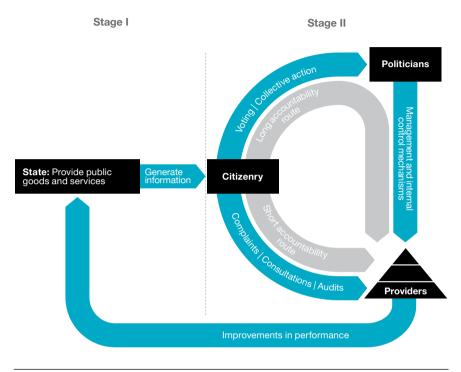
In Stage II, when citizens already have information about the quality of the provision of services, it is necessary that they effectively understand and use this information as an input for two possible types of citizen-State interactions. One possible interaction is through voting and other collective action (for example, petitions, demonstrations, etc.). This type of interaction is called the "long accountability route" (World Bank, 2004) because citizens delegate to politicians the capacity to control and encourage providers to improve the delivery of goods and services. The second type of interaction, which is direct between citizens and providers, is called the "short accountability route" because both citizens and formal and informal associations directly pressure providers. This is also termed social accountability and takes different forms according to the degree of citizen involvement, ranging from only monitoring to participation in decisions about design and the assignment of resources for different public policies.

Finally, providers close the circle by adjusting their behavior according to the demands they receive. Accountability results in the provision of public goods and services that are closer to what users want. This virtuous circle of participation and accountability is sustained by the threat that both politicians and providers pay a high cost when they do not meet the expectations of citizens.<sup>5</sup>

<sup>5.</sup> Ideally, accountability mechanisms that function adequately make the threat of penalty (via voting or alternative forms of citizens expressing their disapproval) sufficient incentive for politicians and providers to improve their performance. This in turn leads to effective complaints by citizens becoming more common. Considering that citizen participation is costly for individuals (in terms of the time dedicated to be informed and collectively organized, for example) a scenario where well-functioning mechanisms of threat by citizens represent the best of possible worlds. On the contrary, a citizen that perceives that his/her complaints are useless can decide to not participate owing to the implied cost and the limited gains from doing so.

The long and short accountability routes should complement each other.

Figure 4.1 Virtuous circle of citizen participation and accountability



Source: the authors.

The long route and the short route are not mutually exclusive. While the electoral mechanism informs policymakers about the basket of public goods and services that the public wants in the medium to long-term, connecting with suppliers tends to be used to demand specific goods or services (e.g. improvements in sewerage or medical services). While electoral participation is occasional (with every election), the short route provides more frequent follow-up to ensure that providers comply with the consensus achieved electorally. Ideally, the two accountability routes are complimentary and sustain the role of citizens as agents external to the State.

However, obviously neither the long nor the short route is free of obstacles. From the moment the State produces some type of good or service there are three types of problems: 1) incentives that are not aligned or strategic behavior; 2) lack of skills or capacities on the part of both the State and citizenry; 3) incomplete information or the incapacity to summarize the multiple dimensions of the State's performance. These obstacles can prevent citizen participation from exercising a corrective influence in the case of undesired deviations, or even directly preventing participation from occurring.

Problems of incentives typically emerge from the agency relationship between citizens (the principal) and the State, represented by both its politicians

and providers (the agents).<sup>6</sup> In general, the agents do not have incentives to disseminate trustworthy information about the quality of goods provided and try to hide the activities of the State to avoid being penalized in accordance with certain metrics. As a consequence, agents can offer a limited number of participatory instruments or deliberately increase the costs of participation. For their part, citizens have few incentives to participate because becoming informed, monitoring and complaining to the State are actions with a high public good component. <sup>7</sup>

Problems of capacities can appear in both stages of accountability. For example, the State can lack the basic skills to produce and disseminate timely and quality information for citizen decision-making. The lack of capacities may limit the control that politicians exercise over providers with regulatory mechanisms within the State,8 or even preclude the effective response of politicians and providers to citizen demands.9 At the same time, lack of capacities on the part of citizens means that they participate little and when they do participate, do so ineffectively, or possibly do not participate at all. For example, although vulnerable populations that suffer the most from the poor provision of services, 10 and consequently have more motives for complaining, participate less. This suggests the presence of certain barriers related to obtaining or interpreting information about public performance or in general with the fact that participation is costly, and for vulnerable populations this cost could be much too high (Molina et al., 2013). It is also possible that participation is low or inadequate when there are problems of attribution, that is, errors on the part of citizens in assigning responsibilities to different public employees.<sup>11</sup> 12

And finally, the problems of incomplete information reflect the difficulties to produce and transmit simple information about the activities of the State. First, producing a good summary measurement of public performance can be difficult in some cases given that many of the available metrics do not distinguish between results owing to the quality of the State's performance and those ow-

<sup>6.</sup> The problems of incentives related to the agent-principal relationship between politicians and the bureaucracy are analyzed in Chapter 2.

<sup>7.</sup> This is a typical problem of collective action. This logic makes for no citizen participating, but in reality citizens often succeed in coordinating and mobilizing through different forms of joint action (demonstrations, presenting public petitions to authorities, etc.).

<sup>8.</sup> These problems are discussed in detail in Chapters 2 and 3.

<sup>9.</sup> For example, a group of citizens can be dissatisfied with the quality of education provided in public schools, but solving this problem with more and better educational resources may be beyond the reach of providers.

<sup>10.</sup> For example, the 2014 CAF Survey shows evidence of a lower frequency of police patrols in relatively poorer areas.

<sup>11.</sup> CAF (2014) provides evidence about the relationship between attribution (on the issue of citizen safety) and electoral penalty.

<sup>12.</sup> In some cases people may feel in some sense sufficiently satisfied so they do not involve themselves in complaints despite the low quality of the services they receive. In this sense, what citizens understand as an inadequate provision of services can also affect their decision to participate (Lieberman et al., 2013). As well, while, as Figure 4.1 shows, the accountability mechanism begins with the existence of particular information about government performance, it is not certain that the provision of information will set in motion the successive steps of this mechanism. This can occur, for example, when citizens receive information that is not new to them.

ing to the external environment.<sup>13</sup> Second, for the average citizen it is very costly to process the information available to evaluate the performance of the State, because of which other actors emerge that take on aggregating, processing and summarizing this information. These actors function as mediators between the State and citizenry, but can have their own interests or are manipulated by either citizen groups or public employees, and provide biased or incomplete information.

All these problems weaken the threats of latent penalty in the ideal accountability mechanism and undermine the incentives for politicians and providers to adjust their behavior. As well, when citizens perceive these weaknesses they can decide not to participate, reducing even more the possibilities of external control.

# Production and dissemination of information by the State

In recent years there have been major expectations of the potential of transparency of public information to reduce corruption and other inefficiencies in the use of resources. However, for transparency to be effective, it is essential that the State is willing and able to generate information about its actions.

# DOES THE STATE HAVE THE CAPACITY TO GENERATE AND PROVIDE INFORMATION?

Every policy implemented by a government generates information. In the case of public education, every year schools enroll students, producing as a counterpart an administrative record with a list of enrolled student. Administrative offices also have records of their teaching staff, with data indicating where every teacher works. As well, the regular payment of salaries generates administrative records of the social security system. The teachers themselves maintain records of student attendance that are systematized and documented. Likewise, some countries conduct standardized tests for many of their students (typically in a particular grade or year) to know the progress of students in acquiring skills and learning. These tests represent a new source of information at the level of the student.

The records of the provision of a public service over time can be an essential tool, not only for internal management (as discussed in Chapter 1), but also for control mechanisms and external accountability. For example, this information could be used to alert the public about average results of students in standardized tests or about the average classroom size per teacher, or the average

<sup>13.</sup> Chapter 1 discusses different aspects of measuring State performance.

salary of teachers in the country or region. This information has the potential to empower citizens, allowing them to make a diagnosis and more informed complaints, whether by the long or short route (for example, publicizing results, not in terms of averages but rather at the level of the school, with the purpose of informing all interested actors in the community). The practice of transmitting systematic and comparable information about public service providers is known as report cards, and in the case of education, has a long tradition in countries like the United States (Figlio and Lucas, 2004), although its use is less extensive in Latin America.

Administrative records are an essential tool for internal management and for external control and accountability mechanisms.

#### Box 4.1 Diffusion of information about providers: the use of report cards in schools

The use of report cards is an example of how the relationship between clients and providers of public goods and services can be strengthened by systematically making information about the suppliers' characteristics and performance more transparent.

Table 1 shows examples of countries where this mechanism has been used in the education sector. The characteristics of the report cards vary significantly.

In some cases, report cards serve solely as internal management tools, while in other cases they are used to keep the community informed, in particular parents. Some experiences emerge as bottom-up initiatives of the education community itself, while others are top-down through the State promoting information dissemination.

With respect to the content, Cameron *et al.* (2006) classified report cards in several levels. Report cards at level 1 only have information related to inputs, like the number of students, teachers, classrooms or textbooks, or the level of expenditures. Level 2 report cards incorporate information about measurements of results, like failure and dropout rates, or of processes in place in schools like parent participation or safety measures. The data necessary to reach level 1 or 2 can come from both centralized information systems or gathered at the level of each school. Level 3 report cards include measurements of the average academic performance of students to identify their advance in incorporating knowledge and skills. This information often comes from standardized tests at the national or international level, but can also be gathered at the level of each school, although in the latter case comparisons can be more complicated. Finally, level 4 report cards summarize the level of satisfaction of parents with the education service their children receive. Consulting with parents offers the advantage of giving access to information about softer aspects related to educational quality or other resources used in schools that are not captured in tests taken by students.

<sup>14.</sup> This information is disseminated without identifying particular students or teachers.

Informative booklets or newsletters.

<sup>16.</sup> Below we discuss the effects of implementing report cards in different contexts, whether about the activation of citizen participation or improving the quality of public services.

Table 1 Example of report cards

Country or organization	Report	Audience	Main objective	Motivation	Content <sup>a/</sup>	Type of comparison <sup>b/</sup>	Type of initiative <sup>c/</sup>	
Brazil (State of Paraná)	Paraná State School Report Card	Community	Accountability and community participation	Promoted by the Secretary of Education (1999-2002)	4	3	Top-Down	
CERCA	School Report Cards Field Test	Community	Mobilization and participation of the community	"Citizen participation experiment funded by U.S. Agency for International Development (USAID)"	2	1	Bottom-Up	
Guinea	School Assessment Worksheet	Community	Mobilization and participation of the community	Decentrali- zation	3	2	Bottom-Up	
India	Bangalore Citizen Assessment	Community	Mobilization and participation of the community	Local civil so- ciety groups	n.d.	Citizen Report Card	Bottom-Up	
Nigeria	Fundamental Quality Report	Commu- nity and sub-national governmentl	Mobilization and partici- pation of the community Management tools for the sub-national government	Decentrali- zation	2	3	Top-Down	
	U.S. No Child Left Behind School Report Card	Community	Accountability	Legal requi- rement to access federal funds	3	4	Top-Down	
United States	Virginia Standards of Learning School Performance Report Cards	Community	Accountability	Legal requirement of the State	3	4	Top-Down	
	Virginia Standards of Learning Report to State Report Card	Educational authorities, sub-national level	Accountability	of Virginia for annual school accreditation			.30 50,011	
Ghana	School Performance Appraisal Meeting (SPAM)	Educational authorities, sub-national level	Accountability	Decentrali- zation	3	s.d.	Top-Down	
Namibia	School Self Assessment System	School	Management tools	Promoted by the Ministry of Education	3	3	Bottom-Up	
Uganda	School Profiles	School	Feed-back from the central gover- nment	Central Mnistry of Education	1	1	Top-Down	
UNICEF	Quality School Grid	School	Management tools	n.d.	2	1	Bottom-Up	

a/ Content of the report card: 1. information about inputs (Number of students, teachers, textbooks, classrooms and expenditures); 2. information about inputs and processes (1 + repetition and dropout rates, presence of school calendars, participation of parents and the community, safety); 3. information about inputs, processes and results (1 + 2 + passing and graduation rates, qualifications in tests); 4. inputs, processes, outputs and parent satisfaction <math>(1 + 2 + 3 + information about student and parent satisfaction, user satisfaction index).

Source: the authors, based on Cameron et al. (2006).

b/Type of comparison: 1. Not comparable; 2. Standards/goals; 3. Comparable among schools; 4. Standards/goals and among schools. c/ Type of initiative: Top-down: the information is generated from administrative data, information systems like EMIS and/or systems of standardized. Bottom-up: the information emerges from the participation of the education community (e.g. teachers, directors, parents).

To provide information, the State requires the capacity not only to generate reliable information, but also to make this information available in a timely and understandable manner, and through mediums that are accessible to the public to which it is directed. As well, the information provided can require different levels of disaggregation, formats and dissemination channels, depending on the target group to be informed. For example, universities and research centers can require a high degree of disaggregation, that is, access to primary data in administrative records (with the obligation to maintain the anonymity of the agents involved) or cross-referencing among different sources of records (standardized tests, sociodemographic characteristics of the samples, variables associated with physical resources employed by the schools, etc.) to make an integral and at the same time sophisticated diagnostic. This level of disaggregation would not be useful for the average citizen that only wants access to a comprehensive evaluation of the state of public education.

However, the records generated in the process of providing public goods or services are often not sufficient for a good evaluation because they do not give information about how satisfied citizens were. In such cases, alternative mechanism for gathering information may be necessary that measure how much users value public services. One tool that is getting increasing use is the "citizen's report card", which provides the information resulting from surveys into user satisfaction. These instruments have emerged from both civil society organizations and governments (Box 4.2).

#### Box 4.2 Citizen feedback: the initiative "¿Cómo vamos?"

In 1998 the Bogota Chamber of Commerce, the publishing house *El Tiempo* and the Corona Foundation founded the project "*Bogotá Cómo Vamos*" (Bogota How are We Doing?), with the objective of evaluating and informing the citizenry about changes in the quality of public goods and services, and in the quality of life in general, expected according to the municipal development plan.

The experience in Bogota, which is still ungoing, has been followed by many others in Colombia (Cali and Cartagena in 2005, Medellin in 2006, Barranquilla in 2007, Bucaramanga in 2009, Valledupar and Ibague in 2010, Pereira in 2011, Manizales in 2012 and Yumbo in 2013). All these cities now make up the Colombian Network of *Cómo Vamos* Cities (RCCCV), representing around a third of the population of Colombia. As well, the "*Como Vamos*" model has been adopted in cities in other countries (Argentina, Brazil, Chile and Peru) and has even reached the level of monitoring the performance of entire countries, as in the case *Cómo Vamos* in Mexico.

The type of information that these initiatives provide varies by city. For example, in Bogota, it includes both subjective (levels of satisfaction with sewerage services, the state of roadways or of parks, citizen safety, etc.) and objective (sociodemographic variables, school repetition rates, measurements of environmental contamination, etc.). In other cities like Santa Fe (Argentina), the initiative, undertaken by the municipal government, shows only detailed objective information, but does not systematically include the opinions of residents.

Source: the authors, based on http://redcomovamos.org/, http://redciudades.net/ and http://www.bogotacomovamos.org/.

## NEW TECHNOLOGIES, E-GOVERNMENT AND TRANSPARENCY

New information and communication technologies (ICT) can facilitate the task of the State of sharing information about its performance at a low cost, reaching a broad and diverse audience. The term e-government encompasses the idea of the intensive use of these new technologies by different State bodies.<sup>17</sup>

One of the main tools of the electronic government is the website. Murillo (2015) evaluated the contribution of websites to public transparency in 16 Latin American countries, considering the quantity and quality of the information national governments provide by this means. The author emphasizes that as well as being available, the information should be timely (up-to-date), easy to find, address diverse audiences and be preferably decodable or readable by computer programs for gathering and systematizing data from different Internet sources. He also provides information about areas that are assumed to be more susceptible to corruption (for example, public budgets, public procurements, etc.) and concludes that while national websites in Latin America provide information in these areas, their level of sophistication generally does not meet minimal standards for this information to be useful for the citizenry in its role as external controller.

In a study commissioned for this report, CIPPEC (2014) analyzed the presence of governments at the municipal level in the internet, examining 125 Latin American municipalities (the five most populous municipalities of the 25 countries of the region) and systematizing the characteristics of existing websites according to the quantity of information they provide to citizens and the level of interaction they allow with the same (for example, the possibility of conducting bureaucratic and other transactions).18 Only 82% of the analyzed municipalities have web portals and less than 60% have portals with the desirable characteristics in terms of transparency and interaction with the citizenry. In particular, 58% of the municipalities provide information about which transactions can be conducted in the municipality. But only much smaller percentages allow for conducting transactions online: 28% allow payment of rates and taxes, 12% the payment of fines and 5% allow for obtaining appointments online for in-person transactions. While the possibility of conducting administrative procedures online does not contribute directly to improving accountability, it provides more transparent and rapid management, reducing favoritism in attending to citizen demands and allowing for a less costly interaction for citizens.

With respect to the use of websites as platforms to disseminate relevant information on management and accountability to citizens, 42% of the municipalities

<sup>17.</sup> A more precise definition is that e-government is the set of processes of simplification, exchange and communication of information among government institutions and between these insitutions and citizens and civil society organizations (Meier, 2012).

<sup>18.</sup> CIPPEC (2014) also noted that there are different stages to evolutionary model of e-government, ranging from low levels of technological and organizational sophistication (solely with the dimension termed "presence") to high technological and organizational levels of development for those governments with good performance in "transactions" with the citizenry.

publish information about their budgets, although only 33% publish the effective execution of the budget. As well, 36% publish information about procurements and 30% about past and current tenders. Finally, less than 10% of the municipalities publish sworn statements by high-level public employees.

And finally, in relation to websites as a mechanism of interaction with citizens, 38% of municipalities receive complaints through Internet, 34% have a unified system for requests and complaints, and 47% use social networks. However, the use of these mechanisms seems very poor given that only 7% of consultations via email received responses and only 6% are responded with the requested information.

In synthesis, there is much room for improvement in Latin American cities in terms of dissemination of basic information about their management through their web portals and in more sophisticated use of ICT to bring the State and citizens closer. The limited development of e-government in the municipalities of the region may be partly due to their lack of capacity to effectively generate and manage information (for example, in the case of public procurement), the lack of development and integration of informatic systems, or inadequate staff training in key areas for managing e-government services. For example, to have an online service to pay fines or rates requires an up-to-date database of taxpayers and debt status, mechanisms of validating payment with credit cards and maintenance of the websites that ensure stability and provide the confidence that citizens need to prefer online to in-person payment.

However, some countries have advanced more than others. According to the performance of the five most populous municipalities of each country in terms of the characteristics reported in Chart 4.1 (see p. 160), the performance of the countries in the region can be classified from very low to very high (Table 4.1).<sup>19</sup>

**Table 4.1** Level of development of municipal web portals according to the evaluation of the five most populated municipalities in each country

Level of performance in the ranking <sup>a/</sup>						
Very high	High	Medium	Low	Very low		
Argentina	Brazil	Bolivia	Belize	Cuba		
Chile	Costa Rica	El Salvador	Honduras	Guyana		
Colombia	Ecuador	Guatemala	Nicaragua	Haiti		
Mexico	Dominican Republic	Puerto Rico	Panama	Jamaica		
Peru	Uruguay	Venezuela	Paraguay	Trinidad and Tobag		

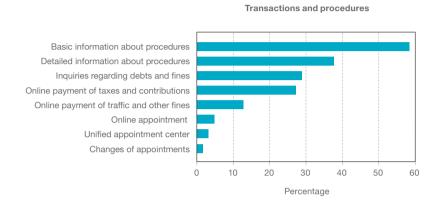
a/ The ranking is calculated using the simple average of coverage for all the dimensions listed in Chart 4.1. Based on this ranking, countries in the region are classified into five categories: very high, high, medium, low and very low performance.

Source: the authors, based on CIPPEC (2014).

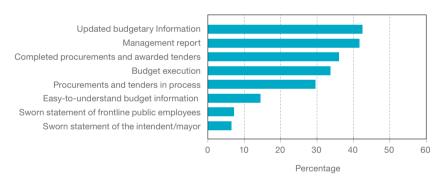
Latin American cities have much to improve in the dissemination of information through websites and more sophisticated use of ICT.

<sup>19.</sup> Municipalities are ranked based on the simple average of the coverage of all the dimensions listed in Chart 4.1.

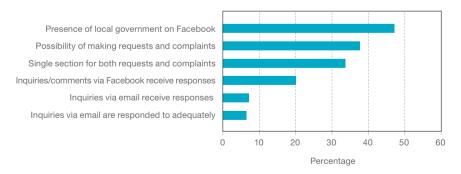
**Chart 4.1** Percentage of Latin American municipalities that meet e-government requisites in their web portals<sup>a/</sup>



#### Transparency



#### Interaction and social networks



a/ The percentages were calculated on the basis of 125 governments, those of the five main cities (according to population) of twenty-five Latin American countries (Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Dominican Republic, Trinidad and Tobago, Uruguay and Venezuela).

Source: the authors, based on CIPPEC (2014).

On the demand side, data from Latinobarómetro show that the great majority of citizens do not make frequent use of the resources available in Internet to inform themselves about what their governments are doing. According to data from 2010, the most commonly used media as a source for information on political matters is television (used by 82% of respondents), followed by radio (50%), print media (37%) and Internet (16%). However, the information available in Internet is probably used much more by NGOs, the media itself, and universities.

Only 15% of the municipalities that were requested by email to provide fiscal information sent the requested information.

# INCENTIVES FOR THE STATE TO PROVIDE INFORMATION

Does the State behave strategically when providing public information? To answer this question, Hatrick et al. (2015) conducted an exercise of requesting information from municipal governments in Colombia, testing whether public employees have less proclivity to respond to requests for information related to their management when this information is likely to be used to monitor their performance. The authors sent an email to all Colombian municipalities requesting basic budgetary information<sup>20</sup> and applying a special treatment with a randomly selected subgroup of municipalities (treatment group). The email sent to these municipalities stated that the information would be used to analyze the relative performance of all the municipalities in the country. The other municipalities (control group) were only requested to send information. The random selection of municipalities for each group allowed for interpreting any differences in the response rates of the two groups as the resistance of public employees to disseminate information in the context of possible comparison of their municipality's performance to that of other municipalities.

Of all the municipalities effectively contacted, 18% sent some type of response, although only 15% included the requested information. Some 78% of the municipalities that responded and 72% of those that responded with the requested information did so within the time limit of seven days prescribed by Law 1712 in response to this type of request. In general, the municipalities that responded are larger, with lower indicators of poverty and better fiscal performance, and are located in the Andean region.

<sup>20.</sup> Specifically, the information requested was the total income and expenditures for the municipality for 2013. The request was made from an institutional e-mail account of CAF. The contact database used had at least one contact email address for every municipality, and in 86.6% of the municipalities there was direct contact with the finance department. To minimize the possibility of not obtaining a response simply because a municipality may have a weak capacity to gather and generate information, the request was simple and dealt with information that the municipality was obliged by law to provide (Law 1712). Of the 1,022 municipalities, only 11 could not be effectively contacted because the contact emails were not valid.

**Table 4.2** Characteristics of Colombian municipalities according to their behavior in relation to providing public information<sup>a/</sup>

	Population <sup>b/</sup>	Index of unmet basic needs (UBN) (%) <sup>b/</sup>	Indicator of fiscal perfor- mance (%)°/	Andean Region (%)	Eastern Region (%)	Pacific Region (%)	Caribbean Region (%)
Sent some response	79,316	25	69	75	7	14	4
Sent the requested information	40,521	24	70	76	7	14	4
Did not respond	30,203	34	67	56	10	16	18

a/ These descriptives were calculated based on an exercise of requesting basic budgetary information through an email sent to municipal governments in Colombia

Source: the authors, based on Hatrick et al. (2015).

Panel A in Table 4.3 shows the results of the effect of the treatment on the probability of obtaining some type of response (column 1) and on the probability of obtaining the requested information (column 2).<sup>21</sup> The coefficient in all cases is interpreted as the difference in the response of the treatment group with respect to the control group, measured in percentage points.

The negative sign in all the estimations is consistent with the proposed hypothesis that the response rate would be lower for the group that received the message indicating comparisons would be made among municipalities. The general results, however, are not statistically significant, although the magnitude of the effects is not negligible: the treatment reduced the probability of giving a response by 2.3 percentage points (12% lower than the response rate of the control group) and the probability of sending the requested information by 1.2 percentage points (8% lower than that of the control group).

Analyzing the treatment in subsamples of municipalities constructed according to their size (Panel B), the most robust result is the probability of receiving a response in the group of municipalities with between 10,000 and 50,000 inhabitants. In this case, the effect of the treatment is always statistically significant and reduces the probability of obtaining a 7 percentage points response rate (33% compared to the control group response rate) and a 6 percentage points probability of sending the requested information (33% compared to the control group response rate).

b/ Data from the 2005 General Census of Colombia.

c/ The fiscal performance indicator is an index calculated by the National Planning Department, which takes into account self-financing of operating costs, debt servicing support, dependence on transfers from the national government and royalties, generation of income by local governments themselves, the magnitude of investment and the capacity to save. Higher values of the indicator reflect better performance.

<sup>21.</sup> To identify the effect of interest, a regression was estimated by ordinary least squares, controlling for the characteristics of the municipality like the number of contact emails, the size of the population, the provincial incidence of poverty, the provincial Gini index, the UBN index in the 2005 census, the percentage of the population between 5 and 24 years of age that attend educational institutions, an indicator of fiscal performance for 2013 and fixed effects of the region.

**Table 4.3** Impact of potential comparison of fiscal performance of municipal governments in Colombia on the response to requests for public information <sup>a/</sup>

	Some response	Sent the requested information
A. Complete sample		
Treatment	-0.023	-0.012
	(0.024)	(0.022)
Observations	1,011	1,011
Response rate of the control	0.185	0.149
B. Population range		
Fewer than 10,000 inhabitants		
Treatment	0.019	0.037
	(0.036)	(0.033)
Observations	393	393
Response rate of the control	0.138	0.101
Between 10,000 and 50,000 inhal	oitants	
Treatment	-0.07**	-0.059*
	(0.0337)	(0.032)
Observations	512	512
Response rate of the control	0.212	0.181
More than 50,000 inhabitants		
Treatment	0.076	0.058
	(0.086)	(0.079)
Observations	106	106
Response rate of the control	0.213	0.164

The robust standard error of differences in means is reported between parentheses.

Source: the authors, based on Hatrick et al. (2015).

#### MASS MEDIA AND ACCOUNTABILITY

As seen in the section above, mass media (print media, radio and television, and internet websites) is one of the main sources through which citizens can inform themselves about political life. Consequently, its role as an intermediary between citizens and the State and its impact on the accountability are very important.<sup>22</sup>

In effect, greater access and exposure to print media (Snyder and Strömberg, 2010; Reinikka and Svensson, 2005), radio (Ferraz and Finan, 2008; Strömberg, 2004), television (Prat and Strömberg, 2005) and internet (Andersen et al.,

<sup>\*,\*\*,\*\*\*</sup> denotes statistically significant differences at 10%, 5% and 1%, respectively.

a/ This table reports the coefficients estimated by ordinary least squares. The dependent variable "Some response" takes the value of 1 if the municipality responded to the email and 0 if it did not. The dependent variable "Sent the requested information" takes the value of 1 if the municipality responded by sending the requested information and 0 if it did not respond or did not send the requested information. The variable "Treatment" takes the value of 1 for the municipalities that were informed by the requesting email that the requested budgetary information would be used to measure their relative performance and 0 for municipalities were not informed of this.

<sup>22.</sup> Prat and Strömberg (2013) reviewed the theoretical and empirical literature on the theme.

Pluralism in the media and a healthy regulatory framework are effective defenses against the capture of the media.

2011, Enikolopov *et al.*, 2014) strengthen accountability mechanisms because they permit citizens to take more informed electoral decisions and because they result in better public services by modifying the intrinsic quality of elected politicians and their behavior. However, the media is exposed to efforts by politicians to silence criticism and to promote only positive coverage of the government, and in some cases the media gives in to these efforts (McMillan and Zoido, 2004; Di Tella and Franceschelli, 2011), which can bias public opinion and weaken control mechanisms. Prat and Strömberg (2013) suggest that pluralism in the media and healthy regulatory framework are effective defenses against efforts to capture the media.

Although in Latin America the new forms of mass communication through Internet, such as blogs and social networks, are among the least used media by citizens to inform themselves about political matters, they have in their favor certain characteristics that distinguish them from the traditional mediums. Firstly, their low cost of entry and decentralized nature limit the possibility of being captured by interest groups or the government itself. Second, they hinder cover-ups by corporations or politicians that try to maintain a reputation unrelated to the reality of their actions. And third, they allow for crowdsourcing, that is, gathering relevant information from multiple sources. This last point is crucial when the incentives for politicians to provide information are weak. Nevertheless, their utility remains uncertain precisely because the low entry cost can reduce the quality and reliability of information sources (given that they can divulge inaccurate information) and because they can create the illusion that they replace offline forms of participation, such as public demonstrations, when in reality there are not so effective (Enikolopov et al., 2015).

### Citizen participation in Latin America: who and how much?

A descriptive analysis of different citizen surveys in the region allows for determining the extent of citizen participation in Latin American and the most commonly used participation mechanisms. It also allows for investigating the factors associated with greater or lesser participation, which constitutes a good starting point for determining whether these mechanisms have the potential to help improve the provision of services.<sup>23</sup>

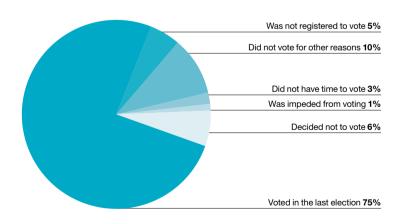
<sup>23.</sup> Given the specificity of short accountability route mechanisms of citizen participation in every country and even in every city within countries, the available systematic information allows for investigating only some of these mechanisms.

# HOW HIGH ARE PARTICIPATION LEVELS IN LATIN AMERICA? A VIEW FROM THE PERSPECTIVE OF SURVEYS ON POLITICAL CULTURE

The most systematic and homogeneous information about citizen participation in different countries is electoral participation. Graphs 4.2 to 4.4 show the percentage of the population over 18 years of age in Latin America that actively participate through electoral mechanisms, using both self-reported data (in Latinobarómetro) and results of administrative electoral records (of the *International Institute of Democracy and Electoral Assistance*, IDEA). According to the response to the question "Did you vote in the last presidential election?" the average electoral participation rate in the region is 75% (Chart 4.2). As well, this self-reported participation does not differ from the data obtained from records on the number of persons that effectively voted in the last respective presidential election (73% of those at voting age).

This average hides a high degree of heterogeneity, given that the participation rates in the last presidential elections range from 46% in Chile to 97% in Uruguay. Nevertheless, electoral participation in the region increased on average by 13% from the 1990s to the last presidential election, and increased in the majority of countries, with increases of more than 50% in Bolivia, Venezuela, El Salvador and Guatemala (Chart 4.3, p. 166).

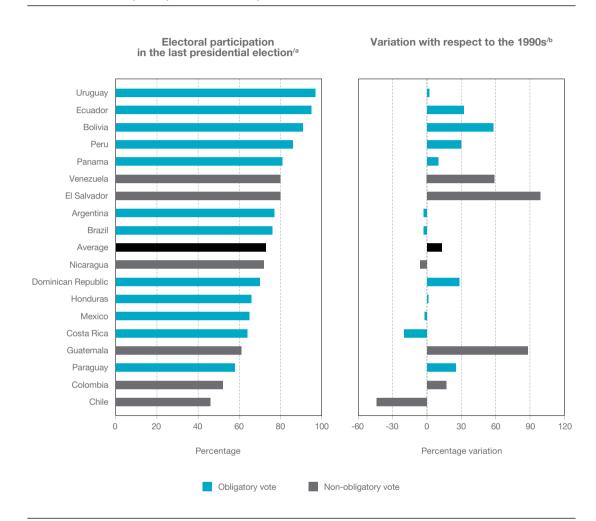
Chart 4.2 Electoral behavior in the last presidential election in Latin American countries<sup>a/</sup>



a/ Simple average for Argentina, Bolivia, Brazil, Colombia, Costa Rica, Dominican Republic, Chile, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela.

Source: the authors, based on Latinobarómetro 2012.

Chart 4.3 Electoral participation in the last presidential election in Latin American countries



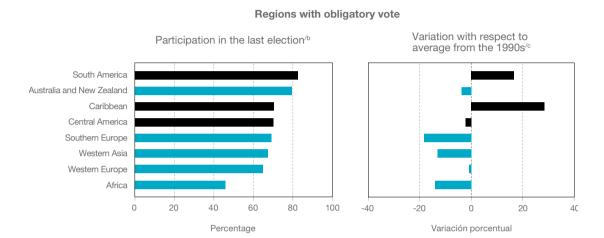
a/The percentages were calculated based on administrative records (percentage of persons that effectively voted over the total voting age population) in the last presidential election in every country. The red lines represent countries where the vote is obligatory, while the blue lines represent countries where the vote is voluntary. Chile is a particular case in that with a reform in the electoral system under Law N° 20.568 in 2012 voter registration is now automatic and voting is voluntary.

Source: the authors, based on the International Institute of Democracy and Electoral Assistance (several years).

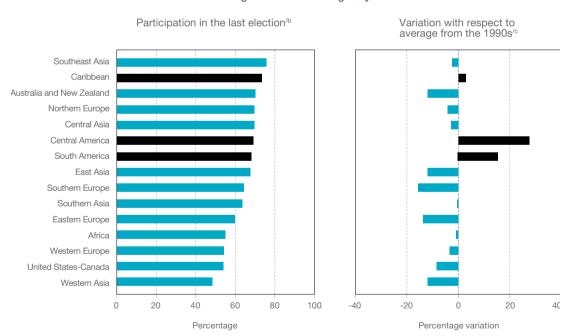
As well, electoral participation in the majority of sub-regions of Latin America is high compared to the other regions of the world (in both countries with and without compulsory voting) and in contrast to all the other regions of the world; it has increased in recent years (Chart 4.4).

b/The percentage variations were calculated by comparing the data from the last presidential election to the average participation in presidential elections in the 1990s.

Chart 4.4 Electoral participation in different regions of the world according to the obligatory nature of the vote<sup>a/</sup>



#### Regions with non-obligatory vote

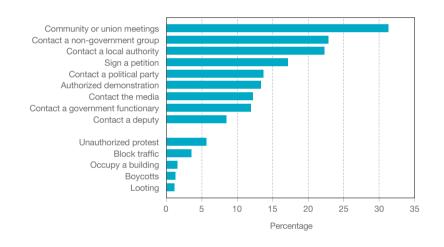


a/ The geographic regions correspond to the classification used by the United Nations Statistical Division (UNSD). b/ The percentages are calculated based on administrative records (percentage of persons that effectively vote over the total voting-age population) of the last presidential and/or legislative elections (depending on the form of government). c/ The percentage variations were calculated by comparing the data from the last election to the average of electoral participation in elections in the 1990s.

Source: the authors, based on the International Institute of Democracy and Electoral Assistance (several years).

In terms of participation through non-electoral routes, the most systematic and homogeneous information comes from surveys. In particular, Latinobarómetro gathers comparable evidence about diverse forms of participation carried out by citizens (Chart 4.5) of a "more civilized" (upper part of the graph) or "less civilized" type (lower part). When people are consulted about a menu of these actions,<sup>24</sup> they report greater participation by more civilized than less civilized routes. For example, between 10% and 30% of respondents report having engaged in some form of the more civilized forms of participation.<sup>25</sup> Participating in a community or union meeting, contacting a non-government group or a local authority, and signing a petition are among the most common actions.

Chart 4.5 Non-electoral citizen participation in Latin America<sup>a/b/</sup>



a/ Respondents are asked if in the last three years they have made any of the following actions: participate in community or union meetings, contact a non-government group, a local authority, a political party, the media, a government functionary, a deputy. No reference to a determined period of time is made in relation to the other actions.

b/ Simple average for Argentina, Bolivia, Brazil, Colombia, Costa Rica, Dominican Republic, Chile, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela.

Source: the authors, based on Latinobarómetro, several years between 2005 and 2012.

The World Values Survey provides information about some forms of non-electoral citizen that can be used for comparisons within Latin America and with other regions. According to this source, and in comparison to more developed regions, citizens in Latin America report lower average levels of participation through signing petitions, authorized demonstrations, strikes and boycotts (Table 4.4).

<sup>24.</sup> Note that it is difficult to discern whether these forms of participation correspond to the long or short accountability route, that is, whether complaints are presented to politicians or directly to providers.

<sup>25.</sup> Except contacting a deputy, the least used route.

**Table 4.4** Percentages of respondents that state they have participated in non-electoral channels in different regions of the world<sup>a/b/</sup>

	Sign a petition (%)	Authorized/ peaceful demonstrations (%)	Join strikes (%)	Boycotts (%)
South America	25	17	11	4
Central America	18	10	6	2
Caribbean	23	15	10	9
United States - Canada	67	19	8	20
Australia - New Zealand	79	20	17	17
Asia	14	11	5	6
Africa	9	14	10	6
Southern Europe	35	26	17	10
Western Europe	51	24	11	12
Eastern Europe	12	12	4	3
Northern Europe	56	19	9	17

 $<sup>\</sup>ensuremath{\mathrm{a}}/\ensuremath{\mathrm{Respondents}}$  are asked if they have engaged in any of these actions.

Source: World Values Survey wave 5 (2005-2009) and wave 6 (2010-2014).

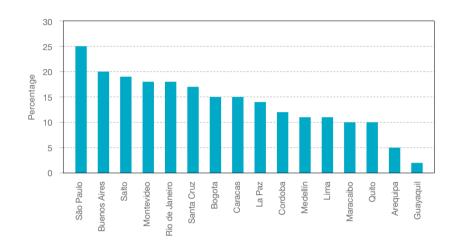
It is more problematic to make systematic comparisons among countries of alternative forms of participation that link citizens to providers of public goods and services by the short accountability route because these mechanisms have distinctive characteristics in each country. The 2009 CAF Survey shed light on one mechanism of this type, citizen participation through communal, municipal or other councils, which may be linked more directly to the exercise of citizen control over local matters, and consequently, over the provision of public goods and services. Specifically, respondents were asked if during the previous year they had participated actively in community or neighborhood councils/meetings/assemblies in their city. <sup>26</sup> There was a high degree of heterogeneity in the levels of participation through these mechanisms (Chart 4.6, p. 170), with São Paulo presenting the highest participation rate of 25%.

b/The geographic regions correspond to the current classifications of the United Nations Statistical Division (UNSD).

<sup>26.</sup> The name of the participation mechanism was mentioned in every city.

Citizen participation in Latin America does not appear to be particularly lacking, although the indices of non-electoral participation are lower than in other regions.

**Chart 4.6** Percentage of persons that participated in communal or neighborhood councils/meetings/assemblies (in the 12 months prior to the interview) in Latin American cities



Source: the authors, with data from the 2009 CAF Survey.

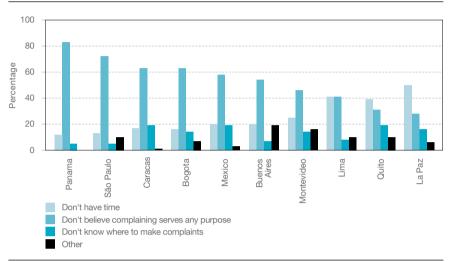
# THE OBSTACLES TO EFFECTIVE PARTICIPATION IN LATIN AMERICA

Are the current levels of participation in Latin America adequate? This is a difficult question to answer given that the causal relationship between the performance of the State and citizen participation is ambiguous. On the one hand, in countries where the State performs well, we could expect the level of citizen participation would be low given that there is less need for complaints when public performance is good. However, it is possible that good performance is accompanied by high levels of participation precisely because the good performance is due to greater external control. As well, if good public performance is perceived as a proxy of the State capacity to resolve problems, citizens in reality can make more complaints and participate more when they perceive good performance.

As has been seen here, citizens in Latin America do not appear be particularly non-participatory, although they do show low indices of non-electoral participation. Given the important failure in the provision of goods and services in the region, it could be argued that this participation is not sufficiently effective as a mechanism of pressure to obtain better performance by the State. What does the data say?

First, according to the 2014 CAF Survey, the main reason that citizens do not make complaints about problems with the provision of public services is that they do not believe that such complaints serve any value, they do not have time, or they do not know where to make complaints (Chart 4.7).

**Chart 4.7** Reasons that citizens do not make complaints about problems in the provision of public services in Latin American cities<sup>a</sup>/

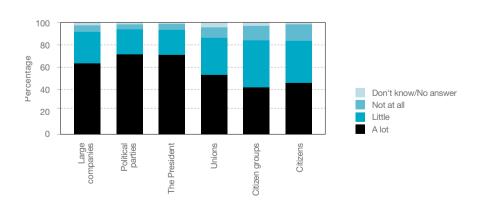


a/ The cities are ordered in the chart according to the category "I don't believe these complaints serve any purpose".

Source: the authors, with data from the 2014 CAF Survey.

Second, according to the National Survey on Political Culture and Citizen Practices in Mexico (ENCUP 2012), citizens do not believe that their complaints have sufficient power to change things, given that they see themselves as relatively uninfluential actors in the political life of the country compared to large companies, politicians or unions (Chart 4.8). The same survey highlighted problems of legitimacy of electoral participation owing to clientelism and, in its extreme form, vote-buying (Box 4.3, p. 173).

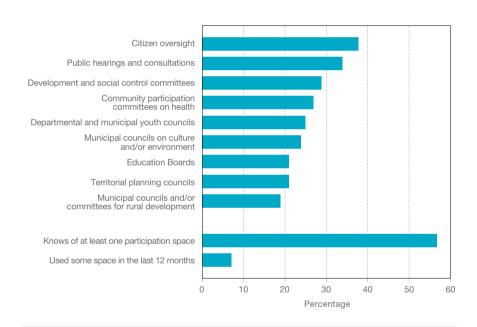
Chart 4.8 Opinion about how much different actors influence political life in Mexico



Source: the authors, based on the National Survey on Political Culture and Citizen Practices (ENCUP) 2012.

Third, according to the 2011 Political Culture Survey (ECP) in Colombia, very few Colombians know about the mechanisms of citizen participation available in their country apart from the vote, the majority of which were designed precisely to strengthen the short accountability route. <sup>27</sup> In particular, less than 30% of citizens know about the public service social control committees or committees for citizen participation in public health, two mechanisms considered to make direct control over public service providers possible (Chart 4.9). What is more, only 57% of citizens know of at least one of the available participation mechanisms, and only 7% had used one in the 12 months prior to the survey.

Chart 4.9 Knowledge and the use of citizen participation mechanisms in Colombia



Source: the authors, based on the 2011 Political Culture Survey (ECP).

Thus, citizen participation is affected by distrust, the costs of participating and lack of knowledge. But which obstacle do citizens perceive as the most important? And which sociodemographic characteristics are shared by citizens that participate to some degree? Understanding the degree to which these three problems impact on different population groups is fundamental to gauge the threat they represent to plurality and the legitimacy of citizen participation.

<sup>27.</sup> Most of these participation mechanisms are provided for under the Citizen Participation Law (Law 134, 1994).

#### Box 4.3 Weakening the long accountability route: vote-buying as an extreme case of clientelism

Weak political institutions foster clientelism, that is, the provision of direct and more or less immediate benefits by candidates to citizens in exchange for their electoral support (Fergusson and Riaño, 2014). Clientelism not only weakens and delegitimizes the vote as a form of rewarding or penalizing elected public employees, but also results in an inefficient use of resources that are diverted with the particular end of capturing the support of specific groups. The extreme form of clientelism is the direct buying of votes. Unfortunately, this practice is not unusual in the region, as recent evidence from Colombia and Mexico illustrates.

In the case of Colombia, the low rate of electoral participation -one of the lowest in the region - and the high level of disinterest in political participation in general represent a formula for vote buying. Fergusson and Riaño (2014) quantified the phenomena by estimating a supply curve for votes that indicates the percentage of citizens willing to sell their vote at different prices. As the willingness to sell one's vote is very sensitive thing to declare and cannot be investigated directly, the authors estimated the supply of votes using an experimental methods and the "reference group technique", which consists of questions designed to avoid underreporting and that were included in the Longitudinal Colombian Survey of Los Andes University. Specifically, respondents are asked to answer hypothetical questions as to whether persons similar to them would accept a certain quantity of money in exchange for their votes. The results are surprising, approximately 45% of Colombians believe that someone like themselves would sell their vote for as little as ten thousand pesos (approximately four US dollars), and this percentage reaches a maximum of approximately 55% when 50 thousand pesos (approximately 20 US dollars) is offered. Low-income and younger persons were more willing to sell their votes, while the level of education does not appear to be an important factor. In contrast, trust in the secret ballot seems to be an attenuating factor.

In the case of Mexico, according to ENCUP 2012, which also included questions based on the reference group technique, 59% of respondents stated that someone similar to themselves would agree to sell his/her vote in exchange for a food basket. Based on the same survey, but using an alternative technique (list-experiment technique), it could be concluded that approximately 17% of voters effectively sold their votes in the 2012 national elections.

Source: the authors, based on Fergusson and Riaño (2014) and ENCUP 2012.

# WHO PARTICIPATES AND WHAT ARE THE DETERMINANTS OF PARTICIPATION?

What does the empirical evidence say about the relative importance of the different limits to citizen participation in the region? A first approximation in responding to this question can be obtained from the information from citizen

Citizen participation positively correlates with the perception of the effectiveness of this participation. participation surveys that include questions about obstacles that citizens identify.<sup>28</sup>

There are measurements in these surveys related to the following potential factors of influence on participation: 1) lack of trust in institutions; 2) perceptions about the effectiveness of the State and of institutions to resolve problems; 3) perceptions about the existence of corruption and fraud; 4) perceptions about the effectiveness of the existing mechanisms of participation to reach their objectives; 5) perceptions about the transparency of the State; 6) lack of knowledge about how to use complaint mechanisms; 7) type of information source for informing one's self; 8) costs of collective action; 9) satisfaction with public services; and 10) other individual characteristics like gender, education and socioeconomic level. Which factors are most associated with participation?

Table 4.5 summarize the results of a multivariate regression analysis in which the dependent variable is a measure of participation and independent variables are associated with each of these factors, plus a series of individual characteristics. The factors most robustly associated with citizen participation are the perception of the effectiveness of this participation (positively), the cost of collective action (negatively) and satisfaction with public services (negatively). Participation also presents a less robust negative association with the effectiveness of the State and its institutions, with the perception of corruption and fraud and the perception of the lack of transparency. There is a contradiction in these results given that while the association between participation and effectiveness indicates that the general perception of a more efficient State motivates citizens to participate less, the association between participation and other more concrete dimensions of participation like less corruption and more transparency indicate that the general perception of a more efficient State leads to more participation.

Certain sociodemographic characteristics seem to play an important role in citizen participation. The characteristic that presents the most robust correlation is education. More educated persons always participate more. As well, individuals from higher socioeconomic levels, those that inform themselves regularly about political matters, older persons and men are more participatory, although these results are less robust.

<sup>28.</sup> This section analyzes the data from three surveys for several years: Latinobarómetro, the CAF Survey and the Political Culture Survey of Colombia (ECP). As the sources of information analyzed are not from homogeneous questionnaires, Table A.1 (Appendix) describes variables associated with different limiting factors from each survey. Not all the questions were used in every survey wave. Consequently, the variables of participation may not always correlate with all the factors at the same time.

<sup>29.</sup> Regressions by ordinary least squares were made, controlling for the larger number of factors and socioeconomic characteristics available in each survey, and while the results cannot be interpreted as causal effects, provide a first descriptive approximation to understand the dynamic of citizen participation.

**Table 4.5** Association between citizen participation and factors of influence and socioeconomic variables<sup>a/</sup>

Measures of participation	Voted <sup>b/</sup>	Signed a petition <sup>c/</sup>	Attended a community/ union meeting <sup>c/</sup>	Partici- pated in authorized demonstra- tion <sup>c/</sup>	Participated in unauthorized protest <sup>c/</sup>	Contacted a local authority <sup>c/</sup>	Contacted a non- government group <sup>c/</sup>	Participated in community councils/ assemblies/ meetings <sup>d/</sup>	Colombia: Used at least one citizen participation space <sup>e/</sup>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Distrust of institutions	Mixed	Mixed	0/-	0	0/+	0/-	0		0/-
Perception of effectiveness of the State and institutions	0	-	-	-	-	0	-	0	
Corruption and fraud	-	0	-	0	0	-	0		
Perception of effectiveness of citizen participation	0/+	+	+	+	+	+	+	+	
Perception of lack of transparency								0	0/-
Misinformation									-
Sources of information	0/+	0/+	+	0/+	0/+	+	0/+		
Cost of collective action	0	-	-	-	-	-	-	-	-
Satisfaction with public services	0	-	-	-		-		-	-
Education	+	+	+	+	+	+	+	+	+
Age	+	+	+	+	0	+	0	-	-
Socioeconomic level	+	0/+	0	0/+	0/+	0/-	+		+
Male	Mixed	0	0	+	+	+	0	0	0

a/The plus (+) or minus sign (-) in the table indicate a positive or negative correlations, respectively, in the repression analysis. When the correlation is not statistically different from zero, 0 is indicated. Given that in cases there is more than one variable to approximate one of the obstacles to participation (for example, when Latinobarómetro is used to analyze electoral participation, there are three measures of confidence in institutions: confidence in Government, confidence in the Congress, and confidence in public administration), it can occur that some present positive correlations with the variable of participation, while others present negative correlations. When the signs are opposite, the result is classified as "mixed". In the case of electoral participation (voting), as the variable is available in more than one survey, the results can be mixed if the correlations differ from one survey to another.

Source: the authors, based on Latinobarómetro (several years), the 2008 and 2009 CAF Surveys and the 2011 Political Culture Survey in Colombia.

b/ Electoral participation (voting) is available in the Latinobarómetro and 2008 CAF Surveys.

c/ These measures of participation are from Latinobarómetro (several years).

d/This measure of participation is from the 2009 CAF Survey.

e/ This measure of participation is from the 2011 Political Culture Survey in Colombia.

#### **EDUCATION AND CITIZEN PARTICIPATION**

It is notable that persons of higher socioeconomic level, with more education and higher incomes, are more participatory, given that the poor provision of goods and services tends to affect low-income persons the most. Why is education so important for citizen participation?<sup>30</sup>

The answer is not simple because education can be linked to citizen participation through more than one channel. Botero *et al.* (2013) argued that there are three mechanisms through which persons with more education are more likely to participate.<sup>31</sup> First, more educated persons can have a better understanding of how to complain. Second, more educated persons can have a more pro-social orientation and a lower tolerance for injustice, which can make them more participatory, even though the private benefit of this participation is low. Third, more educated persons are less afraid of receiving reprimands from the public employees to whom they have directed complaints, given that they have better knowledge of the law and in general are in conditions of low informality in their relationship with the State (for example, in the labor market or land ownership).

The CAF Survey allows for exploring explanations, including the relationships among education, pro-social attitudes and participation (approximated as participation via complaints), which have not been well explored in the existing literature. Jorrat *et al.* (2015) analyzed the results of this survey and found a positive association between citizen participation (complaints) and education (column 1 in Table 4.6), in line with previous works. With the inclusion of pro-social motivations or interest in politics (as a proxy of pro-social motivations) in the regression analysis, the association between education and participation remains unaltered, suggesting that the channels through which education operates can be knowledge of the law and greater legality before the State. Independent of this relationship, the authors also found a positive association between pro-sociality and participation, although with less robust results (columns 2 to 4 in Table 4.6).

<sup>30.</sup> This association is maintained even after controlling for several of the factors that could be correlated with education and citizen participation.

<sup>31.</sup> There are other explanations. For example, Molina et al. (2013) suggests reasons that could hinder participation and that in turn can be correlated to the educational level: access to social networks that facilitate collective action; information gaps; ability to attribute the poor functioning of a public service to the responsibility of the State; "rational inattention", in which individuals decide optimally not to participate in political life given that the capacity to offer attention is a limited resource. Many of these factors were considered in the regression analysis in Table 4.5, but even with this consideration the correlation between education and participation remains positive and significant.

**Table 4.6** Probability of making complaints, education and pro-social behavior in Latin American cities <sup>a/b/</sup>

Variables	(1)	(2)	(3)	(4)
Secondary education	0.012*	0.013*	0.012*	0.012*
	(0.007)	(0.007)	(0.007)	(0.007)
Post-secondary education	0.018**	0.018**	0.018**	0.019**
	(800.0)	(0.008)	(0.008)	(0.008)
Pro-social motivations		0.013**		
(measure 1)°/		(0.006)		
Pro-social motivations			0.004	
(measure 2) <sup>d/</sup>			(0.005)	
Interest in politicse/				0.0002
				(0.003)
Observations	9,512	9,483	9,489	9,475

The robust standard error of the difference between means is reported in parentheses.

Source: the authors, based on Jorrat et al. (2015).

# What works and what does not in promoting citizen participation

Many initiatives have been tried around the world to increase citizen participation and its influence on the actions of the state. Do they generate more and better citizen participation? Do they modify the behavior of providers and politicians? Do they do so in the desired direction? Do they generate significant changes in access to or the quality of the services provided?

There is scarce evidence available and the results of each intervention probably depend largely on the specific characteristics of the context in which it was conducted. Nevertheless, they have provided some general lessons. First, concrete and simple information presented to citizens in a timely manner can be a powerful mechanism to correct the inefficiencies of the State.

<sup>\*,\*\*,\*\*\*</sup> denote statistically significant differences at 10%, 5% and 1%, respectively.

a/ Estimation based on data from ECAF 2014 that covers the following Latin American cities: Buenos Aires, La Paz, São Paulo, Bogota, Quito, Lima, Montevideo, Caracas, Panama and Mexico.

b/This table reports the coefficients estimated by ordinary least squares. The dependent variable is equal to 1 if the respondent affirms having complained about a problem with a public service in the last 12 months, and 0 in the case of not having made a complaint or not having identified a problem. All the regressions controlled for gender, age, employment situation, marital status, perception about the functioning of public services and characteristics of the household (number of persons, number of rooms, type of housing and whether or not it is owned by the respondent) and included fixed effects for the city.

c/The variable "Pro-social motivations (measure 1)" is the average of the score of 1 to 5 (where 1 is "Totally agree" and 5 is "Totally agree") of the respondent to 7 statements, and seeks to measure the components of compassion and commitment to the public interest on which the index Motivation for Public Service of Perry (1996) is based.

d/The variable "Pro-social motivations (measure 2)" is the average of the score of 1 to 5 (where 1 is "Totally disagree" and 5 is "Totally agree") of the respondent to 8 statements that compose the pro-social motivation index of Grant (2008).

e/The variable "Interest in politics" is the average of the score of 1 to 5 of the respondent to 3 statements that make up the component "Attraction to politics" of the index of Perry (1996).

Information by itself does not always succeed in mobilizing citizens.

Second, information by itself does not always succeed in mobilizing citizens, because of which the other aspects that need to be considered to activate participation should be analyzed case by case. Third, combating corruption with direct citizen monitoring of providers can be extremely difficult, such that external control must be combined with strengthening of internal control mechanisms.

#### THE EFFECT OF INFORMATION

Information campaigns seek to provide citizens-clients with data about the performance of the public sector. It is expected that with new information citizens can be induced to demand more and better services, monitor the quality of these services and call into question abuses by public employees with whom they interact (Reinikka and Svensson, 2004). This effect can be made through the long or short accountability route.

With respect to the long route, for example, audits by State agencies are not only powerful tools of internal control, but can also affect voting. Ferraz and Finan (2008) showed that widely disseminating the results of audits of subnational governments in Brazil—which reported irregularities associated with fraud in public procurements, misappropriation of funds or overbilling— affect electoral decisions. Specifically, among municipalities with two acts of corruption the probability of re-election of the mayor falls by 7 percentage points compared to municipalities where the same number of irregularities have been committed but where the information is not available at the time of the election. The probability of re-election in municipalities with three acts of corruption is reduced even more, by 14 percentage points.

With respect to the effect of the short route, perhaps the most interesting case is that of the education sector. Another interesting case is the use of the public expenditure tracking survey (PETS), which has arisen from the need to know more about how public expenditures materialize, for example, on what activities or goods expenditures are made and what administrative units make these expenditures. Other cases consist simply of giving information about existing mechanisms or spaces for participation or about who is responsible for improving the provision of determined goods or services.<sup>32</sup> The following sections deal with these three cases.

# INFORMATION ABOUT PROVIDERS: EDUCATIONAL ACCOUNTABILITY SYSTEMS

The quality of education has traditionally been approximated with the results of standardized tests taken by students (see Box 4.4, p. 180). This measure has been used since the 1980s and 90s in countries like the United States and Great Britain and more recently in other regions of the world. The results are

<sup>32.</sup> Another interesting case is when information about performance is complemented, for example, with information about the minimal quality standards of a service that citizens should receive.

sometimes disclosed to the education community, for example, disseminating the results at the school level by different means, from report cards (see Box 4.1, p. 155) to rankings published in the press and webpages, also provided to the schools themselves. The idea is that publishing the average performance of students in different schools can help align incentives for all the actors involved in education (students, teachers, directors) to improve educational performance. In Latin America, this kind of information is published in Brazil, Chile, Colombia, Peru and Mexico.

The channels through which information about educational performance is disseminated can contribute to better quality education via the long accountability route (promoting complaints against policies or punishment through votes) or the short route (increasing citizen pressure on school directors and/or teachers). However, a third channel is the choice of school (Bruns *et al.*, 2011), which applies in countries where public schools compete for State resources, for example, when these resources are assigned on the basis of the number of students enrolled. In these cases, providing information about student performance can encourage schools to improve educational quality to avoid losing students, and consequently resources as well.

Studies conducted in several developed countries suggest that parents take into consideration average grades when they choose a school for their children<sup>33</sup> and that the dissemination of test results at the school level tends to improve the quality of education.<sup>34</sup> However, there is scarce evidence in developing countries about the causal effect of providing information on educational performance, and to the present, the evidence is mixed. Providing information, at least in the short-term, does not appear to play a preponderant role in the choice of schools (Mizala and Urquiola, 2013), but equally can result in improved student performance (Camargo *et al.*, 2014).

Mizala and Urquiola (2013) show that in Chile, where there is a longer tradition of measuring and publishing information about student performance, parents do not change their choice of school for their children because of information about the relative quality of schools.<sup>35</sup> The authors suggested that this could be due to insufficient dissemination of the results, the difficulty in interpreting the information or the greater weight of other characteristics in the parents' choice of school, like proximity, and characteristics of peers.

<sup>33.</sup> For example, Hastings and Weinstein (2008) found that in the United States providing information about test results increases the number of parents that choose schools with better academic performance. Friesen et al. (2012) found similar results in Canada.

<sup>34.</sup> Figlio and Loeb (2011) summarized the evidence on the effects on educational quality of various systems of educational accountability in the United States.

<sup>35.</sup> Specifically, every two years groups of schools with homogeneous socioeconomic levels are defined, among which prizes are awarded to the best schools according to an index of the National System of Education of Educational Peformance. Quality is measured based on the progress of cohorts from the same school over time, because of which it is a measure of the value added by the school (unlike average performance at one time, which is a measure of absolute performance).

Camargo *et al.* (2014) found that in the case of Brazil, while there are no differences in the composition or levels of enrollment in schools two years after reporting on the average academic performance of their students (compared to similar schools that are not obliged to reveal this information), improvements in performance were observed over the same period, although only in private schools.<sup>36</sup> The difference in impact between public and private schools could be because the salaries and job stability of public school teachers and directors are not directly associated with their performance (see Chapter 2).

In some cases providing information about student performance can be a double-edged sword because the information obtained from applying standardized tests tends to be an imperfect measure of the quality of educational service and its dissemination can have undesired effects (Box 4.4).

#### Box 4.4 Imperfect measures, undesired effects?

According to a production function model of education, student performance in standardized tests is determined by many factors, including the characteristics of the students themselves, the resources contributed by the school, and the efficiency of the school in combining all these factors. Ideally, the measurements of greatest interest to feed into an accountability system are those related to efficiency, but these are precisely the most difficult to construct. Consequently, more simple measurements are usually used to approximate the quality of education provided by different schools, measurements that reflect the average level of educational performance of every school in a given year, or change in performance over time.

Mizala et al. (2007) suggested that in the case of Chile disseminating measurements of average performance by school in the form of rankings based on standardized test results is equivalent to showing rankings based simply on the socioeconomic characteristics of the students of the schools. This is a concern from the point of view of public policy, mainly because introducing an accountability system based on this type of ranking—even when in part they reflect real differences in academic productivity— can excessively penalize schools that accept children from poor families.

However, disseminating information about changes over time in the average performance of every school is also not a solution, given that the data show that this is a very volatile measurement from year to year (Mizala *et al.*, 2007). Another alternative that partly resolves this problem is to gather information at the level of the student over time to analyze individual progress (added value at

<sup>36.</sup> Andrabi et al. (2014) found a similar result in an experiment in Pakistan in which information was disseminated about the quality of schools in some randomly selected municipalities through report cards, where this time public schools were able to improve their performance, although to a lesser extent than private schools.

the student level) instead of the average changes at the level of the school. However, this type of measurement naturally requires greater efforts for data collection and analysis that is not always within the government's reach.

Fearing that providing information about education will end in stigmatizing certain schools and a consequent increase in school segregation by socioeconomic status (under the supposition that richer families have more proclivity to move their children from schools with low rankings), some countries prohibit the disclosure of data on performance in standardized tests at the level of schools. This is the case in Argentina, where the National Education Law of 2006 prohibits dissemination of the results of the National Operational Assessment at the level of schools, teachers or students. However, the literature shows that this would be an extreme step and there are various types of benefits of disseminating disaggregated educational statistics (Figlio and Loeb, 2011).

Noisy or manipulable measurements can have undesired consequences in other sectors, like that of health. For example, Dranove *et al.* (2003) analyzed the adoption of obligatory report cards at the hospital level to disseminate information about mortality rates adjusted for risks among patients that have received bypass surgery in two states in the United States (New York and Pennsylvania). They found that this measure generated incentives among providers to select healthier patients to improve their report cards. As a consequence, the average health of the population worsened, especially among more ill patients compared to other states where this information was not disseminated. Nevertheless, a systematic review of the available evidence (for the United States) about information dissemination initiatives on the performance of health service providers (Fung *et al.*, 2008) indicates that providing information appears to increase investment in improving service provision at the hospital level, although it is still not clear how effective and sure it is at improving the health of citizens.

Finally, Gavazza and Lizzeri (2007) argued that in some cases where, for the sake of efficiency, it is better not to reveal information. They argue that revealing information about performance at the level of the public sector provider increases the demand for high-quality suppliers and in the absence of price mechanisms to ration demand, problems of congestion are generated. Consequently, providers have incentives to not make their performance more transparent. The obligation to provide information, for the same reason, generates dynamic perverse incentives to invest less in improving quality.

Source: the authors

#### PETS - PUBLIC EXPENDITURE TRACKING SURVEY

PETS can be a useful tool when the public sector accounting system functions poorly and does not have the capacity to adequately register expenditures and it is difficult therefore to know when budgetary resources are efficiently transformed into concrete services (Glassman *et al.*, 2008; Reinikka and Smith, 2004). Uganda offers an example of the successful use of PETS

Citizen participation can be limited when citizens do not know how to use the mechanisms of participation or what their rights are. as an input to strengthen an external accountability mechanism. A survey was conducted in 1996 with a representative sample of Ugandan primary schools, which provided information about the amount of money effectively received from a national government program of transfers for non-salary expenditures in which the funds were channeled through local governments as intermediaries. Cross-referencing the information from the survey with administrative records about national government transfers to local districts, it becomes evident that only 20% of resources really reached the schools (Reinikka and Svensson, 2004).

Instead of implementing an anti-corruption system or audits, the government embarked on a two-way information strategy. First, it published the monthly transfers to local governments in national newspapers. Second, it requested schools to publish news about the funds effectively received, with the aim of informing the education community. The information campaign succeeded in raising the percentage of resources that schools received from 20% to 80% (Reinikka and Svensson 2004, 2005). The information campaign also positively affected student enrolment and learning (Reinikka and Svensson, 2011).

# INFORMATION ABOUT PARTICIPATION RIGHTS AND SPACES

As has been seen, citizen participation can be limited when citizens do not know how to use mechanisms of participation or what their rights are.<sup>37</sup>

With respect to the lack of knowledge about participation mechanisms, Banerjee *et al.* (2010) carried out field experiments in villages in the state of Uttar Pradesh, India, which consisted of disseminating information about certain spaces for citizen participation to improve public education called Village Education Committees (VEC), which, while they were available, were not used because people did not know about their existence or functions. The information was disseminated at meetings of members of the education community, including parents.

The authors found that while parents and other members of the education community increased their knowledge about children's school performance (in particular in the villages where report cards were handed out about the quality of education), compared to untreated villages there was no increase in effective participation in the VECs nor more contact between parents and schools. Nor were any changes observed in the choice of schools, despite the high level of supply of private education in the region. Consequently, none of the informational interventions improved children's academic performance.

<sup>37.</sup> For example, in the case of programs for assisting persons in situations of poverty, potential beneficiaries often do not know the precise criteria for accessing support, which can result in problems of inclusion and exclusion (giving benefits to persons that are ineligible while exluding others that would be eligible). Consequently, providing information about these aspects can empower potential beneficiaries and improve the allocation of the program.

What went wrong? First, it is possible that when citizens lack precise guidelines about what actions to take once they have the information, their mobilization remains as good intentions that do not translate into interaction with providers. Second, it is possible that parents perceive VECs as ineffective for improving public education. And third, the socioeconomic level of the recipients of information is an important factor. Pandey *et al.* (2009), for example, conducted a similar intervention in three states in India and found significant effects on participation and on the educational performance of children, but concentrated among parents with a higher socioeconomic level. This suggests that parents with low levels of education or in vulnerable situations may not be in conditions to priorize civic participation over more urgent action for their survival and that of their families.

With respect to lack of knowledge about rights, Banerjee *et al.* (2015) analyzed an informational intervention using an experimental method that consisted of informing randomly selected groups of a population about the benefits of *Rice for the poor*, the largest subsidy program in Indonesia for purchasing food.<sup>38</sup> The implementation of the program presents certain drawbacks because not all the eligible households access the program, while some that are not eligible do access it, and many of those that access it receive less rice than they should and at a higher price. Banerjee *et al.* (2015) showed that informing the eligible population about their eligibility and the exact benefits that they could access resulted in increasing the quantity of rice purchased and at a lower price. As well, the authors found that the effect of the intervention is even greater when the list of the benefitting population is made public to the entire community.

#### WHEN INFORMATION IS NOT ENOUGH

Unfortunately, the mere provision of information and even the promotion or creation of spaces conducive to participation is not sufficient to improve the provision of public services. Interventions that seek to strengthen accountability have to resolve other problems at the same time, like lowering the cost of collective action or facilitating the forms of interaction between citizens and providers.

An intervention with the potential of attacking both barriers at the same time, above all in the context of weak state capacities, is to promote a more active role of the citizenry in decision-making about designating public resources, for example, in terms of design, implementation and monitoring of public policies.

To the present, the evidence is mixed about the impact of mechanisms in which citizens play a more active role in these aspects. Olken (2007) analyzed an experience in Indonesia that had the objective of mobilizing citizens to monitor the evolution of highway construction projects entrusted to local

<sup>38. &</sup>quot;Rice for the poor" allows elegible families to purchase up to 15 kilos of rice at subsidized prices.

For citizen participation to be successful, it is important to strengthen several external control links. governments and to prevent the diversion of funds, which on average has been around 24% of assigned resources. Citizens in the treated communities were invited to participate in meetings in which the persons in charge of projects reported on the expenditures made. While the citizenry effectively participated in these meetings, the waste of resources was not observed to be less than in the control group communities, where interaction between those in charge of projects and citizens was not encouraged. Although it was more likely that problems of corruption would be discussed openly in the meetings and that actions would be taken in this respect, they did not have sufficient impact to substantially reduce the diversion of funds. On the other hand, significant reductions in the diversion of funds were achieved in communities where project managers were informed that their projects would be subject to audits.

In the area of public health, Björkman and Svensson (2009) analyzed an intervention in Uganda that successfully met the objective of modifying the behavior of health workers, thus increasing the quantity and quality of medical services (measured for example by a reduction in the rate of infant mortality) by simultaneously reducing four problems: lack of information about the quality of services; lack of knowledge about rights and spaces for participation; flaws in the coordination of citizens to generate a common vision about existing problems and to define lines of action and concrete monitoring; and lack of effective mechanisms to bring complaints to providers. The intervention consisted of holding meetings between members of the community and the staff of health centers, all facilitated by local NGOs. In these meetings consensus was sought between citizens and providers about concrete lines of action for monitoring providers. Björkman et al. (2014) suggests that in these interactions there is a better sharing of responsibilities of who will work on improving which part of the service provision chain, that is, attribution is improved. However, the authors note that attribution is improved only when information about the quality of services is made available previously. The authors showed that the improvements in the quality and quantity of services continued over the long-term.

In terms of Latin America, Box 4.5 summarizes the experience of Colombia with a mechanism designed to increase citizen involvement in monitoring public policies.

In synthesis, to successfully implement participation mechanisms in which citizens play a more active role, it is important to strengthen the links with external control: informing the population, helping them to organize, providing spaces for presenting complaints, and, so that information flows from citizens to providers, explicitly providing citizens with the opportunity to participate in monitoring and making feedback to providers and politicians possible (Molina et al., 2013).

#### Box 4.5 Visible audits in Colombia

An example in Latin America where the citizenry have been given a leading role in decisions that have traditionally been in the hands of the State is the Visible Audits Program (VA) in Colombia. The presidential anti-corruption commission launched the program in 2008 to promote transparency in the handling of funds from mining royalties transferred to 400 sub-national governments for public works in education, health care, nutrition and water.

Once a public works project in a municipality has been selected, the VAs are developed in several steps that consist of the following activities: 1) information about the VAs is disseminated through invitations, newspapers, and local radio and TV programs in the community where the project was developed; 2) the project is presented to the community in an initial public forum that informs citizens about their rights and attributions, and where a group of interested beneficiaries is formed and trained to carry out project monitoring; 3) periodic forums are held that bring together local authorities, residents and the company in charge of the project to provide opportunities for project follow-up and for citizens to express their views and make recommendations; 4) before final payment is made to the company, a meeting is held with the community to present the completed project.

The VAs only audit projects aimed at improving the provision of public services for a small group of persons in each community. Project selection also depends on the amount of royalties received, the number of irregularities previously detected in the use of royalties, and the expected social impact of the project. Almost 40% of the projects are related to water and sanitation and another 35% to education and housing. The typical project audited by the AVs takes 335 days, involves two community forums and the participation of 59 citizens in each forum. The value of each project is approximately 3.4 million dollars, with more than 80% coming from royalties (Molina *et al.*, 2013).

In a retrospective evaluation, Molina (2014) suggests that VAs have had a positive effect on citizen satisfaction with projects and on the process of executing projects, based on the assessment of citizens.

Source: based on Molina (2014).

#### **Conclusions**

Citizens are the ultimate beneficiaries and funders of everything that the State produces, because of which they are naturally interested in monitoring. But this monitoring is not easy to exercise, given problems of capacities and incentives can appear in the process of citizen participation and accountability that affect both citizens and the State. These problems can reduce the power of citizen participation to improve the quantity and quality of public goods and services.

Beyond these problems, electoral participation in Latin America is high and has been increasing as the democracies in the region have been consolidating. Recent decades have also seen significant advances in social and economic development

in the region, for example, with the broadening of the coverage of basic education, health care and social services. However, States continue to fail in fulfilling fundamental aspects of the tasks that citizens entrust in them. In particular, the provision of public services suffers severe problems of quality over which citizen participation in Latin America does not show any transformative power. A more frequent and direct relationship between citizens and providers can improve the effectiveness of citizen participation.

While in many Latin American countries there are channels for non-electoral participation to establish a close relationship between citizens and providers, the evidence indicates that in practice these channels are used very little. This is because citizens do not have information about their existence or about how to use them, perceive little transparency on the part of the State, or think that the State is incapable of resolving concrete problems and consequently do not even try to channel complaints by this means. As well, given that the process of participation and accountability begins with citizens receiving information about the performance of the State, the lack of credibility of the information that reaches them is a major obstacle to participation. All these cases, problems of capacities and strategic behaviors of the State hinder the arrival of complaints by citizens. More effective functioning of the internal control mechanisms of the State, analyzed in the previous chapters, is crucial to revolve these types of problems.

As well, different citizens living under the same State can have very different participation rates, which may be because some citizen groups receive unequal treatment by the State or because they face different costs for participating. In particular, the evidence indicates strong disparities in citizen participation according to the socioeconomic level of individuals and in particular according to their educational level. This suggests that the greater the human capital, the more effectively citizens can find, process and use information to make their voices heard by those with responsibility for providing quality public services. However, it also indicates that persons with lower educational levels feel excluded from the citizen-State dialogue. The promotion of greater equity of access to public information and better socioeconomic conditions among the most vulnerable populations are central requisites for effective, pluralistic and egalitarian citizen participation.

There are tools available that have greater potential for encouraging better citizen participation, but that are not yet used extensively in Latin America. For example, new information and communication technologies can serve multiple purposes. First, they can reduce the costs of coordination among citizens for collective action in protests, complaints and demonstrations, especially through the role of social networks. Second, they can reduce the cost of contact between citizens and providers, for example through service windows in government web portals. Third, they can help governments in disseminating information about their performance, as well as being adaptable to audiences that can process greater volumes of information or with different degrees of complexity, as is the case of civil society groups like some NGOs and universities that have a fundamental role in taking advantage of the technological boom, analyzing and summarizing relevant information, with the aim of bringing citizens and State closer.

Impact evaluations of different initiatives to improve the power of citizen participation have shown mixed results. It is not always sufficient to given more information about the actions of the State, so that simply promoting greater transparency falls short. It is vitally important to empower citizens for their participation to be effective, reducing the costs of their interaction with the State, often taking up these concerns and levels of satisfaction with the services offered and demonstrating that these concerns will be responded in a timely and concrete manner, that is, ensuring that citizens live under the influence of a capable State.

### **Appendix**

**Table A 4.1** Measurements of participation and factors associated with participation in different political and citizen participation surveys in the region

	Latinobarómetro 2005-2012	2008 and 2009 CAF Surveys	ECP (Colombia)
Measures of participation	Voted in the last presidential election Signed a petition Participated in an authorized demonstration Participated in a community/union meeting Contacted a local authority Participated in an unauthorized protest Contacted a non-government group	Participated actively in community meetings, assemblies or centers in the last year Voted in the last governmental elections Voted in the last local elections	Used some of the citizen participation spaces in the last year
Distrust in institutions	Government Congress Public administration Municipality		Municipal government Public defender
Corruption and fraud	Percentage of corrupt public employees Believe that elections in the country are fraudulent		
Perception of effectiveness of mechanisms of participation	Voting is effective to bring about change It is possible to bring about change	Opinion about citizen participation in community decisions (1 nothing positive; 10 very positive)	
Perception of transparency		Perception of transparency in the municipality	Considers that public information is accessible Perceives that the mayor is never accountable
Lack of information			Does not know if the mayor is accountable Is not familiar with the position of the public defender (ombudsman)
Sources of information	Informs him/herself about political affairs through mass media Informs him/herself through other means: family, friends, co-workers Number of days per week that he/ she informs him/herself about the news through TV, newspapers, radio	Informs him/herself about political matters through the media	
Cost of collective action	Does not participate actively in organizations / groups / associations	Doesn't believe that people will cooperate with each other to resolve problems with the provision of basic services Believes that there is not trust among people that live in his/her community Believes that the private sector is far from committed to resolve the main problems of his/her city	Considers that it is difficult/very difficult to get organized with others
Satisfaction with public services	Average measure of satisfaction with different public services	Average measure of satisfaction with different public services (1 dissatisfied; 10 very satisfied)	Average measure of satisfaction with different public services (1 dissatisfied; 7 very satisfied)

# PUBLIC POLICIES, LEARNING AND MANAGEMENT

**Chapter 5** 

#### **Chapter 5**

#### PUBLIC POLICIES, LEARNING AND MANAGEMENT<sup>1</sup>

"Tell me and I forget, teach me and I may remember, involve me and I learn." Benjamin Franklin

#### Introduction

No one in the private sector doubts that knowledge improves productivity. Nevertheless, it is not clear how it can improve it in the case of the public sector. Producing books is not the same as producing education. And producing police uniforms is not the same as producing citizen safety. Better printing technology should make book production cheaper, but the knowledge that smaller classrooms facilitate learning does not necessarily translate into children obtaining higher scores in standardized tests.

In public management, the understanding of the problems of the population and the policy alternatives to address them do not always translate into effective actions, given that the structure of incentives and institutional restrictions that public servants face make it difficult to take maximum advantage of available knowledge.

On the other hand, knowledge that originates from academic research, while valuable and rigorous, can be insufficient to inform persons that design and implement public programs. One obstacle to incorporating knowledge into public management is the mismatch between the questions raised in scientific research and the needs of those responsible for carrying out public policies (Porter, 2010).

An important part of the knowledge needed to manage public services is generated within the same bodies that offer these services. In effect, it is there where decisions are continuously made about the use of resources, and this flow of experiences contains fundamental information to generate learning about management that can result in improving public services.

Given this, it is appropriate to consider other ways of generating knowledge based on experience, such as measuring the advances of projects over time, the evaluation of the results associated with them, and the evaluation of their impacts, whether qualitatively or quantitatively.<sup>2</sup> In this sense, the international community has promoted the generation of evidence through methodologically rigorous impact evaluations and ev-

<sup>1.</sup> The preparation of this chapter was under the direction of Lesbia Maris and Daniel Ortega, with the research assistance of Jhony Pulido.

<sup>2.</sup> Impact evaluations differ from result-based evaluations in that they seek to quantify the part of the observed results that can be confidently attributed to the project or policy.

Governments have advanced at least formally through legal proposals of evaluation and monitoring systems but their use in practice is still minimal. idence-based policymaking. Nevertheless, the generalization of these practices has been modest.

This chapter begins with a diagnostic of the state of monitoring and evaluation of public policies in the region, and then analyzes firstly the process through which experience becomes knowledge from the perspective of those who decide on and act in public management, emphasizing the incentives and political risks they face. Secondly, the chapter explores how this learning can be converted into innovations in public management – new ways of doing things – identifying the institutional factors that favor the process. The aim is to contribute to reflections on the development of public institutions capable of learning from what they do and not to waste learning.

# Generating knowledge about the use of public resources in Latin America

What is the state of learning from public policies in Latin America? The diagnoses of formal monitoring and evaluation systems and the number of impact studies conducted in the region give an approximation.

# DIAGNOSTIC ABOUT FORMAL EVALUATION AND MONITORING SYSTEMS

García and García (2010) analyzed the state of evaluation and monitoring systems in 25 countries in Latin America and the Caribbean. Their objective was to evaluate the degree of institutionalization of these systems as part of result-based management mechanisms in the public sector. They constructed an index composed of eight dimensions, six linked to the generation of information and two to the use of this information in decision-making. The possible values of the index range from 0 to 5, with 0 representing the poorest possible performance and 5 being the best.

Table 5.1 shows the average values of the eight components of the index for the countries included in the study. The total of the first column represents the global average for the region (1.5), and reflects on average that governments have advanced at least formally through legal proposals of evaluation and monitoring systems but their use in practice remains minimal. This global average hides an interesting dynamic that is revealed when the countries are separated into two blocks according to their level of development in evaluation and monitoring systems. The total of the second column represents the average of the index for Brazil, Chile, Colombia and Mexico (3.8), which are the leaders in the region, with a general index ranging between 3 and 4.5 points. These countries not only have legally established monitoring and evaluation systems, with institutions and technical standards, but as well these systems are operating actively, although in some cases they are still in the

development phase.<sup>3</sup> The total of the third column represents the regional average excluding the group of the four best. This average (1.0) reflects the fact that there are some isolated and incipient efforts in this group of countries to establish a legal framework for monitoring and evaluation, but that these systems are not yet completely operative nor have they extended throughout the public sector.

What underlies the aggregate index? The first dimension of the index identifies the existence and operativeness of a public body for monitoring government activities. The regional average in this dimension is 2.1, which indicates (according to the coding for each category) that in most cases there is a monitoring institution that is beginning to operate. The most advanced countries have an average of 4.5, which implies that they are close to achieving a consolidated monitoring system, with established technical and methodological norms. However, the rest of the countries in the region have an average of 1.7, which indicates there are legal provisions for establishing monitoring institutions but such institutions were still not in operation at the time of the study.

Table 5.1 Indicators of evaluation and monitoring<sup>a/b/</sup>

Indicators of monitoring and evaluation	Average	Average in advanced countries	Average excluding	
Total	1.5	3.8	1.0	
Monitoring institutions	2.1	4.5	1.7	
Scope of program and project monitoring	1.4	4.0	0.9	
Legal and institutional framework of the evaluaiton	1.6	3.9	1.1	
Scope and linkages of the evaluation system	0.7	2,8	0.2	
Statistical information systems	2.8	4.1	2.5	
Use and dissemination of monitoring information	1.2	3.7	0.7	
Dissemination of evaluation results	1.2	4.6	0.6	
Actions arising from non- compliance with goals	0.8	3.1	0.3	

a/ A score of 5 indicates the system is consolidated, 4 that the system is implemented, 3 that it is being developed, 2 that the system is being initiated, 1 that it has been proposed, and 0 that it doesn't exist. In the case of responses that imply percentages, the score is assigned in the following manner: 0 if the percentage is 0%, 1 if the score is between 1 and 20%, 2 between 21 and 40%, 3 between 41 and 60%, 4 between 61 and 80% and 5 if it between 81 and 100%.

b/The advanced countries are Brazil, Chile, Colombia and Mexico, which generally present solid and consistently good performance in all the dimensions.

Source: the authors, based on García and García (2010).

<sup>3.</sup> Box 5.1 describes in more detail the experience of the evaluation systems in Brazil, Chile, Colombia, Mexico and Peru.

The second dimension of the index captures the fact that information can be generated independently in different programs and projects, even when there is no body that centralizes monitoring activities. To develop a more precise appreciation, the authors considered the fraction of total government spending dedicated to programs that are in some way monitored. The average regional performance in this dimension is very poor (1.4), and once again with a significant difference between countries with a better performance (4) and the rest (0.9).

The third dimension of the index captures whether or not there are laws that require evaluations of government policies and programs and whether or not there are public institutions dedicated specifically to evaluation. Likewise, this dimension seeks to capture whether there are established technical standards and human and financial resources for evaluations. Average regional performance in this dimension is 1.6, which indicates that in general the importance of evaluation at a regulatory level is recognized but institutional operativeness is low. Once again, a notable difference is observed between the two groups of countries (3.9 versus 1.1).

The fourth dimension of the index measures firstly the percentage of public programs that were evaluated the year before, the percentage of these that satisfactorily met their objectives, and finally, if there are links among the different institutions responsible for conducting evaluations and between them and those implementing the evaluated programs. The regional average for this dimension is the lowest of all the evaluated dimensions (0.7). These results indicate that there is still a need to make efforts to consolidate program evaluation within the procedures of public policy makers and to promote evaluation that goes beyond the analysis of financial statements. The limited scope and connectedness implies that there is less information available for those interested in introducing an evaluation in their work area, and consequently there is more uncertainty about the potential benefits of the evaluation. The legal incentive is not enough to institutionalize the evaluation.

The fifth dimension captures the existence, quality and reliability of statistical information systems, and their relevance for monitoring the performance of programs and evaluating their impact, and the independence of competent institutions to gather and analyze statistical information. This dimension also helps to reduce the uncertainty for those considering evaluating their programs because they can have more information to anticipate the costs and benefits of evaluation, and with fewer errors. The regional average in this dimension is 2.8, slightly higher than what is observed in the other dimensions, which reflects that in this area the countries are making tangible efforts to increase the availability of quality information. Nevertheless, there continues to be a difference between the two groups of countries, with one having systems fully implemented and the other lagging well behind.

The last three dimensions are concerned with the use and dissemination of the information generated from monitoring and evaluation. The sixth dimension captures whether there are institutionalized procedures to analyze the information obtained and take decisions based on this, as well as the dissemination of this information; and the seventh dimension captures whether or not the information generated is easily accessed by citizens and other public control bodies, such as legislatures. The four countries with better performance have on average made certain advances in these dimensions (3.7 and 4.6, respectively), with mechanisms for use and dissemination that are not only designed, but also at least partially in operation. However, the remaining countries show significant shortcomings (0.7 and 0.6, respectively), with some of them beginning to reflect on the importance of using and disseminating management information, and others where these systems are totally absent from the dominant discourses of policy-makers.

Finally, the eighth dimension refers to corrective actions (or enhancers) that arise from the analysis of the information generated. The regional average is the second lowest of all the dimensions (0.8). In terms of dispersion, we find a similar situation to the previous one (3.1 versus 0.3). In the case of the first group of countries, there are efforts underway to develop mechanisms for institutional learning, while in the other countries such mechanisms are totally absent.

#### Box 5.1 Experiences of evaluating public policies in Latin America

Several countries in the region have in place public policy evaluation systems. In Mexico, the National Council for Evaluation of Social Development Policy (Consejo Nacional de Evaluación de la Política de Desarrollo Social - CONEVAL) is a result of the General Social Development Law of 2004, which indicates the need to "establish evaluation and follow-up mechanisms for the programs and activities of the National Social Development Policy" (Article 1, Point VIII, Ley GDS 2004).

CONEVAL, together with the Secretary of Housing and Public Credit (SHCP) and the Secretary of Public Function (SFP) establishes the Annual Evaluation Program (PAE), which determines the social programs subject to evaluation, as well as the guidelines, types of evaluation and the schedule for carrying out evaluations. The evaluations are conducted by independent bodies and are generally supervised by the agencies in charge of implementing the respective programs. CONEVAL is obligated by law to subsequently publish the results, which it shares in its website.

Colombia has the National System of Evaluation of Management and Results (SINERGIA), created in 1994 on the basis of the National Development Plan, with the objective of generating the information necessary for meeting the goals of the plan, which is renewed every four years.

The policies to be evaluated are defined by the Intersectorial Committee of Evaluation, Management and Results, and the evaluations are carried out by third parties contracted through a system of competitive bidding. SINERGIA also provides technical supervision to evaluations and in each case publishes a document with the results that can be found in its website.

Since the year 2000 Chile has had evaluation and management instruments in the Budget Office (DIPRES) of the Ministry of Finance. DIPRES has an evaluation agenda related to the annual budget cycle, which is approved by an Intersectorial Committee (composed of members of DIPRES, other areas of the Ministry of Finance, the Ministry of Planning and the Secretariat of the Presidency) although it also requires congressional approval, with the authority to include or exclude some policies from evaluation. The evaluations are conducted by panels of external experts chosen through public competitions to ensure their independence and the reliability of the results, which are also published by DIPRES in its website.

Brazil has the Secretaria de Avaliação e Gestão da Informação (SAGI), which is part of the Ministry of Social Development and Hunger Alleviation. SAGI is responsible for information management, monitoring, evaluation and training related to the policies of the Ministry. It has an Evaluation Department that conducts evaluations, either through its own technical team or by private evaluators selected by tender or on the basis of technical merit as international bodies. The results are published periodically in SAGI's website.

Table 1 shows the main types of evaluation carried out by each of these institutions in different periods. The percentage of evaluations of results is high in every case, while impact evaluations are much less common, possibly because of their time horizon, which tends to be long-term.

Table 1 Approximate number of programs evaluated by institution and type of evaluation

Institution	Country	Design	Process	Results	Impact	Total
CONEVAL/SEDESOLa/(2007/2014)	Mexico	447	304	276	27	502
SINERGIA (2006-2014)	Colombia	2	31	43	27	116
DIPRES (2001-2014)	Chile	225	225	225	36	227
SAGI (2006-2014)	Brazil	18	37	51	5	81

a/ SEDESOL: Social Development Secretariat. The detailed information for some evaluations of CONEVAL is included in the webpage of SEDESOL.

Source: the authors, with information from the web pages of CONEVAL, SEDESOL, SINERGIA, DIPRES, SAGI and the Presidency of the Council of Ministers of Peru.

In many cases, the institutions simultaneously conduct different types of evaluation of the same policy, so a report can include, for example, an evaluation of the process together with another of the impact. For example, CONEVAL conducts evaluations with a multi-focus structure (that is, with more than one area of traditional evaluation), which address the following points: design, strategic planning, operation, coverage and targeting, perception of the beneficiaries and results. The structure of evaluations in Chile is very similar, that is, it is integral, equal for the great majority of cases and addresses the following points: rationale, program design, organization and management and effectiveness and quality.

These institutions sometimes undertake other types of evaluations. For example, SINERGIA conducts institutional and executive evaluations and CONEVAL conducts secondary and complementary evaluations specifically of performance and strategies.

Since 2008, the Coordination Secretariat of the Presidency of the Council of Ministers in Peru is responsible for oversight, follow-up and monitoring Mandatory National Policies (PNOCs), a series of policies established by Supreme Decree N° 027-2007-PCM, with the objective of improving the efficiency of State investment and compliance with the priority goals of the State. To do this, the Secretariat forms a network of public employees and bodies for execution or supervision, it sets out the general guidelines for each function and provides support to any and all public employees that need such support. It should present quarterly and annual reports that allow for measuring the level of compliance with policies and the possibility of improving or modifying whatever is necessary to meet its central objectives.

Source: the authors, with information from the websites of CONEVAL, SEDESOL, SINERGIA, Dipres, SAGI and the Presidency of the Council of Ministers of Peru.

#### **IMPACT EVALUATIONS**

As Box 5.1 shows, the formal institutions that evaluate public policies in Latin America tend to priorize monitoring, follow-up and evaluation of results. Nevertheless, there are also many impact evaluations in the region, often led by academic non-government or international organizations.

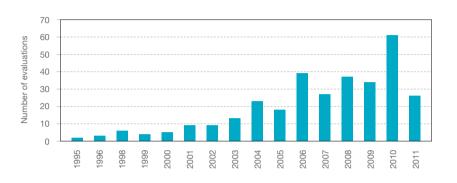
Impact evaluations seek to scientifically quantify the causal relationship between public policies and the variables they attempt to affect. This requires specialized human capital and statistical information. The relevance of impact evaluations for public policies is that they offer concrete measures of the effectiveness of the State and of the opportunities for improvement (for example, through incentives, targeting or mechanisms of participation). And the knowledge they generate can benefit the whole society as well as those administering the evaluated program or policy.

The number of impact evaluations has increased notably around the world in the last 20 years. Alzúa *et al.* (2012) showed that in Latin America in particular the number has increased from fewer than 5 in 1995 to more than 45 in 2010<sup>4</sup> (Chart 5.1, p. 200).

<sup>4.</sup> The authors only took into account impact evaluations that use rigorous methods to identify impacts, whether they were experimental or non-experimental (for example, instrumental variables, differences in differences, discontinuous regression, pairing and structural estimation).

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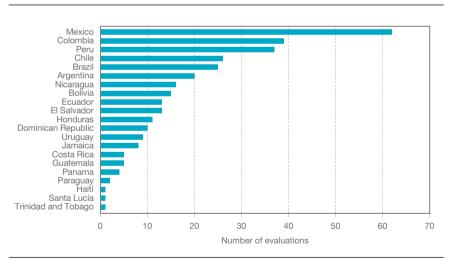
Chart 5.1 Number of impact evaluations carried out in Latin America (1995-2011)<sup>a/</sup>



a/ The countries included are: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Santa Lucía, Trinidad and Tobago and Uruguay.

Source: the authors, with data from Alzúa et al. (2012).

Chart 5.2 Number of impact evaluations per country (1995-2011)

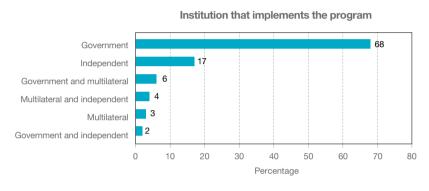


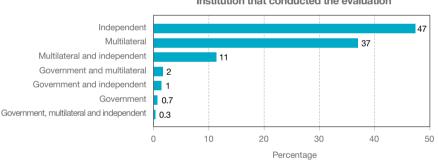
Source: the authors, with data from Alzúa et al. (2012).

However, in relation to monitoring and follow-up, the region is highly heterogeneous, with five countries in the vanguard (see Chart 5.2). In first place, Mexico stands out with more than 60 impact evaluations in the period 1995-2011, in line with the fact that Mexico was one of the first countries to conduct this type of evaluation and that it has institutionalized monitoring and follow-up systems as management tools. In second place are Brazil, Chile, Colombia and Peru, which have each conducted more than 20 impact evaluations thanks to the involvement of public and private institutions and the presence in the majority of these countries of public bodies charged with planning and even directly carrying out

this type of evaluation (Box 5.1, p. 197). Third, a group of six countries led by Argentina have conducted between 10 and 20 impact evaluations, each one carried out in the same period. Finally, a group of ten countries have conducted fewer than ten impact evaluations each.

Chart 5.3 Institutions that conduct impact evaluations and the institutions that implement the evaluated programs in Latin America (1995-2011)<sup>a/</sup>





#### Institution that conducted the evaluation

a/ The countries included are: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Santa Lucia, Trinidad and Tobago and Uruguay.

Source: the authors, based on data from Alzúa et al. (2012).

The great majority (more than 96% of the cases where there is information) of evaluations are conducted by independent or multilateral organizations or a combination of the two. Only 4% of evaluations are conducted by Governments (alone or in association with another organizations), although they are responsible for 75% of the programs. The fact that the majority of evaluations are external to Governments offers the advantage of being objective and presumably of higher technical quality (Alzúa et al., 2012). However, the fact that governments involve themselves so little in evaluations, financing only 6% of them (Alzúa et al., 2012), suggests that they do not see or use evaluations as management tools, an area in which the region has much to improve.

Moreover, the experience of the United States (Box 5.2) suggests that even when there is a system that demands rigorous evidence about the effectiveness of an intervention for the assignment of budgetary resources, there is no guarantee that evidence will be used appropriately to improve the assignment of resources given the imposition of political and personal interests, institutional restrictions or other factors. The lesson for Latin America is that to make better use of available scientific knowledge for decision-making about the use of public resources, in some cases the legal requirement can be functional and in other cases it is not. The key is to achieve that those that take these types of decisions see evaluation as a valid and useful tool for their daily management.

#### Box 5.2 Use of evidence from evaluations of education in the United States

The educational sector in the USA is obliged by state and federal governments to conduct evaluations and use the information they generate to redesign policies. But effective use of evidence is influenced by diverse factors. Honig and Coburn (2008) gathered information about different cases of evaluation and the use of evidence and grouped these factors in the following manner:

- 1. Characteristics of the evidence: First, the results should be published synthetically. Second, the results should be easily accessed. Delays in publication can prejudice the use of the evidence, above all if there is a marked difference between the working rhythm of the planning body and the time the evaluator takes to disseminate the results obtained, and especially if the planning body is influenced by external or internal pressures. Third, ambiguity in the evidence should be avoided so that the planning body does not interpret the results differently from what was intended by the evaluator. And fourth, the planning body must trust the evidence in terms of both the methodology and the source of the evaluation.
- 2. Functional knowledge: Knowledge that is used daily to make decisions is influenced by beliefs, expectations, preferences, experiences and ideologies that tend to bias how the planning body interprets and gives validity and relevance to the evidence, even when the results are unambiguous. Honig and Coburn (2008) illustrated this with the case of a director of special education programs that had just obtained a masters in education for the deaf, and interpreted the qualifications of a student evaluation in her district as a sign that a new special education program for the deaf was necessary. Kennedy (1982) provided another example of how personal interests can affect the interpretation of evidence with the case of a curriculum director that interpreted an evaluation of student migration during the school year that was a result of a high migration rate as an indication that uniform school curriculum was needed in the district.
- **3. Social Capital**. The formal and informal ties and trust between the planning body and other actors involved (evaluators, evaluated institutions and other collaborators) influence the use of evidence in terms of availability and accessibility. Honig (2003) showed that central administrative offices have better access to evidence about student performance when directors think that such information will be used to support them rather than to penalize them.

- **4. Organization of the planning institution:** The use of evidence can be limited by the volume of obligations vis-à-vis the time available by the planning body to understand and interpret and the results.
- **5. Normative influences:** Results are more often evaluated and used when there are routines, models of professional practice and norms that encourage this.
- **6. Political dynamics:** The use of evidence can be influenced by political pressures when the actors involved have political power and when they think they can be affected by the results of an evaluation.

Source: the authors, based on Honig and Coburn (2008).

# A conceptual framework about the decision to evaluate

Public policies makers constantly have to make decisions about initiatives that directly involve the use of public resources; whether because they implement new initiatives, continue existing ones, invest in new infrastructure or their maintenance, or manage the human resources of the State. Policy makers make these decisions on the basis of beliefs about the consequences of their actions. For example, they might implement a compensation scheme tied to performance because they believe that this will increase the efforts of their tax collectors, they might provide a food subsidy to low-income households because they believe it will benefit children between 0 and 3 years of age, or they might prioritize police patrols in areas of the city where there is high rate of violent crime because they believe this will reduce violence at an aggregate level. As the weight of scientific evidence in this system of beliefs is usually not high, the generation of internal learning becomes an important source of information for decision-making. What incentives are there for policy makers to take advantage in the best manner possible of the learning opportunities from their experience?

Every example of the implementation of an initiative is an opportunity to learn about effectiveness in reaching proposed objectives. In principal, from the point of view of social wellbeing, it is always desirable to have better knowledge about the impacts of initiatives. Nevertheless, this is not the only consideration for a policy maker upon deciding whether or not to submit some of his/her initiatives to methodical scrutiny, especially if he/she has a political interest in the initiatives.

Assuming that the public policy maker is motivated, to a certain degree, by electoral or political interests, to decide to put an initiative under the looking glass of analysts implies certain risks. For example, a careful evaluation can discover basic problems in the implementation of programs or that the

The generation of new evidence has potential benefits not only for policy-makers directly, but also for the community of policy-makers in general. program has less effect than what was expected or what authorities had promised and even that it had counterproductive effects. In this scenario, generating knowledge has a cost in terms of reputation and political support. On the other hand, if the evaluation shows positive results, the political benefit can be very great. As well, the knowledge generated can contribute to the quality of public management, and decision-makers can take advantage of this.

In summary, to submit an initiative to methodical scrutiny has great potential benefits, but also has great risks, and the policy maker will decide in each case depending on his/her expectations about them. In contrast to deciding to invest in a developed financial market where there is uncertainty but also a lot of information about stock values and their past profitability, the political consequences of the decision to evaluate a public policy initiative are very uncertain because in general there is little information that the policy maker can use to estimate his/her potential benefits and costs. The generation of new evidence has potential benefits not only for the policy maker directly, but also for the community of policy makers in general, an effect that is not often taken into account in decision-making and that opens a space for intervention by international organizations.

Thus, when an evaluation is perceived as more risky or less beneficial from the political point of view, it is less probable that the policy maker will decide to undertake one. To make evaluation of public initiatives more attractive it is necessary that the political cost is perceived as minor, in some cases potentially through conditions of confidentiality.

However, as perceptions about potential costs and benefits tend to be very imperfect, the policy maker is exposed to two kinds of risk; on the one hand, the risk implied in not knowing exactly what the political effect of the decision will be, and on the other hand, the risk arising from not having other experiences that allow for inferring the first risk. This implies that to the extent that there is more information about other experiences, there will be less global uncertainty and consequently a greater probability that policy makers take a risk that they perceive as more controlled. The less information there was previously, the more important is additional information, because of which it is the pioneering studies that end up having greater influence on the decision to evaluate in other contexts. The most notable example globally is perhaps the randomized impact evaluation conducted in Mexico of the conditioned cash transfer program PROGRESA (now called Oportunidades), which encouraged the majority of countries in the region to not only implement similar programs, but also to evaluate them rigorously.

One of the clearest implications is that resistance to systematically learning about the effects of policies decreases to the extent that there are more evaluations circulating publically. In general this effect is not taken into account by most policy makers, with the exception of those that for some reason see a value in being pioneers in generating new evidence, because of which there is natural role for supranational organizations, such as the multilateral bank, to

promote and make known evaluations of public policies through subsidized or free technical support, as well creating and disseminating technical standards for conducting evaluations.

As well, although there is a social value in making known the knowledge derived from evaluations, it is also true that the risk perceived ex ante by the policy-maker is greater when it is planned to make the results public, so that in some cases it might be appropriate to decide beforehand to keep the results of an evaluation confidential to increase the probability that the evaluation will be done. This could imply a change in the perceptions of the policy maker that can make him/her more willing to submit his/her initiatives to evaluations (Maris and Ortega, 2015).

The above applies to policies and programs observable by voters. However, does this apply in the same way to the internal management initiatives in public organizations? For example, if a public body decides to implement a pay for performance scheme for its employees and carries out an experiment to quantitatively measure the effectiveness of the scheme, it is not clear if the risk faced is electoral, at least in the first instance. However, they may face other risks related to the possibilities of their advance in the institution or their recognition by other actors (for example unions or other managers). The generation of systematic learning about internal management initiatives also represents a potentially significant contribution for the quality of decision-making, but also involves risks for the persons that decide to lead them.

CAF has supported initiatives of learning about diverse themes in the public sector. In Colombia, for example, it assisted the tax collection agency (Dirección de Ingresos and Aduanas Nacional, DIAN) to quantify the effectiveness of different tax collection management instruments. To do this, a large scale social experiment was designed in which around 20,000 taxpayers were randomly selected, some groups of which received collection notice by a determined channel<sup>5</sup> (treatment groups) and a group that did not receive a notice (control group). At the end of three months, the tax compliance of the different treatment groups was compared to that of the control group. The results shows that the personal visit by a DIAN functionary was more effective than the other contact options when it was possible to contact the taxpayer, but considering that this contact is difficult to make for different reasons (quality of information, accessibility, taxpayer not at home), sending an email can be as effective as a visit (fundamentally because the arrival rate was much higher). This experience led DIAN to focus its visits on certain types of taxpayers and expand its database of emails for wider use.

Although there is social value in making the knowledge derived from evaluations public, it is also certain that the risks perceived ex ante by policy-makers is greater when it is planned to make the results public.

<sup>5.</sup> The notification was sent by one of three possible channels: 1) personal visit by a DIAN official; 2) email; or 3) a physical letter by regular mail.

Development organizations in the region have an important role in promoting evaluation and experimentation as management tools.

In Argentina, CAF has assisted the Provincial Government of Cordoba to learn about the effects of the First Step Program (PPP), which consists of subsidizing the employment of young people without work experience. Youths apply with the agreement of the employer that will hire them and they are then selected by public lottery, given that the number of applicants usually far exceeds the financial capacity of the program. The fact that the assignment is made by lottery offers an excellent opportunity to measure the effect of the program given that it is reasonable to assume that there are previous differences between the youths that are chosen and those that are not, such that any subsequent difference can be confidently attributed to participation in the program. Taking advantage of this opportunity, Berniell and De la Mata (2015) found very positive effects for the beneficiaries of the program in terms of the quantity and quality of employment, with gender differences (more jobs are generated for men, but the jobs generated for women were of better quality), the size of the company (greater probability of formal employment in medium-sized or large firms than in micro or small firms) and socioeconomic level (more and better quality employment for applicants from a middle to low economic level). These results have led authorities to consider improvements in targeting the program, in an example of a low-cost learning experience with important benefits for the quality of management. 6

In Venezuela, CAF collaborated with the municipal government of Sucre in Caracas to test the effectiveness of a judicial tool to increase the payment of property taxes, which historically has been characterized by high levels of late payment. Together with local authorities, CAF designed an experiment with 800 taxpayers in arrears, in which a randomly selected group was sent a threat of legal action. The impact was close to 100% with legally incorporated entities that received the threat. Following this test, the use of threat of legal action was extended as a tool for collection. As in the previous cases, the experiment did not represent a significant financial cost for the municipality (nor for CAF), and contributed significantly to improving the quality of management.

Organizations responsible for development in the region have an important role in promoting evaluation and experimentation as management tools. In particular, if policy makers see evaluations as requisites for obtaining external funding, or as imposed by controlling agencies, it is less probable that they will be seen as tools. Although in some contexts this coercive focus can result in more evaluations, it is necessary to look for the way in which they can also lead to institutional learning about the value of the process for the quality of public management. CAF is promoting this vision of institutional strengthening in the region (Box 5.3).

<sup>6.</sup> It should be noted that authorities took a political risk when they accepted support for the study, given that the PPP has been a highly visible program of the Cordoba government, so that if the evaluation had been negative it is possible the electorate would have punished them.

#### Box 5.3 Policy learning from CAF

In May 2013 an area was established in CAF to promote impact evaluations and social experimentation as public management tools. The Impact Evaluation and Policy Learning Office (DEIAP for the initials in Spanish) offers support to all levels of government in the region for rigorous measurement of the effectiveness of their initiatives, whether or not they have funding from CAF. The focus has three basic principals: 1) to priorize the information needs of the policy maker; 2) to submit the research agenda to the maximum academic standards possible, and 3) to involve the authorities responsible for the program from the beginning of the evaluation process. These three principles ensure that the research is completely relevant for the decision making of policy-makers, that the results of the evaluation are the best that can be obtained given the state of advance of the science and that institutional capacity is generated, that is, that the implementers can appreciate other contexts in which an evaluation can help them in taking better decisions.

Since the area was formally created, there have been 35 requests for support from 10 countries in the region in areas as diverse as generating employment, citizen safety, entrepreneurial innovation, social policy and access to health services. More than 30 of the projects related to these requests are currently in the design, execution or analysis of results stage. Every project seeks to generate useful and easy-to-use knowledge for the implementers, whether related to program implementation or to improvements of institutional or administrative aspects. The active participation of those responsible for policies allows for knowing in-depth the functioning of institutions and programs, helping to detect areas for improvement. It also facilitates that the knowledge generated in the evaluation can be translated into tangible changes. At the end of each project a report of the results is provided to the authorities for them to use in decision-making and summaries of the policy are produced, as well as academic works for specialized journals in some cases.

Source: the authors.

#### **SOME IMPLICATIONS**

Efforts that increase the expected benefits or reduce the costs of evaluating increase the probability that authorities willingly undertake evaluations.

There are two types of potential benefits for policy-makers, both linked to the incentive of re-election or of improving their public image. First, when the results of the evaluation are positive, the policy-maker can use it as political propaganda. Second, independent of the results, evaluation can help in making better decisions about resources, which should be observable by the electorate and contribute to improving the image of policy makers. As the first type of benefit only materializes if the result of the evaluation is positive, it is not that tempting. However, the second type of benefit can contribute to the idea that the evaluation, and even experimentation are highly useful tools in public management, even if the results of the evaluation are negative.

The most important potential cost that a policy maker can weigh when deciding whether or not to evaluate a program is the risk of being exposed as a bad public administrator and compromise his/her chances of being re-elected. Limiting this risk ex-ante is difficult, given that the evaluation seeks precisely to identify shortcomings to be remedied in the use of public resources. The challenge is to identify these shortcomings without these being attributed, at least publically, to the administrator of the resources. One way of doing this is to maintain a transitory confidentiality agreement about the evaluation results. Although this option can call into question the reliability of the results given that they cannot be validated by academic discussion, alternative ways to obtain validation can be sought like expert agreement or internal debate supported by international organizations that are willing to maintain confidentiality. The immediate institutional benefit and the ultimate social benefit could justify agreements of this type that make the study viable.

### OTHER FACTORS THAT INFLUENCE THE DECISION TO EVALUATE

Other factors that do not form part of the discussed conceptual framework can influence the decision to evaluate.

First, evaluations are costly, in some cases because the lack of statistical information imposes the need for collecting information, for which authorities often do not have the resources. The key challenge is to identify the cases in which information is available or can be made available at low cost (for example, when there is good administrative information) and attempt to advance with these cases.

Second, the timeline of the policy maker can differ from that of the evaluation. Depending on the type of project, evaluations can take from a few months to several years, because of which much time can pass before results are obtained with policy implications. At DEIAP, for example, an impact evaluation takes on average 16 months, with a range of two months to three years. In particular, to evaluate a tax collection mechanism or a program for patrolling hot points can take relatively little time, while evaluating programs that seek to improve the opportunities for the social development of children, which are expected to have effects over the long term, can take much longer.

Thus, long-term evaluations can be incongruent with the short-term vision of electoral cycles, and especially considering the time and effort required of politicians or bureaucrats. Even with low uncertainty about the results of evaluation and the potential benefits for the policy-maker, a long-term evaluation can be unattractive if the timeline of the policy-maker is much shorter. A possible effect of this is that politicians can be tempted to invest only in knowledge that can be generated in the short-term, or only based on programs that can be evaluated in the short-term. This is not necessarily negative, but can

<sup>7.</sup> Admittedly, this example is not representative of all impact evaluations.

imply not evaluating important programs from the budgetary point of view and with much room for improvement. As well, politicians can also be tempted to sacrifice the quality or informative content of knowledge in exchange for immediate availability.

When knowledge originates from within the organization, its application to generate changes and improvements in the provision of services is direct.

# The use of knowledge to improve management

Once knowledge is available it does not automatically translate into change in public policy (Fox and Benett, 1998). When the learning derived from evaluation suggests changes, implementing these changes is equivalent to altering the status quo and the policy-maker is faced with restrictions to move ahead. To the extent that the policy-maker values innovation or there are political incentives for change or little resistance by interest groups, it is more feasible that learning results in better policies.

Knowledge about relevant matters to public management can come from contributions by the global academic community, or from specialized research teams of the government itself. As well, international or independent agencies can collaborate with those that implement programs (mainly the Government) to generate learning about public programs, which, as shown above, is more common in the region. Independent of the origin of the knowledge, the way in which it is decided to change or maintain the status quo determines the degree to which learning translates into better or worse public services.

## A CONCEPTUAL FRAMEWORK OF DECISIONS FOR CHANGE IN THE PUBLIC SECTOR

Once knowledge is available, how is learning undertaken? That is, how is it decided to continue or discontinue or upscale programs, or to modify some of their components so they function better? Often the way in which knowledge is generated determines the influence it will have on the management of public services.

When the knowledge originates from within the organization, its application to generate changes and improvements in the provision of services is direct. If an evaluation seeks from the start to respond to the central question of interest for those responsible for the policy, it is more probable that the results translate into improvements. However, even in this ideal situation, there are no guarantees that the information will be used effectively given that institutional and political factors can compromise change; the involvement of those responsible for implementing a policy in its evaluation is the most promising scenario for learning to translate into concrete improvements. An example of this is the Community Welfare Homes (HCB for the initials in Spanish) Program in Colombia, in which extensive interaction between the evaluating group and

persons responsible for the program from the implementing agency led to the adoption of concrete actions to address deficiencies identified during the evaluation (for example, nutrition protocols were reviewed and educational campaigns were initiated on hygiene and infant care procedures for mothers) (Briceño et al., 2011).

When the initiative for evaluation comes from outside the organization this naturally implies a lower level of commitment. Although the knowledge generated can serve the society as a whole, as well as other governments considering implementing similar programs, the probability that learning leads to improvements in the evaluated policy is conditioned more by the political environment, institutional frictions, the weight of diverse interest groups that may have been created in relation to the intervention, and in general the incentives to those responsible for the policy to change the status quo. An example of this is the Youth Action Program in Colombia, where even before the results of the impact evaluation were known, substantial changes were introduced that did not respond to the results found (Briceño et al., 2011).

It is not easy to promote change within an organization, and even less so in the public sector. Inertia favors the *status quo* and significant levels of institutional consensus are required to alter deeply rooted patterns. In the iterative model of public sector reform of Thomas and Grindle (1990), the *status quo* is a balance that reflects the agreement of all interested parties about the policies or institutional arrangements. Changing this balance can be complicated and costly in terms of time, resources and political capital, given that the changes go through a process in which a large number of actors with diverse interests intervene at the same time. Equally, interest groups, as well as an organizational culture resistant to change, can slow down the adoption of adjustments in the way of doing things (Rashman and Radnor, 2005). It is possible that this type of resistance opens space for incremental change in the form of applying knowledge instead of major modifications to established patterns (Etzioni, 1987).

What then do public bodies do to translate knowledge into an improved provision of services?

A change in the public sector can consist of a change in policy or in the way of organizing resources used to implement a policy. For example, the method of police patrols can be changed (focusing on points with high incidence of crime or hot spots), or the way in which a determined method is implemented can be altered (monitoring patrols with GPS or radio reports). Naturally, some management decisions do not directly change the way to patrol, but help to improve the use of resources and consequently improve the quality of work that the police do. Ideally, the objective of these changes is to improve the provision of safety and ultimately the welfare of citizens, but the process is also affected by political and ideological interests and by budgetary considerations, as well as by the formal and informal interventions of diverse actors with potentially divergent interests (Thomas and Grindle, 1990).

The way in which knowledge is converted into management changes can be represented with a career interest model in which bureaucrats, in making decisions about public resources, have the objective of rising, or at least not falling, in the bureaucratic hierarchy.<sup>8</sup> Although decisions to make changes occur in different instances, in the majority of cases the bureaucracy is responsible for implementing and doing follow-up for public programs, as well as administering the provision of services. Thus, understanding management decisions in the public sector requires understanding the bureaucracy.

Among the extrinsic motivations for bureaucrats is the possibility of advancing in the civil service structure. Ascending the bureaucratic hierarchy depends mainly on formal and informal systems of evaluation in every institution. Among the universal conditioners that determine the possibilities for advancing in any system are performance, experience, following established guidelines, respect for the hierarchy and ideological discipline. Among the more specific conditioners are promoting entrepreneurship through incentives to introduce changes and innovations that will improve the quality of services.

How then does change unfold? Firstly, the bureaucrat receives information that he/she considers pertinent and reliable (for example, the result of an impact evaluation or monitoring). Based on this new information, he/she must decide whether to introduce changes to improve the provision of the service (with a certain probability of failure) or leave things as they are. The new information can point to deficiencies in the way a service is provided, in which case the bureaucrat can consider making procedural changes, increasing monitoring, changing the design of the program and even completely eliminating the program. Alternatively, the new information can suggest ways to improve a program or expand it to other areas of public policy, as happened with PROGRESA/Oportunidades in Mexico, where the results of the evaluation were instrumental for the expansion of the program to urban areas, as well as for improvements in the design. Finally, the new information can indicate that the program should not be changed, or simply that changes are not justified at that moment.

However, independent of the quality of the information received, there is no guarantee that bureaucrats will take the right decisions. The decision depends partly on their motivation, which in this conceptual framework is the desire for promotion, and partly on the capacity of bureaucrats to read the context in which they operate, as well as, indirectly, institutional factors, the environment, logistics and even random elements that facilitate or hinder decisions to make change (Figure 5.1, p. 212).

The decision to make changes depends, on the one hand, on motivation, which in this conceptual framework supposes the desire for promotion, and on the other hand, on the capacity to read the context in which one operates.

<sup>8.</sup> For a formal presentation of these ideas see Maris and Ortega (2015).

Pecision to innovate

Institutionality

Environment

Randomness

Capacities

Capacities

Figure 5.1 Model of the decision to innovate

Source: the authors.

# THE RESULT OF THE POLICY AND DECISION-MAKING PROCESS

If the bureaucrat knew that his/her decision would result in improved welfare, she/he would always take the right decision, to make change or not depending on whether it is indicated. However, there is no certainty that change will effectively be beneficial given that the entire process is subject to a random component. For example, an unexpected change of key public employees to carry out an innovation can reduce the political and budgetary support for the proposal, and consequently decrease its probability of success. Thus, having taken the decision to undertake change, the bureaucrat faces the risk of wasting significant resources and even of costing the institution its legitimacy. If the bureaucrat decides to make change when it is not possible, or if he/she does not see the need for and possibility of change when it should be made, his/her poor decision can lead to services of worse quality and consequently a lower probability of being promoted.

How then does the bureaucrat make decisions under these conditions of uncertainty? In this conceptual framework it is supposed that the bureaucrat processes his/her knowledge about the service, the institution, and the environment and estimates the probability of success for his/her agenda for change. He/she then chooses the option with the greatest expected benefit. A good bureaucrat can read the context and the probability of success with greater accuracy. That is, a bureaucrat of quality can anticipate with greater facility what will happen with his/her proposal for modification once it is implemented. But in any case, given the uncertain character of the final result, different combinations of probable success and benefits will be valued distinctly according to the degree of risk aversion of every bureaucrat. Those with greater aversion to risk will be more cautious and require higher probability of success and/or more benefits before undertaking any change.

## UNCERTAIN RESULTS AND THE PROBABILITIES OF PROMOTION

Once the bureaucrat has taken a decision and superiors have observed the results, the latter should in turn decide whether to promote the bureaucrat, leave him/her in the same position or demote her/him. The idea is that if the bureaucrat introduces a change that improves a service and this is valued by the institution, the functionary will have greater probability of being promoted. Ideally, the institution should promote bureaucrats with greater abilities to improve the quality of services. However, this is not necessarily the case. Other considerations that can affect the probability of a promotion are the seniority, educational level, and the organizational propensity for change, compliance with procedures, the ideological line or affinity with superiors. Some of these things can be observed directly, or are available on the life page of the bureaucrat. In contrast, the capacity of the bureaucrat to improve the quality of services is particularly difficult to observe. The only thing that is observable is the result of the bureaucrat's work, whether the result of the policy (good or bad) or the decision about the policy (change or the status quo).

Unfortunately, this information is noisy because the observable result is not only a consequence of the bureaucrat's work, but also randomly of a number of important factors beyond the control of the bureaucrat. For example, a strategy of patrolling hot spots can fail to reduce crime if the institutional environment and lack of leadership in the management hinder compliance with patrol protocols. When the observable result depends more on the actions of the functionary than on random and other factors, the information is reliable, but if the opposite occurs, the information is not very useful. The superior does not want to promote someone just because of good luck nor demote someone because of bad luck. Consequently, to the extent that the information contained in the result is reliable, it influences decisions about promotions, and when it is not reliable, it has less weight in such decisions, which must then be supported with other observable elements. In large measure, reliability is given by the average variability of the results. When the results are highly variable, they provide less information about the capacity of the bureaucrat.<sup>10</sup>

Notably, institutions can assess other attributes, or may have to rely on other attributes to make decisions about promotions. Some of these attributes do not necessarily lead to decisions that generate positive change in public management, and consequently a state of equilibrium can be reached in which the bureaucrat does not have the goal of increasing wellbeing, and thus more knowledge does not translate into better services.

Ideally institutions should promote those bureaucrats with the best capacities to improve the quality of the services.

<sup>9.</sup> Jordan et al. (2013) showed that while promotions in China depend in large measure on obtaining good results, in India they depend on evaluations by supervisors.

<sup>10.</sup> This is a classic problem of extracting signals, popularized in monetary theory, in which the reliability of the signal is based on the variance of the random variable, which in this case is the result of the policy.

To the extent that bureaucrats are more uncertain about their environment, existing institutionality and implementation capacity, they will be more reluctant to propose changes.

#### WHAT DOES THIS CONCEPTUAL FRAMEWORK IMPLY?

Change is risky in this conceptual framework because the environment can be volatile and it is difficult to predict if the result of policy change is good or bad. To the degree that the bureaucrat is more uncertain about his/her environment, the institutional context and the capacity for implementation, he/she will be more reluctant to propose changes. The effect of uncertainty is even stronger in the case of bureaucrats with an aversion to taking risks. In this way, only bureaucrats of exceptional capacity or with a low aversion to risk will dare to propose changes. Depending on the distribution of skills and risk tolerance profiles among bureaucrats, this can result in less change than would be desirable or that changes do not improve the quality of services. This implies a lower response capacity to the flow of new information and a poorer quality of public management.

Thus, a system for recognizing public servants that have introduced innovations sustained by scientific knowledge could help to move incentives in the right direction. In general, the system of incentives for bureaucrats should achieve a balance between rewarding the quality of the services rendered to the citizenry and rewarding taking certain risks in introducing improvements in public learning supported by scientific learning. In this sense, a promotion system could be established that does not depend predominantly on the results of bureaucratic actions but also provides for certain procedures for when management changes are proposed. This would not eliminate the risk of bad results, but would help in ensuring that the bureaucrat is not alone in assuming the risk.<sup>11</sup>

Likewise, it is probable that the bureaucrat takes better decisions to the degree that he/she is better informed about the institutional environment and the resistance arising from public pressure. In part this knowledge is acquired when sufficient time passes in a position, which is favored by the job stability that a good part of the bureaucracy in the region enjoys.<sup>12</sup>

The quality of the bureaucracy is another factor with important policy implications, given that it can be modified through better staff recruitment and appropriate contracts. As we saw in Chapter 2, the ideal bureaucracy has the correct capacities, is adequately motivated and is honest. However, given that it is not possible to observe directly (and inexpensively) either the level of motivation or any of the relevant skills or the level of honesty, the adequate design of contracts can help to acquire the right people, encourage the desired levels of effort and, in part, encourage honest behavior.

<sup>11.</sup> Nevertheless, there are two potential problems with this solution. First, as we saw in Chapter 2, problems of moral risk can arise when the evaluation is not tied to performance. Second, the emphasis on procedures can convert the process of change into something excessively bureaucratic and consequently not very flexible and not leading to improvements in management.

<sup>12.</sup> Additionally, more time in an area of work can increase the incentives to invest in long-term programs and improve individual performance (Dal Bó and Rossi, 2011). Jordan et al. (2013) suggests that the greater job stability of public servants in China favors their knowledge about the relevant environment and their incentives to invest in modifications that can take time in materializing, as compared to their counterparts in India that are constantly being transferred to other geographic areas.

When the information that the bureaucrat uses to make decisions is of dubious quality, or when the bureaucrat is not able to understand and use information of quality, it is improbable that knowledge will be used fruitfully. In theory, the bureaucrat should be well informed about the functioning of the service, its deficiencies, and the alternatives to improve its operation, the results that they produce, and its impact on the beneficiaries. And to be well informed it is necessary to have quality information and the capacity for analysis to make sense of data and draw relevant conclusions. Deficiencies in the flow of information, low quality or low analytical capacity can each, or altogether result in bad decisions. For example, Alzúa et al. (2012) suggest that more use can be made in decision-making of the high quality of information obtained from impact evaluations of micro-financing programs in Peru. Consequently, it is important to dedicate resources to increasing the flow and quality of available information, as well as to improve analytical capacity in public institutions. As has been noted above, one way to achieve this is to involve implementers in evaluations.

Deficiencies in the flow of information, lowquality information or low analytical capacity can result in bad decisions either individually or collectively.

Finally, the organizational environment can discourage innovation and the use of knowledge to improve public services. For example, bureaucrats may have little autonomy to take important decisions about the provision of services, or even if they have autonomy in theory, they do not in reality (Briceño *et al.*, 2011). Some organizations by design require that changes be approved in an institutional framework of bureaucratic requirements that slow and complicate any change. In these cases, processes of change become inefficient, unnecessarily long and costly and do not succeed in resolving management deficiencies over time.

Fortunately, it is possible that simplifying procedures makes institutions more flexible and speeds up the response of management to the problems of public policy. In a study of managerial practices at the level of schools in eight countries, Bloom et al. (2015) found that students of schools with better managerial practices<sup>13</sup> had better academic performance, and that this was especially true when comparing independent<sup>14</sup> to public schools. In the case of autonomous schools, the best practices are related to the way in which directors use independence, designing, communicating and executing long-term strategies for their schools. Skoufias and Shapiro (2006) found that greater autonomy (and resources) in a number of Mexican schools helped to reduce school dropout and failure rates.

<sup>13.</sup> Management practices related to school operations, monitoring, goal setting and staff management were measured.

<sup>14.</sup> Schools defined as autonomous are those that, while they receive a major part of their funding from the State, have autonomy in deciding about curriculum, the selection of teachers and even the selection of students.

#### WHAT DOES THE AVAILABLE DATA SAY?

The decision-making process for public policies is multidimensional and a variety of agents with different interests intervene. The exact instance in the process in which a decision is taken is not only difficult to identify, but also it is possible that the implementation of a public policy is not the product of a single decision. This supposes a methodological obstacle to understanding how public policy decisions are taken and what contextual, institutional, or individual aspects affect this process. As well, given the heterogeneity of institutions, cultures and organizational processes, it is difficult to make generalizations that help delineate strategies to improve the quality of decisions for the public services based on the model in the previous section.

Nevertheless, it is possible to investigate the motivations of public servants to initiate innovations in their organizations. For example, Fernandez and Pitts (2011) used data from the 2006 Federal Human Capital Survey (FHCS) in the USA to identify factors that affect the decisions of public employees to innovate. Of the 200,000 public employees from 78 federal agencies that responded to the survey, the sample was restricted to 118,211 persons that classified themselves as non-supervisors. Table 5.2 presents the incidence of the independent variables considered in the motivation to innovate.<sup>15</sup>

First, the intention to innovate increases when public employees feel that the organization values training and rewards the use of new ideas. A one-point increase in perceptions about opportunities for training and development increases the motivation to innovate by 0.29 standard deviations. A one-point increase in perceptions about the existence of mechanisms to reward innovation increases motivation to innovate by 0.21 standard deviations.

Second, the factors related to the autonomy to decide also have a significant positive effect, although less than the previous variables. A one-point increase in empowerment and participation in decision-making perceived by public employees, or in their opinion about their relationship to supervisors, increases motivation to innovate by 0.10 to 0.14 standard deviations. Improvements in relations with supervisors can also increase the motivation to innovate.

Finally, a group of factors related to job satisfaction (of the job itself and of the institution), the communicational culture of the institution, and the availability of resources to carry out the proposed changes have statistically significant but smaller effects. A one-point increase of any of these factors increases the motivation to innovate by 0.05 standard deviations or less.

<sup>15.</sup> Motivation to innovate was defined based on the level of agreement reported with the affirmation. "I feel stimulated thinking about new and better ways of doing things."

**Table 5.2** Relationship between motivation to innovate at work and various factors of the working environment. Responses of public employees from a sample of federal agencies in the USA (2006)<sup>a/</sup>

Opportunities for training and development	0.29**
Rewards for innovation	0.21**
Empowerment	0.10**
Involvement in decision-making	0.14**
Relation of leadership with supervisors	0.13**
Job satisfaction	0.04**
Perceived performance	0.05**
Horizontal communication	0.04**
Vertical communication	-0.01**
Available resources	0.01
Race	-0.01**
Age	0.01**
Location	0.03**

a/The question with which the dependent variable was constructed was: I feel encouraged to think of new and better ways to do things. it takes values between 1, representing "Strongly disagree" and 5, representing "Strongly agree". An ordered probit model was estimated for the calculations, and the reported coefficients were standardized by the variance of the dependent variable. Each coefficient represents the effect on the dependent variable (in standard deviations) of moving it by one unit on the corresponding scale (from 1 to 5) of every independent variable.

Note: levels of significance: \*10%, \*\*5%, \*\*\*1%.

Source: Fernandez and Pitts (2011).

These results are consistent with the implications of the model developed in the previous subsection. In organizations that value proactive action on the part of their public employees and that establish formal mechanisms to encourage this behavior, it is more probable that bureaucrats dare to take decisions for change. That they do take decisions does not necessarily mean that the quality of public services or management improves, but it does represent a first step in that direction.

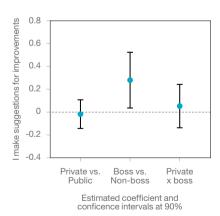
Other policy options to encourage change include actions aimed at improving the communicational culture of the organization. As it is important that there are common goals, there needs to be effective communication among the different working units. To the extent that public employees know what the institution wants to achieve and how they can contribute individually to this goal, it is more likely that they will make an effort to improve their performance or make changes when necessary (Dewatripont *et al.*, 1999).

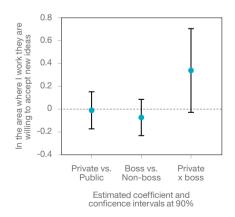
In organizations that value proactive action by its functionaries and that establish mechanisms to encourage this behavior, it is more probable that bureaucrats dare to make decisions for change.

Head *et al.* (2014) surveyed numerous public agencies in Australia to understand the factors that facilitate the use of academic research in decision-making processes. They found that the attitudes of the organizational culture toward the use of experience and rigorous evidence determine in large measure their use more than do the individual characteristics of public employees. The demand for and use of academic works tends to be greater when it is perceived that public policy decisions are based on rigorous empirical evidence, as well as when the working team as a whole values this evidence. Equally, the use is greater in institutions that have a team specifically in charge of achieving value connections between academia and public employees in political positions.

With respect to Latin America, some implications of the model described above can be assessed from the 2014 CAF Survey. Chart 5.4 presents some correlations that report on possible determinants of the motivation to innovate (Panel 1) and perceptions of an institution of proposals for change (Panel 2) according to the position of the worker and the sector to which he/she belongs. Panel 1 shows that being a boss is associated with higher motivation to innovate, with no important difference in this motivation between the public and private sector. Nor is there a statistically significant difference between bosses in the private or public sectors in terms of motivation for change. Panel 2 shows that private sector bosses are more likely to perceive openness to change in their work units.

**Chart 5.4** Motivation to make suggestions for improvements and willingness of the area to accept new ideas. Differences in the probability by sector and position<sup>a/b/</sup>





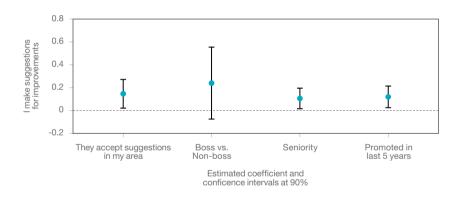
a/The chart reports the coefficients and confidence intervals at 90% estimated by ordinary least squares. The dependent variable used in the left panel was the questions "To what extent do you agree with statement that you make suggestions for improvements? For the right panel the dependent variable was the question "To what extend do you agree with the statement that in your area of work you accept new ideas? The responses in both cases took values from 1 (totally disagree) to 5 (totally disagree). The points represent the difference in the values of this variable between each group and the vertical line is the confidence interval of the estimation of the difference. The regression controlled for city and level of education.

b/ The cities included in the survey are Buenos Aires, La Paz, Sao Paulo, Bogota, Quito, Mexico City, Panama City, Lima, Montevideo and Caracas.

Source: the authors, with data from the 2014 CAF Survey.

Chart 5.5 explores some possible determinants of individual willingness to make suggestions for improvements specifically among public sector workers. First, motivation to innovate appears to be associated with greater institutional willingness to accept changes (and this is independent of the specification used), in the model presented previously. Second, it is associated with greater job satisfaction (although this effect is diluted when other variables related to the work experience are included, because of which they do not appear in Chart 5.5). Third, it is associated positively and significantly with seniority, which perhaps reflects the fact that the longer one is in an organization the more knowledge he/she has of that organization and consequently the greater the probability of proposing changes. Fourth, it is more probable among bosses (although the statistical significance of this relationship is lost when other variables are included). And fifth, it is more common among persons that have been promoted in the last five years (and this result is statistically significant and robust to various specifications).<sup>16</sup>

**Chart 5.5** Relationship between the motivation to make suggestions for improvements and different variables<sup>a/b/</sup>



a/ The chart reports the coefficients and confidence intervals at 90% estimated by ordinary least squares, where the dependent variable was the question "To what degree do you agree with the statement tat you make suggestions for improvements? The responses had values ranging from 1 (totally disagree) to 5 (totally agree). The vertical line is the confidence interval of the estimations of all the points. The regression controlled for the city and the level of education.

b/The cities included in the survey are Buenos Aires, La Paz, Sao Paulo, Bogota, Quito, Mexico City, Panama City, Lima, Montevideo and Caracas.

Source: the authors, with data from the 2014 CAF Survey.

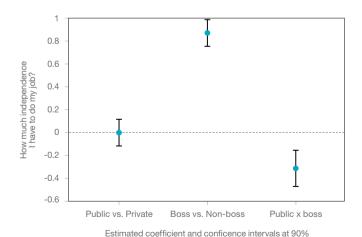
Finally, it is possible to compare enterprise in the pubic sector in Latin America to those of other regions of the world based on the World Values Survey,

<sup>16.</sup> Of course, a bureaucrat may be promoted precisely because of his/her tendency to introduce changes, or for another reason that correlates with motivation, because of which the higher probability of being promoted does not necessarily increase innovation. However, it calls attention to the strong association between the two variables. The propensity to innovate may increase because promotions denote an effort to recruit more talented public employees or because they stimulate greater effort.

which included in its sixth wave a question about independence to perform work functions. Although this variable does not exactly measure the probability of innovating, it can be used as an approximate measure given that the probability of trying new ideas is less to the degree that the functionary has less independence in the exercise of his/her functions.

Graphs 5.6 and 5.7 show some possible determinants of independence in the workplace while controlling for educational level and country. With respect to the position of the worker, the level of independence of bosses appears to be substantially greater than that of non-bosses, which is in line with what was obtained from the data of the CAF Survey (Chart 5.6). However, when bosses in the public sector are compared to counterparts in the private sector, it can be observed that in general public sector bosses have less independence than those in private sector. With respect to the sector in which they are employed (Chart 5.6), it is not observed that the level of independence of public sector workers differs from that of workers in the private sector. However, controlling for the region of origin (Chart 5.7), public sector workers appear to have less independence, and finally, working in Latin America is associated with greater independence compared to the rest of the world and the OECD countries considered (although in this latter case, the result is not statistically significant). However, it appears that bosses in the public sector in OECD countries have more independence to take decisions than their Latin American counterparts (Chart 5.7).

Chart 5.6 Independence to do one's job. All countries<sup>a/b/</sup>

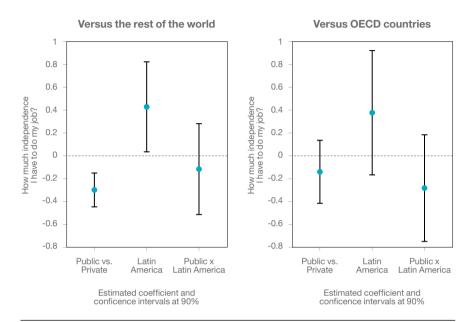


a/ The chart reports the coefficients and confidence intervals at 90% estimated by ordinary least squares, where the question "How much independence do you think you have to do your job?" was used as a dependent variable. Values ranges from 1 (no independence) to 10 (complete independence). b/ The points represent the differences in the values of this variable among the groups and the vertical

line is the confidence interval of the estimation of the difference. The regression controls for city and education level.

Source: the authors, with data from the World Values Survey wave 6 (2010-2014).

Chart 5.7 Independence to do one's job in Latin America versus the rest of the world and OECD countries<sup>a/b/</sup>



a/The chart reports the coefficients and confidence intervals at 90% estimated by ordinary least squares, where the dependent variable used was the question "How much independence do believe you have to do your job?. It takes values from 1 (no independence) to 10 (complete independence).

b/The points represent the difference in the values of this variable among the groups and the vertical line is the confidence interval of the estimation of the difference. The regression controlled for city and level of education.

Source: the authors, with data from the World Values Survey wave 6 (2010-2014).

## Toward a public institutionality that learns and acts

Although almost all the countries in the region have made significant advances in important areas for development like price stability, fiscal discipline and access to primary education, the challenges ahead are enormous. Basic problems of provision persist in areas like citizen safety, health care and the quality of education, and the responses of public policy vary among countries, levels of government and sectors. Beyond budgetary restrictions, one of the most notable obstacles facing the region in increasing public wellbeing in an inclusive manner is the lack of knowledge about what are the best options for the application of public resources.

The experiences of public policies in every corner of Latin America can become a flow of learning about the most effective ways to achieve the objectives of these policies. Achieving this implies investing resources in gathering, systematizing and analyzing these experiences. In the normal action of governments decisions are

Evaluation has associated costs and risks that reduce the incentives to use it as a management tool, which in general results in fewer evaluations than would be desirable.

made about public resources based on information, habits and preconceptions, but it is possible to achieve that scientific evidence plays an increasingly more important role. The rhythm of public administration can leave a small margin for pausing and reflecting strategically. Nevertheless, space can opened for an increasing number of initiatives that leave the imprint of deeper knowledge that can be used not only by the implementing public body but also by others.

The discussion throughout this chapter has revolved around two areas: firstly, the possibility that the policy-maker is more willing to collaborate with evaluation of their own initiatives; and secondly, that the available evidence (internal and external) is used to improve the quality of service provision. Evaluation has associated costs and risks that decrease the incentives to use it as a management tool, which generally results in fewer evaluations being conducted than would be desirable. This implies less generation of knowledge and consequently fewer decisions based on credible and pertinent information. However, more and better information does not always translate into better decisions. The process of policy innovation is complex because it depends on institutional and conjunctural factors and because it involves many actors that at times have divergent interests. This results in few innovations arising from evidence-based learning.

Given all this, is it possible to talk about an ideal system of public policy learning for the developing world? A system that helps the public sectors of the region to learn from their experiences, but that also helps to strengthen the system of accountability to the citizenry? Perhaps an option to consider is advisory bodies within the public sector of every country where every agency, regional government, municipal government or public body can seek support in evaluating their initiatives, and where advisory bodies leverage not only financial resources but also academic resources to answer the concrete questions of policy makers using the best scientific techniques available. In this case, evaluated and evaluator will literally be on the same side, cooperating with the ultimate aim of improving the quality of public services. This marks a key difference with evaluation schemes focused exclusively on accountability and control.

The institutionality of learning should respond to the fact that, despite the great variety of contexts and realities in which the presence of the State is applied, there is a sea of knowledge in the policy experience itself that can help shorten the path to shared and equitable wellbeing.

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In the discussion about what are the best public policies for development it is often assumed that the State has the capacity to successfully design and implement these interventions. But this is not always so. There are numerous cases of policies that, with clear objectives and the necessary resources and a history of success in other contexts, fail to achieve the expected results because of the lack of capacity on the part of the agencies responsible for putting policies into practice. In many of these cases, it is not even possible to draw on these experiences as valuable knowledge and learning to improve resource management in the future.

The present edition of the Report on Economics and Development puts at the center of the debate the analysis of the capacities to design, implement and learn from public policies. Among these capacities is notably the bureaucracy as a crosscutting component throughout the policy production cycle; public procurement systems as a crucial tool to effectively implement programs; citizen participation to strengthen accountability and through this channel improve the provision of public services; and finally, the possibility of transforming experiences in managing public resources into knowledge and learning to increase the effectiveness of the entire process.







