

Cornick, Jorge; Fernández-Arias, Eduardo; Stein, Ernesto

Working Paper

The Challenge of Public Capabilities for Successful Productive Development Policies: Hopeless Task or Pragmatic Program?

IDB Working Paper Series, No. IDB-WP-636

Provided in Cooperation with:

Inter-American Development Bank (IDB), Washington, DC

Suggested Citation: Cornick, Jorge; Fernández-Arias, Eduardo; Stein, Ernesto (2016) : The Challenge of Public Capabilities for Successful Productive Development Policies: Hopeless Task or Pragmatic Program?, IDB Working Paper Series, No. IDB-WP-636, Inter-American Development Bank (IDB), Washington, DC,
<https://hdl.handle.net/11319/7566>

This Version is available at:

<https://hdl.handle.net/10419/146443>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<http://creativecommons.org/licenses/by-nc-nd/3.0/igo/legalcode>

IDB WORKING PAPER SERIES Nº IDB-WP-636

The Challenge of Public Capabilities for Successful Productive Development Policies:

Hopeless Task or Pragmatic Program?

Jorge Cornick
Eduardo Fernández-Arias
Ernesto Stein

Inter-American Development Bank
Department of Research and Chief Economist

March 2016

The Challenge of Public Capabilities for Successful Productive Development Policies:

Hopeless Task or Pragmatic Program?

Jorge Cornick*

Eduardo Fernández-Arias**

Ernesto Stein**

* Senior Partner, DRP Trejos & Cornick

** Inter-American Development Bank

Cataloging-in-Publication data provided by the
Inter-American Development Bank
Felipe Herrera Library

The challenge of public capabilities for successful productive development policies:
hopeless task or pragmatic program? / Jorge Cornick, Eduardo Fernández-Arias,
Ernesto Stein.

p. cm. — (IDB Working Paper Series ; 636)

Includes bibliographic references.

1. Industrial productivity—Government policy. 2. Policy sciences. I. Fernández-
Arias, Eduardo. II. Stein, Ernesto. III. Inter-American Development Bank. Department
of Research and Chief Economist. IV. Title. V. Series.
IDB-WP-636

<http://www.iadb.org>

Copyright © 2016 Inter-American Development Bank. This work is licensed under a Creative Commons IGO 3.0 Attribution-NonCommercial-NoDerivatives (CC-IGO BY-NC-ND 3.0 IGO) license (<http://creativecommons.org/licenses/by-nc-nd/3.0/igo/legalcode>) and may be reproduced with attribution to the IDB and for any non-commercial purpose, as provided below. No derivative work is allowed.

Any dispute related to the use of the works of the IDB that cannot be settled amicably shall be submitted to arbitration pursuant to the UNCITRAL rules. The use of the IDB's name for any purpose other than for attribution, and the use of IDB's logo shall be subject to a separate written license agreement between the IDB and the user and is not authorized as part of this CC-IGO license.

Following a peer review process, and with previous written consent by the Inter-American Development Bank (IDB), a revised version of this work may also be reproduced in any academic journal, including those indexed by the American Economic Association's EconLit, provided that the IDB is credited and that the author(s) receive no income from the publication. Therefore, the restriction to receive income from such publication shall only extend to the publication's author(s). With regard to such restriction, in case of any inconsistency between the Creative Commons IGO 3.0 Attribution-NonCommercial-NoDerivatives license and these statements, the latter shall prevail.

Note that link provided above includes additional terms and conditions of the license.

The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the Inter-American Development Bank, its Board of Directors, or the countries they represent.



Jorge Cornick, email: jcornick@eurekared.com

Abstract*

This paper discusses the organizational structure and technical, operational and political capabilities required for successful productive development policies (PDPs). It also discusses how countries can match their PDPs to existing capabilities, as well as expand their capabilities in the long run. The specific difficulties associated with PDPs are also discussed.

JEL classifications: H10, H11, L50, O25

Keywords: Government performance, Industrial policy

* A previous version of this paper appeared as Chapter 10 of IDB (2014).

1. Introduction

Historical experience—and a well-developed body of theoretical arguments—suggest that productive development policies (PDPs) are an important component of a successful development strategy. But designing and implementing successful PDPs is not easy. To begin with, the process requires a well-oiled learning mechanism to diagnose market failures amenable to policy intervention and to design sound policy initiatives. Furthermore, it is not enough to get the policy design right; the public sector as a whole and the agencies in charge of specific policies (which we will call productive development agencies or PDAs) must also have the right capabilities to implement them.¹

The ability to design and implement successful PDPs is influenced by several factors, ranging from the organizational structure of the public sector in charge of these policies to the technical, operational and political capabilities (TOP capabilities from here on) of the relevant public agencies.² Organizational structures refer to the distribution of responsibilities, decision-making powers and control over resources among different agencies or units within agencies. The TOP capabilities of PDAs encompass not only the technical ability to deal with PDPs but also the necessary enabling conditions for a successful PDA. These factors are not independent; rather, they interact in fundamental ways. For example, possessing the technical skills to design and implement a certain policy does not mean that the policy will be implemented appropriately. Participants must have the right organizational structure and incentives for these skills to lead to effective policy design and implementation on the ground. Moreover, if financial resources allocated to specific policies are insufficient, agents will lack the incentives to invest in the technical capabilities needed for sound policy design and implementation, since lack of resources alone will likely condemn those policies to failure, independently of the capability level of the relevant PDAs.

It should be noted, however, that the explanatory power that “public capabilities” may have regarding the performance of Productive Development Agencies and, more generally, the

¹ By PDAs we mean all the agencies involved in the design, implementation, evaluation and oversight of PDPs, including the relevant ministries. While there may be important differences among them (for example, some may specialize in design and others in implementation), we will only make these distinctions to the extent that they are necessary for the analysis.

² At a more general level, other critical factors include political institutions, the features of the policymaking process as well as the interests, capabilities, and distribution of power between the key actors in the process (Spiller, Stein, and Tommasi, 2008). These are outside the scope of this paper and the report in which it was originally included.

public sector, is bounded by the political economy, the institutional context and the features of the Policy Making Process within which they operate.³

The political economy, that is to say, the balance of political and economic power at any given moment, defines the most general framework for politics and policymaking. A given political economy balance, however, may express itself in Policy Making Processes (PMP) with different features as discussed, for example, by Spiller, Stein and Tommasi, (2008). And even within a given PMP, different institutional designs are possible, and need not be uniform across all parts of the public sector, all levels of government, or all regions within a country.

TOP Capabilities help explain the performance of public agencies within the limits set by the political economy, the PMP and the specific institutional design in each case. It is reasonable to assume that in the long run there can be feedback effects: a successful Productive Development Agency, and successful Productive Development Policies may be the starting point of processes that eventually result in changes in the institutional design, the Policy Making Process and even the political economy, as the recent experience of China (see, for example, Dinh et al., 2013 and Pascha, Storz and Taube, 2011) so richly illustrates.

This paper discusses the organizational structure and TOP capabilities required for successful PDPs. It also discusses how countries can match their PDPs to existing capabilities, as well as expand their capabilities in the long run. But first, the specific difficulties associated with PDPs are discussed.

2. Why Are PDPs Hard?

PDPs are a particularly difficult type of public policy for several reasons, as discussed below.

2.1 The Need for Policy Discovery

For some public policies, the problem, the target beneficiaries, and the solution are all known. For example, a vaccination campaign against Hepatitis A involves administering a first dose of the vaccine to children between 12 and 23 months of age, and a second one between six and 18 months later. The doses and the delivery mechanism are known and need to meet specific quality criteria defined by standard protocols.

³ Some of these issues have been studied in detail in previous IDB publications. See, for example, the flagship report *The Politics of Policies* (IDB, 2005).

Productive development policies are different. While in some cases the problems may be known *ex ante* (for example, there are spillovers in research and development that need to be addressed), in most cases problems need to be discovered as part of the policy process. Even when the problems are known, the best solutions may be hard to identify, as many different instruments can potentially be used to solve a problem; the ideal instrument in a particular country context may not be ideal in another. The target beneficiaries of interventions may not be known, either. For example, policies to support entrepreneurship require the identification of young firms with high growth potential—which is not as simple as identifying children between 12 and 23 months of age. To some extent, productive development policies need to be set up as search engines, scanning the policy space in order to identify the most important problems, the most appropriate solutions, and the best ways to implement them.⁴

One additional feature of PDPs makes this discovery process more challenging: the effectiveness of PDPs depends not just on public sector actions, but also on voluntary actions of the private sector. For some projects, such as building a road, success or failure depends entirely on actions over which the public sector has direct control. PDPs, in contrast, try to induce changes in the behavior of private agents in response to public sector actions, such as providing a public input or a fiscal incentive. Policies may or may not succeed in inducing the desired changes in private behavior, which provides an additional reason for policy experimentation and adjustment.

2.2 Knowledge and Technical Skills Requirements

Even relatively simple PDPs may require advanced knowledge or technical skills, which are generally in short supply in the public sector, particularly in developing countries. For example, subsidizing research and development may seem to be a straightforward endeavor. However, calculating the level of a subsidy so that it is neither more than what is needed (leading to waste of public resources) nor less than needed (leading to failure to induce the desired behavior) may be far from easy. Moreover, designing mechanisms to select the right R&D projects to fund—those likely to give rise to positive externalities—also requires important technical skills. In contrast to the vaccination example, neither the doses nor the delivery mechanism are obvious.

⁴ In this regard, the design and implementation of PDPs may not be as much a science as it is an art.

2.3 Long Delays between Policy Interventions and Results

In most cases, PDPs yield significant results only many years after they are started. This poses two opposite challenges: on the one hand, policymakers or their constituencies may become impatient and discontinue a worthwhile policy because the expected results have not yet materialized after a number of years. Thus, a policy may be eliminated simply because its “planting to harvest” horizon was longer than what policymakers could provide or were willing to provide. On the other hand, the expectation of future results can perpetuate a policy that has failed and should be discontinued. In particular, it can help sustain misguided policies that are in place due to capture or simply because those responsible do not like to admit failure.⁵

2.4 The Need to Collaborate with the Private Sector

For many PDPs, the public sector will likely have access to only part of the information required to identify what is needed. Much of the information likely resides in the private sector. And some of it may be unknown to both, and needs to be discovered as part of the policy process. Thus, collaboration with the private sector and joint exploration of the necessary policies and instruments is an essential ingredient of the policy process. This applies to many wide-ranging initiatives such as private-public dialogues regarding national competitiveness policies, as well as to more focused initiatives such as joint efforts to identify the main obstacles to the development of a sector. At the same time, the private sector may use this information exchange to derive undue benefits from PDPs, which adds an extra layer of difficulty. Creating an effective mechanism for policy discovery and collaboration, while preventing the challenges of policy capture, in other words, is a formidable challenge.

2.5 Risk of Capture and Rent Seeking

PDPs face the risk of capture from the private sector that they are designed to benefit. But the direct beneficiaries are not the only actors that can capture the policy process. Private suppliers hired by public agencies, or even the bureaucracy that works in those agencies, may also capture the policy process to favor their own interests. The intensity of the risk will vary across different types of policies and according to the choice of policy instruments, but it will always be present. Monetary subsidies aimed at a particular sector on an ongoing basis may be an obvious target for

⁵ The long delays also complicate the evaluation of the programs, since many things may change during these maturation periods, making it more difficult to attribute particular outcomes to specific PDPs.

rent seeking, but even the provision of horizontal public inputs may be subject to capture by bureaucracies or private sector suppliers of the public sector. Moreover, politicians may use PDPs as vehicles to distribute favors to their constituencies or campaign contributors, in exchange for votes or political support, under the guise of productive policies.

2.6. The Need to Cooperate across Multiple Public Agencies

In some cases, PDPs can be implemented by a single public agency. These can be thought of as *narrow policies*, either horizontal or vertical. Consider a minister of tourism who engages in a dialogue with the private sector in order to identify the main obstacles to developing a new tourist destination that is considered a high priority. One intervention that may be needed is a public relations and advertising campaign, which a ministry of tourism typically handles. This is a good example of a narrow, vertical policy. In other interventions, however, the ministry of tourism may need the cooperation of other agencies to pave an access road, build a water treatment plant, build an airport or provide the required training of the workforce, among other activities. While the minister is the one who engages the sector and is in a good position to assess the merits of their demands, he cannot deliver on what is needed. The minister is not responsible for paving roads and training workers, which are responsibilities of the public works and labor ministers, respectively. These interventions are examples of “*wide*” policies.

Public development agencies typically do not have authority over the rest of the public sector whose collaboration is required for PDPs to succeed. Therefore, successful PDAs will not only need to induce voluntary changes in the behavior of private sector agents: they will need to induce the voluntary and hard-to-control collaboration of other public sector agencies. Often, the failure to elicit this type of public-public collaboration derails well-intentioned PDPs, perhaps even more than the failure to induce the voluntary participation of the private sector.

3. The Organizational Structure of the Public Sector for Productive Development Policies

Traditional public sector organizational structures, and in particular sectoral ministries (industry, agriculture, trade, health, education, etc.), tend to be managed by means of a “command and control” approach that is not well suited for PDPs in which joint public-private sector policy discovery is an essential ingredient. What, then, are the alternatives?

There is no single answer or “one size fits all” solution. The most suitable options vary depending on factors such as the scope of PDPs, the instruments used, and the depth of desired cooperation with the private sector. Nevertheless, the organizational structure and design of public sector agencies in charge of PDPs should carefully take into account the six features that make them particularly hard, as described in the previous section. Without pretending to provide ready-made recipes to be applied everywhere, the following are some suggestions on how to do this. The numbering of the suggestions corresponds to the numbering of the difficulties used in the preceding section.

3.1 Ensuring Flexibility and Openness to Engage in the Policy Discovery Process

Traditional public sector organizations, bound by rigid rules and subject to a complex set of controls, authorizations, and auditing processes, are not likely to have the flexibility and adaptability required to identify the constraints on productivity growth and how best to address them. Traditional public sector organizations are not designed to deal with the experimentation, learning and adjustment required for PDPs, or to engage in joint discovery processes with the private sector. There are several options to overcome this obstacle.

First, public-private consultation bodies (whether presidential-level councils, or regional and/or sectoral bodies) are by definition mixed entities with more flexible rules than purely public organizations, even though they may have to rely on those traditional organizations for policy delivery. Second, some public agencies have more flexible operational rules than others. Taking advantage of this, some countries have engaged public banks, such as BNDES in Brazil or BANCOLDEX in Colombia, to manage their PDPs. Third, some countries have relied on private, generally nonprofit organizations to fulfill some public sector roles, in cooperation with purely public organizations, as in the case of CINDE, a private organization responsible for attracting foreign direct investment (FDI) in Costa Rica, in close, legally enabled cooperation with the Ministry of Foreign Trade, or Fundación Chile, in Chile. A fourth option is to provide some public organizations with “private-like” operational rules, and to involve the private sector in their governance structure. Good examples are INTA, the National Agricultural Technology Institute in Argentina, a highly decentralized organization that is deeply engaged with the private sector, and includes private sector representatives in its governance structure, or the National

Innovation Agency in Uruguay (ANII), which operates according to private law, and is not bound by the rigid purchasing, hiring and promotion rules of the rest of the public sector.

In many cases, collaboration with the private sector is limited by formal and informal governance rules. In some cases, public institutions are barred from engaging in for-profit activities, thus preventing them from participating in joint research projects with the private sector, as several agricultural institutions in South America have done, sharing the royalties generated by their discoveries. Or it may be simply that within a “command and control” organizational culture, the need to consult, let alone cooperate with the private sector, is an option that is not even considered.

Therefore, the inclusion of legal and administrative mechanisms that facilitate public-private collaboration should be a key element in organizational design. Legal authorization may be needed so that public sector entities can engage in explicit collaboration with the private sector. Administrative mechanisms may be needed to transform the legal authorization into institutional practice. INTA in Argentina (to support agricultural producers) and COMEX in Costa Rica (to attract FDI) are good examples of organizations explicitly designed to collaborate with the private sector.

3.2. Availability of Highly Skilled Personnel

The ability to hire and retain personnel with the skills required by an agency in charge of PDPs will depend, for the most part, on resources, hiring and compensation policies, as well as career paths within the PDAs and perhaps even after a public servant leaves the PDA for a job in another public agency or in the private sector. Organizational structure may matter as well: in many countries in the region, rigid pay scales and promotion rules in the public administration, together with the use of civil service positions as a means of political exchange, may make it difficult to attract and retain top talent within the regular bureaucracy. Some agencies outside of the regular bureaucracy, in contrast, have more flexible operational and administrative rules, which allow them to pay better salaries and provide incentives to attract and retain a highly qualified labor force. Despite the obvious tension this may create within the government, bodies of this kind may be in a better position to deliver results, particularly in countries where the regular bureaucracy is weak, in PDPs that are demanding in terms of the required technical skills required.

Among others, autonomous development banks could be suitable agencies to play this role of “island of excellence.” BNDES, for example, offers a very competitive package to recent graduates. These jobs are highly sought after, and staff members often spend their entire careers within the organization. Sectoral experts at BNDES are highly recognized for their knowledge, and often consulted or involved in policy design and implementation. Another example of a development bank involved in a PDP relates to the Productive Transformation Program (PTP) in Colombia. The program identifies sectors with great potential as engines of export growth and productive transformation, and supports these sectors—mainly through vertical public inputs and the resolution of coordination problems—to help them achieve that potential. The PTP was originally under the Ministry of Trade, but was later moved to the Colombian development bank, BANCOLDEX, because it is not subject to the same rigid administrative barriers as the ministries and enjoys more flexibility with regard to salaries and recruitment procedures. As a result of the switch, the quality and stability of the public sector managers of each sector has improved (Eslava, Meléndez and Perry, 2014).

3.3. Providing Coherence over Time

PDPs are long-term undertakings. Organizations in charge of them should thus be able to operate with long time horizons. This requires both policy and organizational stability. Organizations launched by executive decree, or that constitute informal working arrangements, usually do not last long, as a change in administration, or even a change in a ministry, is enough for them to be replaced by new organizations or agencies. Similarly, organizations created mainly in response to the availability of grants or concessional loans and that require little financial commitment from local authorities will likely disappear when funding dries up. On the other hand, organizations created by law likely enjoy greater stability, particularly in countries where changing laws is a slow process, or when they are backed by some sort of international commitment.

Like organizations, policies established by law, rather than just at the executive’s discretion—and particularly those that are an integral part of an international commitment through membership in international organizations such as the World Trade Organization or trade agreements—will likely be quite stable. In some cases, involving public-private councils on a specific policy, or financing by a multilateral development agency may help provide policy

stability. These actors are not subject to the political cycle, and thus may provide some sort of intertemporal glue. According to Eslava, Meléndez and Perry (2014), the involvement of the Private Council for Competitiveness in Colombia helped preserve the Productive Transformation Program in the transition from the Uribe to the Santos administration.

Finally, stability of personnel—subject to fulfillment of performance standards—is also required, at least for a core technical team and the essential components of the bureaucracy.⁶ Stability can be insured either by civil service regulations or by the specific bylaws of a particular agency. Stability of organizations and personnel is a key factor to elicit the investment in capabilities needed to adequately design and implement PDPs. If public officials know they will not stay within an organization for significant periods of time, they will not have incentives to invest in upgrading their capabilities.

3.4. Selecting and Empowering Credible Public Sector Participants to Convene and Engage the Private Sector

The willingness of the private sector to join and remain involved in PDP processes depends on many factors, but a crucial one is the selection of public sector participants. If those participants are credible and have authority over the resources required by the PDP, participation may be worthwhile for the private sector. In contrast, if the private sector believes that the public sector participants, because of their training, rank, or attitude, are not able or do not have the authority required to deliver their end of the bargain, collaboration often breaks down. The private sector is likely to conclude that the dialogue is a waste of time and will not make the necessary investments for public-private dialogue to yield results.

Involving “the highest possible political level,” however, is not appropriate or necessary in all cases. As Schneider (2013) notes, it all depends on the nature of the PDP and on where the authority to implement it resides.⁷ Having a president participate in a private-public national dialogue may signal to the private sector the high priority that the president assigns to the dialogue, but may also be an indication that both the process and the agreements reached will

⁶ In cases in which public officials interact with private actors, high rotation of public officials can be a powerful disincentive for the private sector to engage for at least two reasons: first, rotation may impose high transaction costs on the private actors, who have to explain the situation to the newcomers again and again; second, agreements reached with the public actor today may not be respected tomorrow by their replacements.

⁷ Naturally, participation in national strategic councils requires a different type of public participation than the implementation of a specific policy instrument.

only last as long as the presidential term.⁸ However, when productive development policy is really a top priority for the head of the executive, his or her engagement can be extremely productive, as shown by the experiences of the Republic of Korea and Singapore (Schneider, 2013).

A Solomonic suggestion would be to engage the lowest possible level of public authority with enough standing to convene the relevant parts of the private sector, and the authority to deliver on the commitments resulting from the public-private collaboration process.⁹ As will become clear, the standing and authority of the public sector participants will also be crucial to elicit inter-agency collaboration for “wide” policies, which involve a variety of public agencies providing solutions to private sector challenges.

3.5. Protection from Capture

Several features of organizational design can provide protection against private sector capture, although none are perfect. Full public access to the organization’s records, budgets, and actions certainly helps, as the organization will be under potentially detailed public scrutiny. Rules and restrictions on the policy instruments the organization is allowed to use can also help: cash outlays under bureaucratic discretion provide ample opportunity for capture and corruption. Programs designed so that only the “right” type of firms self-select into them—for example, with incentives valuable to these firms but not to others—may offer considerable protection from capture. For example, a corporate income tax exemption is valuable for a competitive firm that expects to make profits, but not for a non-profitable firm that seeks rents. Moreover, the revenue loss in the latter case would be zero, since a nonviable company would not pay corporate income taxes anyway. Programs may also rely on private sector agents to do the selection. This can be the case for incubator programs: under the right incentives, they will benefit from choosing the right firms and providing them with adequate services and will incur losses otherwise.

Good public sector career paths and adequate compensation packages (which may not be limited to cash benefits) may also help. If technocrats in charge of PDPs have short careers and

⁸ Moreover, if frequent and periodic meetings at the highest level are held on an issue that is not a high priority, the president or other high-ranking officials will begin sending delegates rather than attending the meetings themselves. Soon the private sector will follow suit, and what was meant to be a high-level political exercise will evolve into a low-level bureaucratic one.

⁹ Inducing changes in the behavior of the private sector requires more than just choosing the right public sector participants. Issues of policy and instrument design are essential, but this discussion focuses on organizational design.

their best employment opportunities after the public sector are jobs with the same companies that were under their jurisdiction, the temptation to be complacent with those companies is considerable. The temptation will be less if they have job stability, good career paths within the public sector, and incentives related to performance.

Corporate governance of the agencies in charge of PDPs may also mitigate the problem of capture. For example, including in the board of an agency private sector participants that have opposing interests vis-à-vis the beneficiaries—for example, because they compete for the same pool of resources—may partially address the problems associated with the public sector’s informational disadvantage. For a more detailed discussion of the role of corporate governance in protection from capture, see Box 1.

PDP institutions are also subject to capture by other agents, not just the private sector whose productivity they are supposed to promote. They may be captured by their own bureaucracies, by service providers, or by politicians that use them for clientelistic purposes. For example, Artopoulos and Navarro (2014) argue that to some extent science and technology policies in the region have been captured by the scientific community, which may prefer to research issues in which they are interested, regardless of whether they are useful to the private sector.

Box 1. The Corporate Governance of Executing Agencies

Do executing agencies need corporate governance? Or is it enough just to appoint a director who reports to the minister? When an agency manages substantial public resources aimed at addressing market failures and implementing the government's economic policy, a number of problems can arise. Under some circumstances, the agencies may be too focused on the interests of those they report to, and not enough on the real needs of the beneficiaries they are meant to support. On the other hand, concentrating solely on the demands of beneficiaries may also bring about problems. The agency could be captured by its beneficiaries, and, for example, provide excessive benefits, or avoid terminating a program that is ineffective or no longer justified.

Having good corporate governance can help executing agencies address these problems. It is important for executing agencies to have stable and credible corporate governance with representation not only from the authority under which they operate but also from the direct beneficiaries and society in general. Naming directors who represent the interests of beneficiaries to the board of directors of an agency contributes to reducing informational asymmetries between the agency and the beneficiaries, leading to programs that are more likely to be useful. Including directors who represent the interests of civil society beyond the direct beneficiaries—for example, from sectors that may be competing for the same resources—can help prevent the capture to which the agency may be exposed. More generally, it is important to have directors who are not directly related to the government of the day in order to ensure the consistency of the agency's actions over time, avoiding changes of strategy that are not justified by technical considerations with every change of government. This is especially important in areas that need more time to mature before generating results—a common characteristic of policies aimed at promoting significant productive transformation.

There are other problems that good corporate governance in executing agencies could help address. For example, an agency that designs the policy that it then implements will usually not be very inclined to evaluate its own performance, or do so with the necessary rigor. It will tend to conclude that its results were achieved efficiently and effectively. A corporate government that represents multiple interests, as suggested, can facilitate such evaluation. In addition, the design of the policy may be completely disconnected from what other agencies are doing or planning. This could well create serious problems of coordination when implementing

Box 1., continued

policies that overlap between various public agencies, leading to competition, duplication, and, ultimately, ineffective policies. In this case, having directors who are heads of related agencies can prevent the problem of duplication and help solve the problem of coordination between public agencies so prevalent in Latin America and the Caribbean.

For example, agencies involved in promoting basic science could have directors who are renowned scientists and academics, together with executive directors from agencies that promote innovation. Their boards could also include specialists in science and higher education, along with a representative from the private and business world. This diverse board could be chaired by the minister under whom the agency operates, either education or science and technology. Naturally, this board would select the director of the agency.

Protection against supplier and bureaucratic capture can be provided by mechanisms such that i) the program or policy is (at least partially) funded by the private sector it is supposed to benefit, and ii) the private sector participates in program or policy governance. Good examples are agronomic research funded by a self-imposed tax on producers, who in turn oversee how the funds are used, as is the case in some INTA programs, or tourism promotion in Costa Rica, funded by a tax on the industry, which in turn has several seats on the Costa Rican Tourism Institute's marketing board. Political capture may be mitigated by public access to information, for example with regard to the identity of the program beneficiaries and their geographical location (to prevent benefits that are concentrated in the jurisdiction of the relevant politicians), as well as the timing of support around elections. Involvement of strong, public-minded private sector organizations in the policymaking process—such as Colombia's Private Council for Competitiveness—may also mitigate political capture.

Finally, systematic program or policy evaluation can provide protection against all forms of capture. In the realm of social policy, Mexico's CONEVAL is responsible for coordinating and regulating the evaluation of national policies in support of social development. This federal agency has the technical capability and the autonomy to generate objective information, perform or contract rigorous evaluations, and in this way inform policymaking in the social areas. While CONEVAL sometimes supports evaluation in other sectors including PDPs, more systematic monitoring and evaluation of these policies would be a welcome development. Interestingly, the

productivity law currently being prepared contemplates a requirement to make PDPs subject to monitoring and evaluation, in particular those corresponding to the vertical/market intervention quadrant, in order to mitigate the risk of capture and rent seeking.

No manual exists on how to design an agency to protect it from capture because each case is unique. The examples just presented illustrate the range of issues to be considered, and thus can provide some guidance to policymakers engaged in organizational design.

3.6 Cooperation across Public Agencies

Public-public cooperation is a challenging issue in PDPs, particularly when policies are wide and many public agencies must participate and coordinate for policy to be implemented successfully.¹⁰ As discussed above with the example of tourism, the minister or public official in charge of the dialogue with a certain sector may be in a good position to assess the sector's public input needs, but may not be in a good position to deliver what is needed. In such cases, in order for the needed public inputs to be delivered, some mechanisms of coordination within the public sector need to be in place. But public-public cooperation is not easy. In general, those responsible for the management of public agencies involved in PDPs, from ministries to specialized agencies, do not have the right incentives to cooperate. Rather than solving other agency's priorities, they prefer to focus on their own and in fact the failure to coordinate within the public sector is often one of the most important obstacles to public-private collaboration and the successful implementation of PDPs.

Several organizational structures, discussed below, have been used to address this challenge.

3.6.1 Specialized Cabinets and High-Level Task Forces

One way in which countries have attempted to address the need for coordination across government agencies is by creating specialized cabinets. Mexico is a case in point. Recently, President Peña Nieto created five such cabinets, one for each priority of the National Development Plan. One of them, called "Prosperous Mexico," is the most closely linked to PDPs. The cabinet, chaired by the president but coordinated by the minister of finance, includes

¹⁰ The distinction between wide policies that involve many agencies and narrow ones that involve only one or a few should not be confused with the distinction between vertical policies that impact only a specific sector of economic activity and horizontal policies that impact all sectors of economic activity.

representation from 14 different ministries, as well as the heads of PEMEX, the Federal Electricity Commission and the Mexican Institute of Social Security, among other agencies. While it does not address all the problems associated with intra-agency coordination discussed above, the specialized cabinet does provide a space for the participating agencies to align their priorities and coordinate policy. The participation of the president, who actually chairs the higher-level meetings attended by the ministers, signals the priority he assigns to these policies.

While interministerial cabinets can sometimes help provide a cross-cutting vision of the needs of the productive sector, they are not always effective in solving coordination issues. The case of Chile and the Regional Productive Development Agencies (ARDP) program is illustrative in this regard. Initially, the program, whose objective is to promote a number of clusters in each region, was given a high priority by the government, as creating the ARDPs was a campaign promise that needed to be fulfilled during the president's first 100 days in office. Given the centralized nature of PDPs in Chile, the program design included an interministerial board at the national level to facilitate high-level policy coordination affecting the selected clusters. As it turned out, however, the national coordination unit barely met. When the ARDPs identify needed public inputs and request help from local representatives of the central level agencies, frequently the response is that they do not have the approval from Santiago to change their annual spending plans. Clearly, interministerial mechanisms are not the panacea, and they can only go as far as the political will behind them allows.¹¹

On occasion, rather than a specialized cabinet in charge of a specific policy area on a more permanent basis, a public sector task force can bring together members of a variety of public entities to collaborate on a temporary basis in a specific task. For these task forces to work, as in the case of specialized cabinets, a *primus inter pares* is usually required. This may take the form of the chief of staff or the minister of the presidency, or sometimes, a specially appointed minister, with full backing from the president to act on the task assigned, as the voice of the president and with the authority of his or her office. Without such full backing and

¹¹ Uruguay is another country with specialized cabinets. The "Productive Cabinet," which is composed of ministries that deal with the productive sector, includes the Ministries of Economics and Finance, Industry, Energy and Mining, Labor and Social Security, Livestock, Agriculture and Fishing and Tourism and Sports, as well as the Office of Planning and Budget. This cabinet oversees the sectorial councils, a group of 14 public-private councils charged with identifying obstacles and solutions to the development of these sectors. The productive cabinet, however, does not have a clear leader, does not meet very frequently, and has not been very effective as a mechanism for coordination.

delegation of authority from the president to the head of the council, these coordinating mechanisms are unlikely to work.

A good example is the case of Intel and Costa Rica. When the government decided to target Intel as a potential investor in Costa Rica, a task force was created that involved all agencies that would have an impact on Intel's decision and success; the president himself chaired it. After Intel set up operations in Costa Rica and the country's ability to host such a high-tech operation was established, the presidential task force was no longer needed. CINDE, the organization in charge of attracting FDI, has been able to pursue other high-tech multinational companies pretty much on its own.

Sometimes cooperation across agencies comes from informal mechanisms and geographical proximity. Recently, Argentina inaugurated the "Polo Científico Tecnológico," a series of buildings that resemble a campus to house the Ministry of Science, Technology and Productive Innovation (in charge of policy design), the National Innovation Agency for the Promotion of Science and Technology (executing agency), the CONICET (National Council for Scientific and Technical Research) , as well as a number of interdisciplinary international innovation institutes, including the Buenos Aires Biomedicine Research Institute, in partnership with the Max Planck Society. At the heart of the Polo is the restaurant, which provides a common space for policymakers, researchers and agency staff to interact informally, and develop the common vision and trust needed to enhance cooperation. Minister Barañao has credited this familiarity with important improvements in the design of policy instruments.

3.6.2 Matrix-Like Organizations

In a matrix-type organization, the vertical organization in charge of the PDP process has a budget to purchase services from horizontal agencies. For example, the ministry of tourism might purchase services from the ministry of transportation—such as a paved road, a water treatment facility, or an airport—or the minister of labor. This idea was proposed by Hausmann, Rodrik, and Sabel (2008) for South Africa. It gives the vertical entity extraordinary power to deliver on certain commitments, particularly those related to services provided by other public sector entities. It might also boost the interest and resources invested by the private sector in public-private collaboration, thus increasing the likelihood that such collaboration would be more fruitful. Within the region, Chile presents a case that is fairly consistent with these ideas. In

particular, the Ministry of Agriculture has an agreement with CORFO and Fundación Chile through which it “hires” these institutions, transferring financial resources in exchange for their role in implementing PDPs for the sector, which they engage in using their considerable expertise.¹²

Hausmann, Rodrik, and Sabel (2008) propose that rather than assigning a predetermined budget to each vertical agency so they can purchase services from other agencies, a single pool could be set aside with the portion of the budget assigned to this function. The vertical agencies would compete to finance their priority projects under a clear and transparent selection mechanism. While it may require significant changes in the budget procedures of the countries in the region, such a flexible arrangement would match well with the uncertain nature of PDPs.¹³

3.6.3 Public-Private Councils and Other Third Parties

Public-private councils have been a staple of the successful catch-up stories of economic development of the twentieth century, and play a very important role in many developed countries as well. Both the scope and depth of public-private cooperation within these councils can vary enormously, from economy-wide to sector-specific and region-specific, and from a forum in which the government informs the private sector of its policies to one in which in-depth information sharing, policy design, and policy implementation take place.

When broad in scope, these councils can help define the general framework of a country’s productive development or competitiveness strategy, ensuring some degree of coherence between the different policy components. If public participation is broad, these councils may provide a space in which those responsible for the different agencies can coordinate and find opportunities for collaboration. The private sector participants may also use these councils as a forum to access different public sector participants and express their needs.

¹² While not in the specific area of PDPs, the example of the Defense Logistics Agency is also a good illustration of this idea. The agency is responsible for providing supplies and services to America’s military forces worldwide, including food, fuel, medical supplies, and weapons. Interestingly, the DLA does not have its own budget to provide these services. The budget is controlled by the different branches of the armed forces, which can hire the services of the DLA, or choose to hire other logistics providers, if the DLA proposal is not to their liking (see Bilmes and Gould, 2009: 64–79).

¹³ Alternatively, priority actions identified during the year could be accommodated in the budget of the following year (see Hausmann et al., 2011).

When these councils are instituted in a permanent way, they also help provide policy stability beyond the tenure of a particular administration.¹⁴

Sometimes, coherence across organizations and across time comes from third parties, such as multilateral organizations that provide funding for programs and agencies, and nongovernmental organizations. They can also use their prestige as a force for persuasion and training to mid-level, nonpolitical bureaucracies. In Costa Rica, for instance, CINDE interacts with many public agencies that have an impact on trade and foreign direct investment, and helps provide both coordination and consistency to their actions over time despite not having any formal authority.

4. TOP Capabilities for Productive Development Policies

In addition to the creation of appropriate organizational structures, a second factor that influences the public sector's ability to design and implement successful PDPs is the availability of Technical, Operational and Political Capabilities, or TOP Capabilities for short. The presence or absence of capabilities is of great relevance for policymakers considering whether to adopt a certain policy. While organizational structures may be amenable to reform, when it comes to capabilities, policymakers often have to work with what they have; they can increase them over time, but only gradually. In this sense, capabilities may be the most important short-term constraint as countries transition to more complex and demanding PDPs.

4.1 Technical Capabilities

Technical capabilities comprise all the knowledge and expertise required to perform public sector tasks related to PDPs. This includes the ability to apply highly specialized, advanced knowledge to policy design and implementation, such as scientists working in technological institutes like INTA in Argentina or EMBRAPA in Brazil, or project evaluators in an innovation agency or a public development bank. Technical capabilities are in part determined by factors that affect the selection of personnel and their incentives to invest in their technical capabilities, such as agencies' recruitment and promotion practices, and whether salaries are competitive.

¹⁴ For more discussion on public-private councils, see Chapter 11 of IDB (2014), Chapter 11, as well as Devlin (2013) and Schneider (2013).

In many countries in Latin America and the Caribbean in which the pool of skilled public administrators is thin, some public agencies such as the Central Bank, regulatory agencies, the revenue service agency, the state development banks and other such organizations attract an important portion of the highly skilled personnel. This sometimes leaves agencies in charge of PDPs with relatively weak technical staff. In such cases, upgrading the capabilities of the staff through education, training and career development can be an important step.

When lacking personnel with adequate capabilities, agencies can sometimes use the capabilities of others. Placing some PDPs under the responsibility of public development banks may be a way to address this. Alternatively, some less developed countries have used the technical staff of relatively more developed ones. For example, Paraguay's Conacyt (the science and technology agency) uses staff from the FONDEF fund in Chile to evaluate their projects. Chile, in turn, used Younoodle, a California web-based company that specializes in scoring business plans, to evaluate projects for the Start-Up Chile program.

In some cases, more horizontal regional cooperation can help. PROSUR, a Regional Public Good project financed by the IDB involving nine patent offices in countries in Latin America, is an excellent example. It is not uncommon for foreign firms to want to register the same patents in multiple countries in the region. This implies replicating the due diligence on the patents up to nine times. Given the limited pool of technical experts who can perform this task in many countries, severe work overload is likely. The project generates a common platform such that, when the first office evaluates the patent, the results are made available to all of them. Countries are now working on establishing a single regional trademark system, so firms can protect their trademarks in many countries simultaneously.

4.2 Operational Capabilities¹⁵

Operational capabilities include managerial skills: that is, the ability to run an organization with high professional standards, efficiency, and results. They also allow an organization to set meaningful, measurable goals and evaluate its performance. They also involve the ability to create an environment within which policy experimentation, evaluation and learning is encouraged, and even required, including setting up appropriate incentives for staff to engage in

¹⁵ Care should be taken not to confuse “organizational structure” and “organizational skills.” The former refers to how organizations are structured, whereas the latter refers to what an organization knows how to do.

these activities, and the proper accountability mechanisms. Otherwise, agencies may become set in their way of doing things, even if not effective.

Operational capabilities also involve attributes that enable the organization to collaborate effectively with other relevant public sector organizations, as well as with the private sector. For example, for a PDA in charge of cluster development, operational capabilities would include the ability to effectively organize the engagement with the relevant private counterparts in order to lead a process of identifying public inputs needed for the development of the sector—as well as the obstacles that constrain such development—and the ability to elicit the cooperation of other relevant public agencies that may be critical for the delivery of required public inputs or removal of obstacles.

Some countries have interesting mechanisms to develop these skills, although not necessarily in the realm of PDPs. In the United States, for example, the terrorist attacks of September 11, 2001, brought into focus the need to break down barriers between the different agencies within the intelligence community (IC). In response to this, the Intelligence Reform and Terrorism Prevention Act of 2004 established the Office of the Director of National Intelligence (DNI), and authorized the director to prescribe personnel policies and programs applicable to the IC, recommending the creation of a joint personnel rotation system, and making “service in more than one element of the IC a condition for promotion to such positions within the community as the Director shall specify.” In response to this, the DNI, John Negroponte, created the Civilian IC Joint Duty Program, which established Joint Duty assignments in different agencies of the intelligence community, and issued a directive mandating a Joint Duty requirement for promotions to senior executive levels. The Joint Duty program creates cross-agency expertise, provides senior staff with a wider perspective on intelligence issues and fosters an environment of information sharing and interagency cooperation.¹⁶

4.3 Political Capabilities

Political capabilities include both the ability to secure political support to accomplish the mission and the safeguards protecting against political capture. They involve the ability to access, engage, influence and secure the support of the relevant authorities: a PDA may require cabinet-

¹⁶ In 2008, the IC Civilian Joint Duty Program won the Innovations in American Government Award by the Ash Institute of Harvard University’s Kennedy School of Government as a “key to improved national security” and an “innovative solution for improving cross-agency understanding.”

level support, a governmental program may require support from congress, and so on. In turn, the agency must create a supportive environment among key stakeholders and an effective constituency even as it exercises influence and leadership over key actors and stakeholders above and beyond formal authority lines.

It is also important for agencies to secure a long-term mandate and the institutional setting required to pursue it. For this, they must enjoy adequate and stable funding, merit based talent recruitment and personnel stability, protection from undue interference from short-term party politics, clientelistic pressures and various forms of capture, whether political, bureaucratic or from direct beneficiaries.¹⁷ Finally, entities must be able to secure the flexibility and autonomy required to engage in policy design and implementation discovery and adjustment.

Clearly, TOP capabilities are mutually supportive. For example, an entity with little political support will find it difficult to obtain the resources needed to recruit staff with high technical skills, and without them it will be difficult to become a legitimate actor with the private sector. Likewise, without a fluid interaction with private actors, a PDA will have trouble establishing a good support base, which in turn will undermine its capacity to mobilize other entities involved in public policymaking, limit its impact and further damage its reputation with private actors.

4.4 Assessing Public Sector Capabilities

How can the public sector or individual organizations within the public sector assess whether each one of their TOP Capabilities is high or low?

Direct measurements of TOP Capabilities, as defined, are not readily available neither for the public sector as a whole or for individual PDAs. Recent research by the Inter-American Development Bank represents a first attempt at direct assessment of them in selected PDAs.¹⁸ Meanwhile, some help is available from the sources discussed below.

¹⁷ These capabilities would be made possible by fostering transparency and governance structures that bring to bear the interests of all relevant stakeholders.

¹⁸ See the terms of reference for the IDB project Building Institutional Capabilities for Productive Development Policies. See <http://www.iadb.org/en/research-and-data/project-details,3187.html?id=3266>.

4.4.1 Assessment by Policymakers

A well-educated, benevolent policymaker (that is to say, one whose aim is to use PDPs to increase national productivity) will likely be able to form an impressionistic but well-informed evaluation of public sector capabilities. For example, does the agency of interest enjoy considerable independence from vested interests, or is it vulnerable to them? Is it efficient and professionally managed? Do the personnel have the knowledge and training required to deal with the task at hand? Does the organization or agency set for itself meaningful, measurable goals? Does it evaluate its own work, and does it take corrective action when it falls short of its goals? Outside experts—for example, from multilateral organizations—and counterparts in similar agencies in other countries could be used to assess an agency’s capabilities. Visits to state-of-the-art counterpart agencies in other countries can be another good way for managers to assess their own capabilities and capability gaps.

4.4.2 Indirect Measurements

There are numerous, albeit imperfect, international indicators of public sector capabilities readily available, such as the World Bank’s Worldwide Governance Indicators, the Public Sector section of the Country Policy and Institutional Assessment database, the Bertelsmann Stiftung’s Transformation Index (BTI), and the “Institutions” indicators of the Global Competitiveness Report. In general, these may be too broad, and may be useful only as a first approximation.

Berkman et al. (2013) have compiled indicators of policy features and government capabilities that may prove more directly useful, including indexes for policy stability (the extent to which policies are stable over time); adaptability (the extent to which policies can be adjusted when they fail or when circumstances change); coordination and coherence (the degree to which policies are consistent with related policies, and result from well-coordinated actions among the actors who participate in their design and implementation); quality of implementation and enforcement; and public regardedness (the degree to which policies pursue the public interest).¹⁹ They also include an index of bureaucratic quality, based on a series of institutional diagnostic studies conducted by the IDB in the region. Table 1 illustrates the values of these indicators for most Latin American and Caribbean countries.

¹⁹ This paper updates the policy indexes that were developed originally in IDB (2005).

Table 1. Key Features of Public Policies since the 1980s: Cluster Analysis

Country	Stability	Adaptability	Implementation & enforcement	Coordination	Public- regardedness	Bureaucratic quality
Argentina	Medium	Medium	Low	Medium	Low	Medium
The Bahamas	High*				High*	
Belize	High*				Medium*	
Bolivia	Low	Medium	Medium	Low	Low	Low
Brazil	High	High	High	High	Medium	High
Barbados	High*				High	
Chile	High	High	High	High	High	High
Colombia	Medium	High	High	Medium	Low	High
Costa Rica	Medium	High	High	Medium*	High	High
Dominican Rep.	Low	High	High	Medium*	Medium	Medium*
Ecuador	Low	Low	Low	Medium*	Medium	Medium
Guatemala	Low	Low	Low	Low	Medium	Low
Guyana	High*	Low*	Medium*	Low*	Low	Medium
Honduras	Medium	Medium	Medium	Low*	Low	Medium
Haiti	Low*	Low	Low	Low*	Low	Low
Jamaica	Medium	Medium*	High		Medium	High*
Mexico	Medium	Medium	High	Medium	Medium	Medium
Nicaragua	Medium	Low	Medium	Medium*	Low	Medium
Panama	Medium	Medium	Medium	High*	Medium	Low
Peru	Medium	Medium	Medium	Low	Medium	Medium
Paraguay	Low	Medium	Low	Low*	Low	Low
El Salvador	Medium	Medium	High	Low*	Medium	Low
Suriname					Medium	
Trinidad and Tobago	High		Medium*		Medium	
Uruguay	High	High*	High		High	Medium*
Venezuela	Low	Low	Low	Medium	Medium	Low

Source: Scartascini and Franco (2014).

Note: The policy Index was built including only those countries for which at most one of the components was missing.

*Countries missing half or more of the components of the given index.

While all of the indicators mentioned have been calculated for the public sector as a whole and based on answers to opinion surveys (and thus are not hard data), they do provide some guidance. For instance, one would be very cautious before recommending PDPs that require very advanced public-public coordination capabilities in a country like Bolivia or Guatemala, where the global Coordination and Coherence index is very low, without at least recommending additional measures to mitigate potential inter-agency coordination problems. Ongoing research (see methodology in Chrisney and Kamiya, 2011) is attempting to generate agency- and program-level indicators as well.²⁰

5. Different Capability Requirements for Different Policy Types

While each individual PDP has unique features, different types of PDPs can be broadly characterized in terms of the key public sector capabilities they require, or by the “relative intensity” with which they demand those capabilities. The following general considerations are useful.

- *Wide versus narrow PDPs.* Wide PDPs—that is, those that require the participation of many independent public sector organizations—pose considerable challenges for public sector coordination. Organizational features that facilitate cooperation across public agencies—such as a well-functioning matrix organization, or cross participation in agencies’ boards—and operational capabilities regarding public-public coordination—perhaps acquired by rotating senior staff through different PDA agencies so that they understand each other’s viewpoints and speak the same language, as in the example of the Joint Duty Program discussed above—will be particularly important. Narrow PDPs—which can be implemented by a single organization or a small group of organizations characterized by clear hierarchical relations—do not present this challenge.
- *Vertical versus horizontal PDPs.* All else equal, vertical PDPs face a greater risk of private capture than horizontal PDPs. Their benefits accrue to a relatively small

²⁰ These authors define desirable attributes for institutions and policy instruments and attempt to grade them according to their perspectives for creating effective and efficient interventions. The institutional attributes include coverage, coordination, efficiency, client focus, accountability, and learning. Each criterion is distinguished by a specific indicator (ranging from 0 to 2, depending on the degree of compliance or presence of the attribute), which can then be used to evaluate institutions. The focus is on benchmarking their performance and method of operation, rather than on explaining the conditions that allow them to act effectively and build the required capabilities.

group of beneficiaries and can be large, while the costs are often borne by the taxpayers, and are typically small per individual taxpayer. The results are concentrated benefits and widespread costs. Thus, beneficiaries may be able to appropriate funds for private benefit—without corresponding social gains—and without detection or opposition. Accordingly, technical skills to engage in a selection process with due attention to well justified criteria and organizational features and political safeguards that provide protection against capture by sectors with strong lobbying capabilities or political connections will be particularly important for vertical policies. Vertical policies are also likely to require in-depth, sector-specific knowledge and technical skills.

- *Avoiding capture of market interventions.* Market interventions may also be easy targets for capture, since they directly impact the firm's financial bottom line. This is true especially when interventions that can be justified on a temporary basis involve recurrent benefits; this creates incentives for the beneficiaries to lobby for continuous support, even after the rationale for intervention is no longer valid.²¹ The elimination of market interventions creates losers and, therefore, may be disadvantageous for political contenders. One-off market interventions such as installation subsidies to attract FDI do not pose a similar challenge. However, they may be demanding in terms of probity and technical skills (such as the need to identify the foreign investments worthy of support from a social point of view). Careful design can help avoid problems. For those market interventions that attempt to stimulate certain behaviors, capture is less prevalent in cases where, by design, only the firms that exhibit the sought-after behavior receive the benefits. For example, in the case of the subsidy to export pioneers proposed in Chapter 2 of IDB (2014), only the first exporters of a new product receive the subsidy, provided they have followers that benefit from spillovers. Thus, the design of the instrument constrains the scope for policymakers' discretion in selecting beneficiaries and for rent seeking by firms. In such cases, the design of the

²¹ In contrast, public inputs tend to be one-off interventions (such as passage of a law to safeguard intellectual property needed to develop the biotechnology sector, or the development of a new rice variety) or an ongoing response to permanent needs (such as the provision of phytosanitary services or the creation of an electrical engineering major in the public university). Thus, the temporal mismatch between policy justification and instrument does not typically arise.

instrument ensures that only the “right” firms self-select into the program, sparing policymakers the need to “pick winners” in a discretionary (and potentially arbitrary) way. Market interventions that involve discretion in the selection of beneficiaries require organizational features and political skills to protect against capture, insulating the decision-making process from undue pressures from both politicians and the private sector.

- *Removal of public “bads.”* In the case of public inputs, it is useful to distinguish between policies that remove public bads (such as cumbersome and unnecessary regulations) and policies that provide public inputs. Policies that eliminate excessive regulation are technically relatively easy, but frequently demand the coordinated participation of many independent public agencies. Coordinating such participation is not just a technical issue; it requires the proper political authority. Examples are the one-stop-shop policies to start a business that have been adopted in several countries in the region.²² Removal of public bads requires extensive operational capabilities involving public-public coordination and authority over other agencies.
- *Vertical public inputs.* In the case of vertical public inputs, two different stages may be distinguished. First, a decision—based on technical, and not political, criteria—must be made on which sectors to engage. Second, the main obstacles to the development of a sector must be identified, along with the public inputs needed to unleash the sector’s potential. This identification process entails the ability to convene the right actors in the private sector, and engage in a constructive dialogue to define a plan. As with other vertical policies, technical knowledge of the sectors involved is an important requirement. If the needed public inputs require actions by other public sector actors, they involve strong public-public cooperation capabilities, as well as an adequate level of political authority.

²² See Chapter 4 in IDB (2014) for an analysis of the impact of these policies.

6. From Best Practices to Best Matches: Public Capabilities and Policy Choice

PDPs are hard policies to execute and, to varying degrees, performance depends on capabilities and organizational strengths. How can institutions face the challenge of setting up a PDP portfolio?

In institutional reform projects in the developing world, as Andrews (2013) has argued, the prevailing practice is to identify “best practices” to deal with any given problem, and try to adopt them wherever they are required. At first blush, this seems to make perfect sense: if the “best” way to deal with a problem can be identified, it would be a waste of time to try to reinvent the wheel, and it would be wrong to settle for anything less than the “best” solution.

Recently, however, the notion of adopting “best practices” has been sharply criticized. For the purposes of this chapter, two main arguments seem particularly relevant.

First, if an organization is assigned a task that widely exceeds its capabilities, it may collapse under the strain, just as athletes attempting to lift too much weight before they are ready leave the gym injured, not stronger. Alternatively, an organization that receives funding that is conditional on adopting best practices may try to “go through the motions,” pretending to do something it knows it cannot really do, like an athlete that huffs, puffs, and groans loudly in the gym while actually doing very little work. This does not produce any gains, either. In both cases, lack of capabilities precludes success.²³

Second, policies are not applied in a vacuum, but rather in very specific contexts, rich in explicit and tacit “working rules” and behavioral norms that may differ from formal laws (Ostrom, 1990: 51). Local actors know these rules well and follow them, while foreign experts may find it more difficult to pick them up. It is the “tacit” part—the unwritten rules of behavior—that makes the adoption of what works well elsewhere so difficult. For example, “best practices” in a setting where behavior is based on mutual trust among policy participants will not work as well in a setting dominated by mistrust. From a slightly different (but not incompatible) perspective, Andrews (2013: 45) describes institutions as icebergs, “suggesting that a large part of any institutional logic is unseen or below the water line because it is informal—implicit, unwritten and seldom visible.” The difficulty of transferring “best practices” from one country context to another is that the informal, implicit, unwritten, and seldom visible elements of the

²³ The first case is described as “premature load bearing” and the second as “isomorphic mimicry” in Pritchett, Woolcock, and Andrews (2010).

institutional setup are practically impossible to replicate. Without them, supposedly “best” practices are unlikely to yield the expected results.

But what, then, is the alternative to “best practices?” The alternative is “best matches” between capabilities, policies, and productive policy goals. Of course, best matches must also take into account the institutional context. The argument in favor of “best matches” is as follows.

First, problems that require PDP solutions can typically be addressed through different policy instruments, not just a single one.²⁴ Each of these policy instruments requires different public capabilities to effectively design and implement them.

Second, the public sectors of different countries, and different public sector agencies within each country, are endowed with different capabilities for policy design and implementation. Some countries may have a deeper pool of people with technical skills. Others may find it easier to align political actors in order to ensure the sustainability of some policies over time, or have better ways to coordinate policies that require multiple agencies. Different agencies may also differ in terms of the capabilities they possess.

Third, and following from the first two points, the choice of policy instruments to be used to achieve broadly defined PDP goals should be guided by the best match between the capability requirements of those policies and instruments and the capabilities available in the relevant parts of the public sector.²⁵ Countries should assign responsibilities for the design and implementation of policies to agencies that currently have or are close to having the requisite capabilities for those policies. True, policies that are too complex to handle today may be within reach a few years down the road. In the short term, however, it may be wise to refrain from utilizing instruments that require capabilities that countries do not currently possess. More ambitious undertakings can be tackled later as the relevant capabilities develop.

This logic may lead to choosing policies and instruments that are relatively blunt or not the most efficient. Yet choosing less-than-ideal instruments that roughly match public capabilities may be preferable to choosing state-of-the-art instruments that the public sector is not ready to master and use. There are two complementary reasons for this pragmatic approach. First, if the instruments are less than ideal, but still useful, some progress will be made toward

²⁴ Rodrik (2007) has stressed the point more generally in his book *One Economics, Many Recipes*.

²⁵ Similar considerations apply when assigning specific policy instruments to specific public agencies, which also have different capabilities.

solving the problem that needs to be addressed. Second, by simply starting to do something about the problem, the public sector will deepen its understanding of the problem and increase its capability to deal with it. In the right context, this will lead to upgrades in capabilities and the ability to choose, or create, better policies and instruments.

7. Policy Learning and Capability Building

While policymakers should decide on the policy mix taking into account available capabilities, they should also be concerned with enhancing those capabilities over time. Just as countries can use existing productive capabilities as springboards to acquire new productive capabilities and change their comparative advantages, the public sector can also use their existing capabilities as a point of departure to expand them, thus allowing them to tackle more complex PDPs.

There is certainly a role for capability upgrading through traditional methods: personnel policies that attract the right talent, competitive salaries to retain that talent; promotion policies that reward performance and technical and managerial skills, rotation policies to encourage cooperation across agencies, and good training programs focused on required capabilities, among other possibilities. Improving organizational structures along the lines discussed in this chapter may contribute to upgrade capabilities as well. Countries should devote sufficient resources to capability upgrading. As important as these methods might be, however, the process of acquiring capabilities involves much learning by doing. In fact, as argued by Pritchett, Woolcock and Andrews (2010), it is in the process of identifying problems and learning how best to address them through iteration and adaptation that capabilities for policy design and implementation really develop. In other words, the same discovery processes that spark policy learning and improvement may also expand capabilities for policy design and implementation.

In line with these ideas, this paper proposes that policy learning and capability upgrading require three distinct but complementary conditions: an enabling environment; a sound method for improvement; and the correct set of incentives.

7.1 Enabling Environment

An enabling environment comprises a set of “minimum conditions” without which improving capabilities is simply out of the question, and a set of “desirable conditions” under which

capability upgrading may be easier. The lists provided below are meant only as a first step in exploring this question; they do not pretend to be exhaustive or final.

The *minimum conditions* are stability and flexibility. Stability (of policy, organization, and personnel) is needed because without it, learning—and therefore improving—is simply not possible; knowledge is not accumulated, but rather lost when policies change very quickly, organizations have short lives, and personnel rotates at high rates. Flexibility is needed because learning leads to discovering new things to do and new ways of doing them; an organization that discourages its staff from trying new things cannot translate learning into improved capabilities and performance. Table 1 shows which countries in the region have better indicators in terms of policy stability as well as flexibility (adaptability), and may thus offer more fertile ground for upgrading capabilities. A culture of monitoring and evaluation is also a requirement, since it provides a way for policymakers to derive lessons from policy experiences. An enabling environment for capability upgrading does not just happen by chance, but rather as a result of conscious decisions to provide such an environment, and requires substantial political support.

Desirable conditions include adequate resources; participation in knowledge and practice networks; access to training; qualified, highly skilled personnel who are encouraged to develop their own capabilities; and so on. An environment of trust, respect for the professional abilities of the personnel and a reasonable degree of autonomy from political pressure for decision makers at different organizational levels may also help, as well as systematic interaction with policy beneficiaries and other stakeholders.

7.2 A Method for Improvement

An enabling environment is not enough. Organizations need methods that create new knowledge and translate it into both policy improvement and capability. “Best practices” and traditional training have attempted to achieve these goals, but the results have been less than satisfactory. These disappointing results should not be grounds for discarding the study of successful practices or dismissing the usefulness of training and advanced education. However, a method for improvement should complement these efforts by incorporating other important features. Recent work by authors such as Sabel, Zeitlin, Pritchett, Woolcock, and Andrews (see references) has produced important insights on this issue.

Sabel and Zeitlin (2012) emphasize that the exact nature of the problems faced by the “street-level bureaucrat” or frontline worker of the public sector is often not known; when this is the case, the best way of solving those problems, given the particular features of each case, cannot be known *ex ante* at the central levels of any organization. Therefore, sufficient discretion must be granted to the street-level bureaucrat, but this discretion—which is to say, the ability to try new things or new ways of doing old things—needs to be integrated into a system that creates new knowledge and improved organizational performance. The bureaucrat can deviate from organizational norms, but the deviation needs to be justified, and the results evaluated. Within this paradigm, street-level bureaucrats must provide detailed information on what exactly was done, how it was done and why, as well as what results were obtained. In fact, accountability within this paradigm relates more to the proper provision of this information in order to allow joint learning, rather than to the actual effectiveness of the delivery.

This method of learning and capability upgrading typically involves not just one street-level bureaucrat delivering a service, but many, thus speeding up the joint learning process. As a result of what is learned, norms and instructions are adjusted, discarded, or created, and the cycle starts again. Within this method, which these authors call “experimentalist governance,” there is no clear separation between policy design and implementation. It is in the process of implementing that learning takes place, capabilities are upgraded, and policy design adapts. The program of Start-Up Chile discussed in Chapter 4 of IDB (2014) has some elements of experimentalist governance: the program was rolled out with a minimalist design and was adjusted on the go as learning took place.

Andrews, Pritchett and Woolcock (2012) have independently developed a method that shares many elements with Sabel and Zeitlin’s. They call their method PDIA: problem-driven iterative adaptation. The initial focus, they argue, should not be on some ready-made, imported “solution” (such as best practices), developed and applied in a different context, but rather on understanding the exact nature of the local problem. Then, different possible approaches to solving the problem should be outlined and tried out (perhaps simultaneously, if the policy is being applied at the same time in different regions, or to different groups of beneficiaries), and the results evaluated. Based on this, improved solutions can be tried or, if the problem has been solved, the next problem can be tackled. Iteration thus leads to adaptation, and the process begins anew. Moreover, it is in the process of solving specific problems that capabilities are

accumulated. The experimentalist governance and PDIA approaches apply to policymaking in general, but are especially relevant to PDPs, in which often the exact nature of the problems and the best way to address them are not known *ex ante*.

While these two groups of authors have developed their approaches independently, the similarities are obvious. The process outlined in what follows, inspired by their ideas, will be characterized as an EFA Cycle that begins with Experimentation, as in Sabel and Zeitlin (2012), ends with Adaptation, as in Pritchett, Woolcock, and Andrews (2010), and has a feedback loop in the middle.

7.2.1 Experimentation

In the words of American philosopher John Dewey, policies should be “experimental in the sense that they will be entertained subject to constant and well-equipped observation of the consequences they entail when acted upon, and subject to ready and flexible revision in the light of observed consequences” (Sabel and Simon, 2011, 78). Experimentalism does not necessarily call for formal, statistically meaningful experiments, but rather for a space in which different approaches to solving a given problem are allowed, and their results systematically evaluated. U.S. President Franklin Delano Roosevelt made the point even more forcefully in the depths of the Great Depression in 1932: “The country needs and, unless I mistake its temper, the country demands bold, persistent experimentation. It is common sense to take a method and try it: if it fails, admit it frankly and try another. But above all, try something” (Roosevelt, 1932).

While room for “trying out new things” might seem like a commonsense requirement in order to learn whether there are better ways to achieve current goals, or even to revise those goals, creating such room goes against the grain of the dominant paradigm in public administration in Latin America. Within this paradigm, desirable features for public service delivery involve clear, and ideally simple, rules and procedures, designed by technocratic experts facing well-defined problems that can be tackled with well-defined, known technologies, minimizing bureaucratic discretion at the point of delivery. Moreover, as noted by Aghion et al. (2010), in societies with low levels of trust there is a tendency to impose even more strict and detailed regulations on public sector actions as a means to stop corruption. While such strict, detailed regulations may help mitigate wrongdoing by public officials, they are exactly the opposite of what room for experimentation requires. But this is exactly what has happened in

many Latin American countries, where regulations and controls are increasingly abundant, and where the work of agencies in charge of them, such as Comptrolling Offices (*Contralorías*) frequently has a paralyzing effect on the rest of the public administration. This is, of course, not an argument against accountability and proper control of public funds. But controls and accountability could be more focused on policy outcomes rather than on red tape and procedure. In other words, there should less emphasis on ex ante control and more emphasis on ex post control.

7.2.2 Feedback Loops

The second component of the approach is the “feedback loop.” This is perhaps the most difficult component of all from a technical point of view.

The general idea is simple enough: in order to improve, an organization needs to obtain data that identifies things that work and things that do not work through “constant and well equipped observation of the consequences” of policies and projects (to use Dewey’s expression). But just identifying what has worked and what has not is not enough to improve performance: this information must flow back into the decision-making process in order to discard that which did not work, adopt that which has worked, and continue to tinker with it to make it better—hence the complementarity between feedback loops and experimentation.

In order to be useful for decision making, feedback needs to be received in a timely fashion. A comprehensive, rigorous evaluation of a program that is delivered years after program completion, while invaluable for learning about its impact and whether it merits continued support and replication, is of little use for policymakers involved in the program’s design. Thus, agencies need to combine more formal and time-consuming evaluations with provisional, impressionistic evaluations of what seems to be working and what is not, and equally impressionistic attempts at identifying reasons for this differential performance.²⁶ While the more formal evaluations are underway, they will have to do more of what seems to be working and less of what seems not to be working, and observe the results. They may resort in some cases to systematically trying out several different options, or “crawl the design space” (Pritchett, Samji, and Hammer, 2012): that is to say, to go back to experimentation, and to evaluate, at least informally, the results of different approaches to solving one particular problem.

²⁶ In some cases, feedback from users or beneficiaries might be crucial as well.

7.2.3 Adaptation

The ultimate goal of experimentation and feedback is organizational adaptation. The idea is not just to try out new things, and to observe and evaluate their effect. The idea is to use experimentation and feedback loops to systematically generate new knowledge, and to use this new knowledge to change organizations, policies, and practices: that is, to use this new knowledge to increase organizational capabilities.

This is possible, however, only if organizations have some flexibility. Without it, experimentation would not be possible, but even if it did take place, in the margins and under the radar, it would not lead to large-scale—and therefore visible—changes in organizational structure, policies, operating procedures, organizational culture, and accepted norms of behavior. The case of produce funds in Mexico, discussed in Box 2, is a good example of the EFA cycle at work.

Box 2. The EFA Cycle at Work: The Experience with Produce Foundations in Mexico

Promoting the use of scientific capacities to help small and medium agriculture producers is a sensible thing to do. In principle, it also appears to be a simple and straightforward policy: put some resources on the table and make an open call to the research community to present applied R&D proposals to deal with the challenges and opportunities that producers face in their localities. Sounds easy. But the experience of the Produce Foundations in Mexico highlights the unexpected complexities involved in moving from theory to reality.

The Produce Foundations were established in every Mexican state. Their purpose was to provide financial support to applied research projects that would address relevant local technological challenges in the agricultural area. The resources were assigned through open and contestable calls. Luring researchers to apply for the funds was not difficult. On the contrary, many proposals were presented. However, the managers of the funds began to notice that the projects were not really addressing the needs of the local producers, but were instead responding to the interest of the researchers. Although the terms of reference and the evaluation criteria were adjusted in successive calls, the research community still managed to stick to its previous agenda, finding creative ways to “camouflage” proposals so they would be eligible. After many trials, managers decided to radically change the operational model of the fund. Instead of waiting for the researchers’ proposals, they went to the communities and met with local producers and organizations to identify the main problems they faced; then they organized calls for R&D projects that would address precisely those problems. Resources were directed to pre-investment studies in order to assess the technological feasibility and the productive relevance of the challenges put forward by the producers. Obviously this also meant a profound change in the competence profile of fund personnel.

7.3 Incentives for Improvement

An enabling environment and a method for improvement are necessary but not sufficient conditions for capability upgrading. Somebody has to do the upgrading—so that somebody had better have a good reason to proceed with the always difficult and risky task of deviating from accepted practice and creating new norms and policies. The puzzle is still missing one piece: incentives and motivation.

On this issue the extant literature is divided into two conflicting strands. On the one hand, a pessimistic strand is associated with the public choice theory and part of the political economy literature, which views bureaucrats and politicians as pursuing narrowly defined self-interested goals, rather than the social welfare. On the other hand, Sabel and Zeitlin’s ideas on experimentalist governance as well as Andrews, Pritchett, and Woolcock’s ideas on “positive deviation” and “Problem Driven Iterative Adaptation” take a more optimistic view that, given the right institutional framework—which includes important elements of accountability—public servants will implement policy in the service of the general interest. In reality, both “public-minded” behavior and “self-interested behavior” occur, so perhaps the more interesting question is what prompts policy participants to behave one way or the other.

What prompts a bureaucrat to do his or her job well, to seek outstanding performance and great results? Several factors may come into play, including the following:

- Belonging to a prestigious organization—possibly one with high admission barriers, having a well-defined and attractive career path within the public sector and, perhaps after leaving it, in the private sector.²⁷
- Being part of a (possibly global) “community of practice” with well-defined standards of acceptable practice and quality.
- Prestige and community respect. This may be strengthened through formal recognition of extraordinary performance. The U.S. federal government, for example, has instituted the Samuel J. Heyman Service to America Medals, known as the Sammies, which have earned a reputation as the “Oscars” of public service.²⁸

²⁷ See discussion of “revolving doors” in Chapter 1 of IDB (2014).

²⁸ Interestingly, in many cases, Sammies have been awarded on the basis of achievements obtained through inter-agency collaboration.

- Having long enough time horizons for investments by bureaucrats to develop their own capabilities or those of the organization to have time to pay off.
- Salaries that are indicative of a high social valuation of the profession or activity, perhaps with a contingent component dependent on performance.
- Strong mechanisms of accountability.

7.4 Is Any of This Realistic?

The preceding subsections present an argument about the minimum institutional conditions required for upgrading the capability of the public sector. Whatever the theoretical merits of the approach, is it realistic to try to implement it (or something similar to it) in Latin America and the Caribbean. Doesn't "room for experimentation" open the door for arbitrary behavior on the part of public agencies? And isn't the idea of establishing feedback loops with empowered stakeholders embedded in the decision-making process just plain utopia?

No, it is not. Throughout the region there are many examples of PDAs that are engaged in experimentalism, learning from their policy results, with feedback loops that use this newly acquired knowledge to guide continuous processes of policy adjustment and capability upgrading. Fundación Chile and CORFO in Chile, CINDE in Costa Rica, the ANII in Uruguay, the Innovation Agency in Argentina, and the agricultural technology institutes in Argentina, Brazil, and Uruguay are just a few organizations that have, to a greater or lesser extent, carved out some room for experimentation, worked closely with the private sector, attracted and developed top-level talent, and created a strong organizational ethos of high performance and professional excellence. Some have dedicated units charged with implementing policy studies and carrying out impact evaluations, indicating a strong focus on learning and results, rather than on procedure and ex ante controls.

The case of INTA in Argentina illustrates some of these points. This institution has decentralized units deployed in the territory that function with a considerable amount of autonomy. It provides their staff significant discretion at the point of delivery and ample space for joint experimentation with the private sector. It also provides their staff with the right monetary incentives for discovery, which has produced very successful results. The development of new rice varieties discussed in Chapter 2 of IDB (2014) is a case in point. Not only did the experts at the local INTA unit come up with a variety well adapted to the needs of the local

growers in the Entre Ríos province, but in the process of solving this problem they also acquired world-class technical capabilities for rice technology that led to even more important developments down the road. In other words, their efforts to solve a specific local problem led to the solution of that problem, and the accumulation of further technical capabilities.

Even though these high capability organizations are not the norm, they prove that even in unfavorable contexts their creation is indeed possible. High-capability PDAs should be seen as potential “templates” to be used as guides in a more general effort to upgrade PDP-relevant public capabilities. Successful PDAs in Latin America should be treated not as irreproducible exceptions but rather as institutions deserving of careful study in order to identify the elements in their experience that can be used to guide a broader effort to create high-performing PDP institutions in the region. The IDB research project on “Building Capabilities for PDAs” aims precisely at this goal.

References

- Aghion, P. et al. 2010. "Regulation and Distrust." *Quarterly Journal of Economics* 125(3): 1015–49.
- Andrews, M. 2013. *The Limits of Institutional Reform in Development: Changing Rules for Realistic Solutions*. New York, United States: Cambridge University Press.
- Andrews, M., L. Pritchett and M. Woolcock. 2012. "Escaping Capability Traps through Problem-Driven Iterative Adaptation (PDIA)." Working Paper 299. Washington, DC, United States: Center for Global Development.
- Artopoulos, A., and J.C. Navarro. 2014. "La Política de la Política Pública en Ciencia, Tecnología e Innovación en América Latina: Modelo Conceptual y Casos Estilizados." Washington, DC, United States: Inter-American Development Bank. Mimeographed document.
- Berkman, H. et al. 2013. "Political Institutions, State Capabilities, and Public Policy: An International Dataset." Washington, DC, United States: Inter-American Development Bank. http://www.iadb.org/en/research-and-data/publication-details,3169.html?pub_id=dba-012.
- Bilmes, L.J., and W.S. Gould. 2009. *The People Factor: Strengthening America by Investing in Public Service*. Washington, DC, United States: Brookings Institution Press.
- Busso, M., A. Fernández and C. Tamayo. 2016. "Firm Productivity as an Engine of Saving." Technical Note IDB-TN-963. Washington, DC, United States: Inter-American Development Bank.
- Chrisney, M. D., and M. Kamiya. 2011. "Institutions and Productive Development Programs in Latin America and the Caribbean: Methodological Approach and Preliminary Results." Technical Note IDB-TN-305. Washington, DC, United States: Inter-American Development Bank.
- Devlin, R. 2013. "National Public-Private Economic Councils: Their Governance Matters." Washington, DC, United States: Inter-American Development Bank. Unpublished.
- Dinh, H.T. et al. 2013. *Tales from the Development Frontier: How China and Other Countries Harness Light Manufacturing to Create Jobs and Prosperity*. Washington, DC, The World Bank.

- Ekboir, J.M. et al. 2009. "Successful Organizational Learning in the Management of Agricultural Research and Innovation: The Mexican Produce Foundations." Research Report 162. International Food Policy Research Institute (IFPRI), Washington, DC.
- Eslava, M., M. Meléndez and G. Perry. 2014. "Public-Private Collaboration on Productive Development Policies in Colombia." Working Paper IDB-WP-479. Washington, DC, United States: Inter-American Development Bank.
- Franco Chuaire, M., and C. Scartascini. 2014. "The Politics of Policies: Revisiting the Quality of Public Policies and Government Capabilities in Latin America and the Caribbean." Policy Brief IDB-PB-220. Washington, DC, United States: Inter-American Development Bank.
- Hausmann, R. et al. 2011. "Construyendo un Mejor Futuro para la República Dominicana: Herramientas para el Desarrollo." Cambridge, United States: Harvard University, Center for International Development. Technical report.
- Hausmann, R., D. Rodrik and C. F. Sabel. 2008. "Reconfiguring Industrial Policy: A Framework with an Application to South Africa." CID Working Paper 168. Cambridge, United States: Harvard University, Center for International Development.
- Hsieh, C-T., and P. Klenow. 2009. "Misallocation and Manufacturing TFP in China and India." *Quarterly Journal of Economics* 124: 1403-1448.
- Kugler, A. 1999. "The Impact of Firing Costs on Turnover and Unemployment: Evidence from Inter-American Development Bank (IDB). 2005. *The Politics of Policies*. Economic and Social Progress in Latin America: 2006 Report. Washington, DC and Cambridge, United States: IDB and David Rockefeller Center for Latin American Studies, Harvard University.
- . 2014. *Rethinking Productive Development: Sound Policies and Institutions for Economic Transformation*. Development in the Americas Report. Washington, DC, United States: IDB.
- Melo, A., and A. Rodríguez-Clare. 2006. "Productive Development Policies and Supporting Institutions in Latin America and the Caribbean." Competitiveness Working Paper C-106. Washington, DC, United States: Inter-American Development Bank.
- Pascha, W., C. Storz and M. Taube, editors. 2011. *Institutional Variety in East Asia: Formal and Informal Patterns of Coordination*. Cheltenham, United Kingdom and Northampton, United States: Edward Elgar.

- Ostrom, E. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge, UK: Cambridge University Press.
- Pritchett, L., S. Samji and J. Hammer. 2012. “It’s All about MeE: Using Structured Experiential Learning (‘e’) to Crawl the Design Space.” CID Working Paper 249. Cambridge, United States: Harvard University, Center for International Development.
- Pritchett, L., M. Woolcock and M. Andrews. 2010. “Capability Traps? The Mechanisms of Persistent Implementation Failure.” Working Paper 234. Washington, DC, United States: Center for Global Development.
- Rodrik, D. 2007. *One Economics, Many Recipes: Globalization, Institutions, and Economic Growth*. Princeton, NJ: Princeton University Press.
- Roosevelt, F.D. 1932. Commencement address. Atlanta, United States, Oglethorpe University. May 22.
- Sabel, C.F., and S. Reddy. 2007. “Learning to Learn: Undoing the Gordian Knot of Development Today.” *Challenge* 50(5): 73–92.
- Sabel, C.F., and W. H. Simon. 2011. “Minimalism and Experimentalism in the Administrative State.” *Georgetown Law Journal* 100(1): 53–93.
- . 2012. “Contextualizing Regimes: Institutionalization as a Response to the Limits of Interpretation and Policy Engineering.” *Michigan Law Review* 110(7): 1265–308.
- Sabel, C.F., and J. Zeitlin. 2012. “Experimentalist Governance.” In D. Levi-Faur, editor. *The Oxford Handbook of Governance*. New York, United States: Oxford University Press.
- Sánchez, G., I. Butler and R. Rozemberg. 2011. “Productive Development Policies in Argentina.” Working Paper IDB-WP-193. Washington, DC, United States: Inter-American Development Bank.
- Schneider, B.R. 2010. “Business-Government Interaction in Policy Councils in Latin America: Cheap Talk, Expensive Exchanges, or Collaborative Learning?” Working Paper IDB-WP-167. Washington, DC, United States: Inter-American Development Bank..
- . 2013. “Institutions for Effective Business-Government Collaboration: Micro Mechanisms and Macro Politics in Latin America.” Working Paper IDB-WP-418. Washington, DC, United States: Inter-American Development Bank.

Spiller, P.T., E. Stein and M. Tommasi. 2008. "Political Institutions, Policymaking, and Policy: An Introduction." In: C. Scartascini et al., editors. *Policymaking in Latin America: How Politics Shapes Policies*. Washington, DC and Cambridge, United States: Inter-American Development Bank and David Rockefeller Center for Latin American Studies, Harvard University.