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The Organization of Public-Private Cooperation for Productive Development Policies

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Abstract*

Productive development policies (PDPs)—what used to be called industrial policies—are increasingly recognized as an essential part of the development toolkit, and the need for public-private cooperation is increasingly viewed as a key element for the successful design and implementation of such policies. If so, how should the cooperation be organized and how should the public sector organize itself to successfully participate in it? This paper suggests that public sector organization should be a response to three key variables: the scope of the PDP, the scope of the intended cooperation, and the organizational characteristics of the private sector. It further proposes the appropriate selection of public sector participants; the alignment of policy, political, and organizational time frames; the ensured quality of the bureaucracy; the protection against private and bureaucratic capture and against unbounded financial risk; and a reasonable regulatory environment of key elements for success.

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1 Introduction

> “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.” Franklin D. Roosevelt. Oglethorpe University Commencement Address, May 22, 1932.

How should the public sector organize itself to undertake public-private collaboration projects (PPCs) that lead to successful (i.e., productivity-enhancing and not merely rent-increasing) productive development policies (PDPs)? This is the main question addressed in this paper. For the sake of brevity, public-private collaboration for productive development policies will be denoted henceforth as PPC4PDP.

This paper approaches the question in two steps. Sections 2, 3, and 4 examine three preliminary issues: the scope of PDPs, the scope of the intended PPC, and the characteristics and organization of the private. Section 4 addresses the question of public sector organization, arguing that public sector organization should be designed systematically, taking into account the issues examined in the three previous sections, and it should address seven key tasks: ensuring appropriate selection of public sector participants, aligning policy and political and organizational time frames, providing protection against private sector capture, providing protection against bureaucratic capture, providing protection against unbounded public sector financial risk, and offering a reasonable regulatory and normative framework.

This paper proposes a systematic framework for the analysis of public sector organization. No formal hypothesis was tested to attempt to evaluate what works and what doesn’t in terms of public sector organization for PPC4PDPs. Given how idiosyncratic and context-dependent each experience is, such tests are of dubious value. However, case studies and recent work by the Inter-American Development Bank (IDB) on this subject have been examined with the aim of identifying key issues that should be addressed when analyzing public sector organization for PPC4PDPs.

The question is posed in terms of requirements, following the spirit of Rodrik’s *One Economics Many Recipes* (2007), definitive answers are not provided. There are many ways to solve any issue, as history, culture and institutions may call for different answers in different contexts. Through the analysis of key issues and bold experimentation, this paper aims to provide better answers.

2 The Scope of Productive Development Policies

Numerous classifications of PDPs have been proposed. Fernández-Arias, E. (2010:308) proposes a 2x2 classification matrix that divides PDPs into "vertical" (or sector-specific) and "horizontal" (or economy-wide) policies, and into "public input" and "market intervention" depending on the instruments used. Harrison and Rodríguez-Clare (2010) make a distinction between "hard" and "soft" industrial policy, which is roughly equivalent to the distinction between "market intervention" and "public input" PDPs. Hausmann, Rodrik, and Sabel (2008) distinguish between industrial policy "in the small," which aims at improving existing activities, and industrial policy "in the large," or strategic bets aimed at creating new sectors or activities in which a country may become competitive. Trejos (2011) groups PDPs in three "zones": a green zone of PDPs that should be pursued, consisting mostly of the provision of horizontal public goods and some "soft" vertical policies; a red zone of PDPs that should be avoided, comprising "hard," price-distorting market interventions, restrictive central planning and (generally but not always) direct government involvement in productive activity; and an "amber zone" of theoretically justifiable but practically hard to do right PDPs, particularly vertical policies subject to capture or hampered by lack of adequate information on the public sector side. This paper puts forth another, complementary way of looking at PDPs, according to their goals, grouped as follows.

2.1 Correcting Bureaucratic Failures

Many deregulation policies fall into the category of correcting bureaucratic failures, "reinventing government," red tape elimination projects, and the like. The starting point is the identification of (micro) government failures, or the "reengineering" of permitting, licensing, and other bureaucratic requirements (Krueger, 1990). This type of PDP could be considered "deregulation in the small." (Winston [1993] reviews deregulation "in the large" in the United States.) But small does not necessarily mean unimportant: entrepreneurship-stifling, useless cost-increasing, opportunities for corruption, and legal uncertainty can all result from poorly designed or poorly implemented bureaucratic procedures. Jiménez (2001) provides a detailed description of this type of reform in the case of Costa Rica.

2.2 Correcting Market Failures

Market failures have been the theoretical justification of public sector interventions since Pigou (1932) and they provide a theoretical justification for industrial policy in particular. Rodríguez-Clare (2004) has argued that productive development policies should be designed specifically to address two types of market failures that are important for the development process: externalities of discovery and coordination failures. The problem, in the first case, is that discovering new profitable economic activities entails costs but pioneers cannot fully appropriate the benefits of their discoveries, as Hausmann and Rodrik (2003) explain in detail. In the second case, the problem is that many simultaneous activities and public inputs may be required for a sector to realize "Marshallian externalities," and the private sector may not be able to solve these coordination issues by itself. Thus, Harrison and Rodríguez-Clare (2010) posit Marshallian externalities as the main theoretical justification for industrial policy, while the IDB (2012) illustrates their importance in a number of case studies in Latin America.

A more general case for PDPs can be made using the arguments presented in Hausmann and Rodrik (2006): given that any new activity requires sector-specific public inputs, some sort of public policy that goes beyond the basics of macroeconomic stability is always needed for an activity to emerge (or perhaps to grow) and function. In other words, some sort of horizontal or vertical PDP is always necessary for a market to emerge and an industry to flourish. This approach matches the ideas developed by Cimoli, Dosi, and Stiglitz (2009), who consider market failures to be generalized rather than exceptional (and hence not very useful as criteria to decide where governments should intervene) and who emphasize the idea that markets are always embedded in complementary, non-market institutions.

A third perspective is the "transaction cost" perspective (Coase, 1988): a transaction may not take place in the market because the transaction costs for private agents may make it unprofitable. Just as transaction costs make the firm a more efficient mechanism than the market for certain transactions, public policy may be a more efficient mechanism for certain decisions, which, in turn, enables the development of private firms and markets. This perspective is compatible with the view that posits coordination failures as the main justification for industrial policies. Coase (1988) is highly critical of the haste (or lack of research) that has led many economists, not the least of whom Pigou, to assume too quickly that there is a market failure and that such a failure is a prima facie case for government intervention. He shows that lighthouse services (often presented as an example of a public good that has to be provided by the public sector) have been provided on the basis of user fees, and argues that externalities are in some cases better dealt with using market mechanisms than government regulations. The creation of markets for carbon emissions is a leading example of the potential usefulness of this approach.

2.3 Creating a Market

In a world of complete and perfect markets, a "missing market" would be an imperfection to be corrected; if there are infinitely many missing markets and most of the existing ones are seriously imperfect, then "market creation" is more usefully thought of as a different kind of public policy. As Hausmann and Rodrik (2006) illustrate using the example of the real estate sector, public institutions are a requirement for markets to operate. Moreover, while some public institutions, such as well-defined property rights and a well-functioning judicial system, may have economy-wide effects, many public goods and services have at least some degree of market specificity. Hence, at least some potential markets may not exist because the specific market-supporting public institutions do not exist and the required public inputs are not being provided, while arrangements between private sector actors may result only in very limited or inefficient markets, or may not be feasible at all.

Intellectual property (IP) rights are a clear example of this: a complex public apparatus for registration, validation, and enforcement is required to create a market for intellectual property, and even a well-developed market for one type of IP. For example, patents protecting industrial inventions may be inadequate for IP in digital media, biological research, brand registration, and other activities. Carbon emissions, financial instruments, and cross-border energy trading are other examples of markets whose creation requires explicit public sector fiat. Similarly, markets for some financial instruments, such as futures and other derivatives, cannot pop up spontaneously, but rather require specific public actions for their creation.

2.4 Creating an Industry

Sometimes, it may not be sufficient for the public sector to provide the market-specific institutions and public inputs required for a market to exist and then assume that the relevant product or service will be offered by the private sector. Instead, it may be necessary—at least in the judgment of the relevant political authorities—for the public sector to jump in and create such an industry. This is what Hausmann, Rodrik, and Sabel (2008) have called industrial policy "in the large."

If a government decides to take this route, it can do so by creating a state-owned enterprise, in which case the undertaking would fall outside the scope of this paper because no public-private collaboration would be involved. But it could also do so by way of a strategic partnership with a private sector firm, or by acting in the role of a venture capitalist. These last two options are clearly of interest in this paper.

2.5 Changing the Course of Development

All of the cases discussed so far are presumed to have a somewhat limited focus: a particular market or industry is to be created or a well-defined set of market imperfections is to be corrected. However, more than a few PPC projects have been considerably more ambitious, aiming to change the entire path of a country's economic development. Some projects of this type have been extraordinarily successful, as in the cases of Korea and Ireland. The key is the scope and time horizon of the intervention. The goal is a radical, long-term transformation of the economic structure of a country.

Devlin and Moguillansky (2009; 2012; 2011) have studied several of these processes in detail and have derived both operational principles and pillars for their successful undertaking. Since this paper is concerned with narrower (and in most cases vertical) policies, the interested reader is referred to their work for further details.

2.6 Narrow Versus Broad Interventions

While the vertical/horizontal distinction is useful, the scope of public action required for a vertical intervention may encompass several line ministries and institutions (tourism development may require interventions by the Ministry of Education or a specialized institution in charge of training, the Ministry of Transportation, the Ministry of Finance, the Ministry of Health, and so on), while some horizontal interventions may require a more focused intervention (for example, the key to better contract enforcement may lie in better training of the judiciary and/or weeding out corrupt judges).

It seems useful to distinguish between "broad" and "narrow" interventions, which can in turn be vertical or horizontal. The latter distinction refers to whether the object of the policy is a particular sector, or whether it is meant to have a general impact on the business climate or the competitiveness of a nation. The former distinction is related to inputs: whether achieving the desired policy impact will require mobilizing a large swath of the public sector (be it the executive branch, decentralized institutions, or the legislature) or whether the policy goals can be achieved through the focused action of one or more public-sector organizations.

All other things being equal, the narrower the intervention, the greater the chances of success, as inter-institutional coordination is not usually the forte of the public sector. The binding constraints on economic development may call for broad rather than narrow interventions. Even in this case, narrower interventions that are more likely to succeed may be called for, as testing and learning grounds and for their demonstration effects, which may embolden both public and private sector actors to undertake broader, more ambitious projects.

3 The Scope of Public-Private Cooperation

In the traditional view of public sector interventions in the economy, as summarized inter alia by Joskow and Noll (1981), a public-sector entity, working with the goal of maximizing social welfare, identifies a market failure and then devises an intervention to correct that failure in the form of taxes, subsidies, price regulation, or other appropriate means. This view has come under criticism from many fronts, which can be summarized in a strand that begins with the regulatory capture theory introduced by Stigler (1971), and questions the assumption that public agents have social-welfare maximization as their objective function (Peltzman, 1989), and a second strand that points out that even if the public sector tried to maximize social welfare, it simply does not and cannot hope to have all the required information to design first- or even second-best public interventions to correct or compensate for market failures (Rodrik, 2008).

Given these difficulties, one possible answer would be that, to the extent possible, the public sector should abstain from market interventions in general and from industrial policy (or productive development policies) in particular. Another possible answer is to recognize, as Rodrik (2008) proposes, that the theoretical case for industrial policy is a strong one, and the difficulties and dangers of its implementation are no different than those observed in other areas of economic policy. The relevant question is how to design industrial policy in a way that increases social welfare, or, more narrowly, how to design and deploy productive development policies that result in increased productivity and not just privately captured rents.

In this paper the second perspective is assumed. Following Hausmann, Rodrik, and Sabel (2008: 2), it assumes that "neither economists and public officials, on the one side, nor private actors, on the other, know where the relevant distortions are" and that public-private collaboration is therefore a desirable instrument in the search for both the distortions (or development bottlenecks) to be addressed and the instruments best suited to address them. With this framework in mind, the rest of this section examines the scope of public-private collaboration in the design and implementation of productive development policies.

3.1 Consultation

Consultation may be considered the simplest and least demanding form of PPC4PDP, but depending on the design of the consultation process, its scope and depth, it may be politically and technically demanding. With respect to the depth of the consultation process, following Devlin (2013), there is a continuum that starts with "mere talk," progresses to "consultation" in which issues are discussed but the government then makes decisions on its own, and culminates in "dialogue," the goal of which is to develop a consensus among participants or, as Schneider (2010) more colorfully puts it, it ranges from "cheap talk" to "expensive exchanges" to "collaborative learning."

The scope of the consultation processes can also show considerable variation. Devlin (2013) and Devlin and Moguillansky (2009; 2010) focus on the development of long-term national development strategies. However, consultation frequently takes place on much narrower issues: adjacent-room consultations are common in the negotiation of free trade agreements, and vertically specialized institutions engage in different degrees of consultation with their constituencies. Schneider (2010) presents numerous examples of these narrower consultations.

Finally, the degree of institutionalization can range from formal councils, as in the cases of Finland, Ireland, and Singapore (Devlin and Moguillansky, 2010), to informal consultations without formal procedures or regular meetings, out of fear of capture, as in the case of Uruguay during the discussion of the Industrial Promotion Bill in 2007 (Barrios, Gandelman, and Michelin, 2010).

Given the wide variation along these three variables, there are no rules regarding the organization of public-private dialogues. However, several authors have proposed general guidelines that may prove useful in particular contexts. Herzberg and Wright (2006), for example, propose 12 good-practice principles, while Devlin and Moguillansky (2010) propose 11 principles for the development of public-private alliances. Rodrik (2008) has also proposed design principles for industrial policies that include public-private collaboration.

3.2 Joint Policy Design

With respect to collaboration in policy design, in a pure consultation process, by definition, the public sector "listens" to the private sector, but then goes away and makes decision by itself. Joint policy design takes the collaboration a step further, by involving the private sector in policy design, presumably under certain pre-established rules. What Devlin (2013) calls "dialogue" can be thought as straddling the divide between pure consultation and joint policy design.

Joint policy design can be undertaken for PDPs of any scope, but the challenges increase with the increase in scope: at the least ambitious end of the scale, there could be a joint public-private entity or deliberative council, such as the Council for Regulatory Improvement in Mexico, comprising representatives of the public and private sectors and academia (Arce, 2001), working on reduction of red tape in a particular industry or even a particular activity within the industry, that is, policies to correct bureaucratic failures. The differentiating element is that the private sector would not just be lodging complaints or raising issues, but would be actively involved in the assessment of the main problems and the design of possible solutions. This would require not just in-depth knowledge of the practical problems that they face, but skills that would enable the private sector to make technically sound proposals and evaluate those made by the public sector.

Other types of cooperation include the private sector, academia, and the government working together to design a research program aimed at increasing the productivity of a particular economic activity. Good examples are the public-private collaboration in the development of new varieties of sugar cane between private producers and EEAOC, an autonomous institution of the Government of Tucumán, in Argentina, documented by Bisang et al. (2012) and the collaboration between local producers, INTA (a public research institution), and a multinational corporation in the development of genetically modified rice, also in

Argentina, documented by Sánchez, Butler, and Rozemberg (2011). Another example is CINDE, in Costa Rica, a private organization that today acts as the country's foreign direct investment (FDI) attraction agency, but which played a large role in defining the country's FDI regime and laws over many years (Clark, 2001).

3.3 Joint Policy Implementation

Finally, the private and public sector may work together in policy implementation, through a variety of instruments and modalities.

- A public entity for the promotion or transformation of certain activities may be created with private sector representatives on its board of directors. Such is the case, for example, of the Costa Rican Institute of Tourism, an autonomous public institution, on whose board of directors industry leaders are always represented (Cornick, Jiménez, and Román, 2013)
- Mixed public/private entities may be created for similar purposes.
- Private entities may be entrusted with public policy tasks under some sort of agreement and perhaps with public sector representatives on their boards of directors, as is the case of Fundación Chile (Agosin, Larraín, and Grau, 2010).
- Mixed public/private task forces may be created, with periodic meetings and progress reports provided to the relevant public sector authorities.

Another possibility seems to operate in practice, if not in theory. Generally speaking, this paper is concerned with devising means to avoid private capture of PPCs for PDPs. But, while the overall process should not be captured, there may be cases in which a public entity is designed to be captured. In fact, the role of the entity may be to act as an advocate for a segment of the private sector within the public sector. This may be useful when the private sector does not have strong organizations and a strong voice, but if this is so, it should be clear and transparent. More importantly, other entities, with an eye on the bigger picture, should balance the influence of the sector-specific, captured-by design entity. In many cases, private-sector leaders who are expected to act as sector or industry advocates head vertical organizations within the public sector (such as the Ministry of Agriculture, Mining, and so on). In this case, for the process as a whole not to be captured, other public-sector participants must act as checks and balances.

A further reason for using public-sector advocates for private interests is that, depending on the issue, the government may not be able to commit the regular participation of high-level cabinet members in a particular dialogue, but it may be able to assure the private sector that the "vertical" minister will bring the sector's issues to each relevant "horizontal" minister, to decentralized agencies, and to the president or prime minister. The sector is thus offered a voice. This may not be all that is needed, but it could be a good start.

3.4 Monitoring and Evaluation

Regardless of whether the public sector merely consults with the private sector, engages in joint policy design, or engages in joint policy implementation, monitoring and evaluation is needed. On a technical level, evaluation requires, at a minimum, well-defined objectives and goals and ideally also well-defined impacts and quantitative instruments to test them.

On a political level, other issues arise. The first and most basic is whether there is monitoring and evaluation of policy progress and impacts. Many policies go on for years without any monitoring or evaluation of their effectiveness. The second question is whether the evaluation itself has any impact. If a policy or institution does not work, will it be closed and, if necessary, replaced by a new one, or will business continue as usual, rendering the evaluation useless?

The third question is who is in charge of the evaluation: the public entity in charge of the policy (likely to be biased) or a public or nonpublic third party. In either case, does the private sector have a meaningful participation in the evaluation process? Are other stakeholders involved?

All too often there are no clear goals or evaluation criteria for PDPs, let alone actual evaluations. Bisang et al. (2012) find few examples of in-depth evaluations of public policies in Argentina. Benavente et al (2012: 68) make a similar point regarding Chile: "One way to generate institutionality is through evaluations that can show the achievements and weaknesses of the policy and the mechanisms that are key for the outcome. This allows executors to directly improve on the weak areas in time and makes it harder to eliminate them for political-short run motives. Ideally, this evaluation process should be independent of the government, and could be conducted either internally or by an outside evaluator. In Chile such an evaluation mechanism does not exist in PDPs with relevant levels of PPC". Cornick, Jimenez and Román (2013) point out that the lack of evaluation mechanisms is a weakness in PDPs in Costa Rica.

4 The Organization of the Private Sector

How the government should organize itself to effectively participate in the public-private dialogue and then in the cooperative design and implementation of PDPs depends, in part, on the characteristics and organization of the private sector. This section presents a taxonomy. Here, "private sector" may refer to the whole of the private sector, or to a particular industry, depending on the context.

4.1 Before Collaboration Can Start

Collaboration presumes that there are at least two actors that might, under certain conditions, engage in fruitful collaboration. Public sector agencies seeking to engage in PPC4PPD may find that there is no counterpart ready to engage. At the most basic level, then, before the collaboration can start, the public sector may have to take an active role in creating or at least strengthening private sector organizations that can meaningfully engage with the public sector. As Rodríguez-Clare (2004: 9) states: "even the best-intentioned government cannot succeed without a collaborative and motivated private sector." Furthermore, "The government could also provide support to different sectors that want to start or improve their level of organization. This would be the first line of action in countries where private organizations are weak, or designed for rent seeking or confrontation rather than constructive work."

This step, however, is fraught with danger: namely, that the public sector will create or encourage a pliable organization that is dependent on and meekly follows the public sector. What is needed is something altogether different: an organization that gives an independent voice to the relevant producers, one that can truly partner with the public sector either to reveal information the government requires for well-designed, productivity-enhancing PDPS and advance the legitimate interest of its members, or to co-explore with the public sector new avenues for productivity enhancement. An "open architecture" (Hausmann and Rodrik, 2006), which encourages private sector organization and allows great latitude as to the specifics of the organization and self-selection of participants, would seem advisable.

4.2 Ideologically and/or Programmatically Cohesive or Fractured

It is important to determine whether the relevant segment of the private sector has a unified understanding of the problem and broad agreement as to the possible solutions. The broader the policy and the more sectors involved, the greater the likelihood that there will be disagreements, sometimes quite deep ones, giving rise to serious confrontations. Are local producers opposed to international or multinational producers? Are “services” and “manufacturing” in disagreement? Do regionally based business have a different viewpoint or different priorities than those based in metropolitan areas? Do different types of businesses have strong and diverging political party affiliations?

Behind all these questions is the suggestion that the private sector is not homogeneous, and firms across sectors and even within sectors may have different interests and, consequently, different policy preferences. As Pritchett and Werker (2012) note, that private sector firms may have divergent interests which are important to understand, as some of the elite may not be interested in inclusive growth. Schneider (2013), making a similar point on public-private collaboration for productive development policies, asserts that PPC and policy outcomes depend on the structure, capabilities, and preferences of the main business interlocutors. All of these issues should be carefully considered by the public sector as the PPC4PDP process is designed. In some cases, and notwithstanding the best efforts to keep the process under an open architecture, the government may have to pick sectors or actors, choosing those that may offer effective support for government policies. In other cases, it may be possible (or political reality may impose the need) to bridge differences and find compromises. The crucial point is that these decisions and strategies should be, to the extent possible, deliberate.

4.3 Oligopolistic or Atomistic Structure

The relevant part of the private sector for any PPC may be composed of many firms, none of which holds a dominant position either politically or economically, or a few firms may have control. In the second case, the few dominant firms may coexist with a large number of smaller firms, as is frequently the case in agricultural production, or it may be made up of only a few firms, as is often the case in some segments of the telecommunications market. Some of the ways in which the public sector organizes itself to design and implement the PDP in each type of market structure, and ways that the public-private dialogue is organized are described below.

4.3.1 Competitive Market Structure (many firms, none dominant)

In this case, it is unlikely that any one firm will yield significant political influence, and the risk of capture in the service of a few particular firms is minimal. Whether sector capture (the ability of a sector to impose policies that benefit it without increasing its global productivity) can occur will depend on how well the sector is organized and how the public sector has structured itself to avoid capture. But while the danger of capture is minimized if the public sector is faced with a competitive market structure, the difficulties of organizing the public-private dialogue, of having the private sector share in the costs of the policy, and of its engaging with the policy are maximized: information flows slowly, and the supply side of the policy may have difficulties finding the demand side. The degree of organization of the private sector will play a crucial role in either facilitating or hindering cooperation.

If this is so, it may be worth the government's time and resources, both human and financial, to actively promote the organization of the private sector. Where mere encouragement fails, chartered organizations, such as those proposed by Romer (1993), may be more effective: a small tax may be levied on the production of a certain good, the proceeds of which would go to a producer's organization, governed by a democratically elected body, bound by transparency and accountability rules. Since producers have to pay the tax regardless, they might as well express their views to the government. This is how organizations such INTA, in Argentina, work and how tourism promotion is financed in Costa Rica.

The implication is that, in addition to deploying a technical and/or political team in charge of the dialogue and collaborative policy design and execution, the public sector may have to create some sort of organization or team in charge of promoting private sector organization and developing the skills and human capital necessary to engage in a productive dialogue and policy implementation process. These two teams should be separate: one should be charged with helping the private sector conduct a self-assessment, articulate the issues, and propose solutions. The other should be in charge of arriving at negotiated agreements, taking into account not just the needs of the sector, but also the requirements for fostering a stronger, more productive economy.

4.3.2 Many Firms with a Few Dominant Firms

In this case, it may be easy to start a dialogue with the sector, which in reality is a dialogue with the dominant firms in that sector, which use the smaller firms as props to set policy parameters such that the benefits from the PDP are concentrated in the few dominant firms. This seems to be typically the case of price support policies. Price supports are set at a level that barely allows the least efficient producer to break even, but they create considerable rents for the larger, more efficient producers, all at the consumer's expense (Helmberger, 1991).

The challenge is how to make the voices of the numerous small producers heard. It is assumed that the optimal policy entails raising their productivity rather than easing them out of the sector, as sometimes happens. Once again, the government may do well by promoting the organization of small producers. A charter organization may work well, if places are reserved on its board of directors for small and medium producers and they are well organized, as in the case of ICAFE in Costa Rica (Cornick, Jiménez, and Román, 2013). Once again, two different teams may need to be deployed: one that promotes the organization, provides support, and acts as an advocate of the small producers, and another that promotes dialogue and policy efforts from the more general standpoint of the public sector and its policies. Needless to say, dominant firms will make every effort to be the dominant voices of their sector, and efforts to give voice to small producers will likely receive lip service from everyone, and stiff opposition in practice.

4.3.3 Oligopolistic Market Structure

This is the mirror image of the competitive market structure: organizing the dialogue and partnering for policy design and implementation are easier tasks in this case, but the probability of economically dominant firms also wielding political power is maximized. Hence, in this case, dialogue is easy, while avoiding capture is difficult. The internal organization of the public sector to avoid capture becomes critical.

4.3.4 Bringing in other Stakeholders

One possibility would be to include other stakeholders in the dialogue. If it is claimed that the activities of X will bring benefits to Y, and no harm to Z, it may be a good idea to include Y and Z in the dialogue. Academic organizations and NGOs may help provide a more balanced view than that which could be obtained from a more restricted dialogue.

4.4 High or Low Skill Level

Entrepreneurial, managerial and technical skills in the relevant industry may be high or low. In the first case, partnering, and thus the possibility of jointly identifying the obstacles to faster growth and the best ways to remove them, is highest. Chile, with its numerous and highly capable think tanks, is a good example of the difference that a knowledgeable, technically savvy private sector can make (Aninat et al. 2010). However, as a colleague, Ernesto Dalbó, pointed out after the completion of this paper, if the private sector's skills are so high such that the public sector cannot match them, the danger of policy being manipulated (captured) by the private sector increases. This is perhaps why, as discussed previously herein, the Uruguayan government decided not to have periodic, institutionalized consultations with the private sector.

On the other hand, if the skill set in the private sector is very low, the public sector is more likely to speak to the private sector than partner with it, at least until the skill set in the private sector improves. The danger is that the initial process of skill development may be guided more by bureaucratic than business-relevant criteria. The challenge for the public sector is to organize itself in a way that allows it systematically to receive business-relevant inputs and incorporate them in policy design and implementation by working with business leaders from more advanced sectors and with academic institutions and research centers with relevant experience.

Since a skeptical private sector may not be receptive to advice coming directly from the public sector, it is advisable to promote cooperation between the private sector and NGOs or academic institutions with the aim of developing skills independently. Funding may be a problem. Poor private sector organizations with rich member companies are quite common, but there are cases of well-funded think tanks and business chambers. How to solve the free-rider problem in the absence of a compulsory, tax-based scheme may warrant some study.

4.5 Organized or Not

To engage in PPC, the public sector needs an effective private-sector counterpart. In this regard, it is worthwhile to explore the following issues: the degree of organization of the private sector; the extent to which its organizations—chambers, associations, and the like—enjoy broad support and legitimacy; and the quality of the communication between these organizations, particularly umbrella organizations, and the firms. These issues are relevant to public sector organization, as the requirements needed to work with a well-organized sector will be quite different from those needed to work with a sector where the government will need to reach out directly to individual producers.

In Brazil, for example, business interests are fragmented and there are no all-encompassing umbrella organizations. Different business groups use different entry points into the political system, and no overall public-private collaboration takes place (Alston, et al. 2010). In contrast, in Chile, the corporate sector is well organized in business federations, which negotiate with the public sector on issues affecting their interests (Aninat, 2010).

The existence of strong, well-funded, sectoral or multi-sectoral business organizations does not automatically guarantee their social legitimacy. Large firms may feel well represented by these organizations, but at the same time a large number of small firms may feel, correctly, that they have little or no voice in the policy debate. Real-life cases are more nuanced, and government efforts should take individual differences into account.

4.6 Actual versus Potential

When the goal of a PDP is to create a market or an industry, the private sector that will eventually operate in that market or industry is, by definition, non-existent when the policy is launched. However, there may be private-sector actors that are suitable collaborators for the public sector. For example, a cross-border electricity market may not exist, so there are no exporters or importers of electricity. However, there will be regulators, producers, wholesalers, retailers, business consumers, and domestic consumers in all countries that wish to create cross-border markets, and they could be engaged in the PPC. By the same token, a country that decides to create an oil extraction industry where there is none, in a partnership of some sort with the private sector, could conceivable have a refinery already in operation, private importers and distributors, and businesses engaged in other extracting industries with relevant experience and/or technology. The private sector may not exist in the market or industry, yet there may be private agents and other stakeholders that possess relevant information. The government would do well to engage them in a PPC project.

5 Public Sector Organization for PPC4PDP

While an effort has been made to anchor the discussions in Sections 2, 3, and 4 of this paper in the empirical and theoretical literature, this section explores a subject that has been less studied in the context of productive development policies: public sector organization for PPC. The vast literature on public sector administration, performance, and reform provides useful insights into the organizational issues discussed in this section, but these insights have for the most part not been incorporated into the debate on industrial policy.

5.1 Selection of Public Sector Participants

Whatever the scope of the dialogue, joint policy design, or joint policy implementation, the relevant decision makers from the public sector must be involved, that is, those with convening power and sufficient authority to deliver on policy agreements reached with the private sector, or with enough leadership to influence the dialogue with other public authorities with a stake in the issues. Otherwise, the private sector will soon realize that it is simply wasting its time.

It is a common temptation to think that this means "the highest possible level," but this can be a mistake. If the intervention is of the "correcting bureaucratic failures" type, a high-ranking figure, such as the president, may be too far removed to provide anything other than a general mandate. Moreover, if frequent and periodic meetings at the highest level are held on an issue that is not a high priority, the 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. Including the highest-ranking authority may be justified in countries with weak institutions, where a presidential order is carried out immediately. Thus, the appropriate cabinet-level, or managerial-level officials should be involved. Schneider (2013) points out that having a president participate in a private-public 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 last only as long as the presidential term. The participation of lower-level but adequately empowered civil servants may be a sign of commitment and continuity.

The broad distinction presented earlier between "broad" and "narrow" PDPs may provide some guidance at this point: the broader the policy, the more likely that a high ranking official, with formal and/or informal authority over all participants will be needed. The opposite will be generally true of narrow PDPs. For example, a very narrow intervention may require statutory changes, which may not be feasible without the participation of leaders from the executive and legislative branches.

This apparently simple requirement may frequently demand the involvement of both vertical public-sector organizations (such as the Tourism Promotion Board) and horizontal ones. If this is the case, calls for inter inter-agency cooperation and coordination frequently are not heard, as the agencies themselves and their directors vie for power and influence. In this case, a clear line of authority is needed, whether formal or informal. A presidential chief of staff, minister of the presidency, or prime minister may be appropriate. There may be a *primus inter pares* among agents nominally at the same hierarchical level, or the relevant authority may name a champion who is not only in charge of the process but has real authority to lead it.

Finally, the relevant players for the "dialogue" component of the process may not necessarily be the relevant players for the "execution" component. To a great extent, this will depend on the structure of decision making and budget allocations in each case. The needs of a particular sector or cluster may be identified through a conversation led by an agency that acts as an advocate of the sector, even though it may not be able to deliver directly all of what the sector needs. There may be situations in which both the horizontal and the vertical agencies need to be involved from the very beginning, and in this case, someone has to have overall authority over the process.

The idea of a matrix-type organization has also been proposed, in which the vertical organization has a budget to purchase services from horizontal agencies (for example, the ministry of tourism may hire the ministry of transportation to build a road and an airport), an idea originally proposed by Hausmann, Rodrik and Sabel (2008) for South Africa. Where such an arrangement is feasible, it would give the vertical entity in charge of the PP4PD process extraordinary power to deliver on certain commitments, particularly those related to services provided by other public sector entities, even though this would not suffice when changes in rules and regulations are required. In many countries, however, the basic rules of the budgetary process are defined at the constitutional level or as part of complex legislation regarding the management of public finances, and this approach may simply not be feasible, regardless of its theoretical virtues. In this case, delivery of the appropriate inputs from a diverse set of agencies will depend on clear lines of real, as opposed to simply formal, authority within the public sector, at a high enough level so that all agencies can be made to adhere to the policy.

5.2 Align Policy, Political, and Organizational Time Frames

It is frequently argued that PDPs should be guided by a long-term national development or competitiveness strategy. This is uncontroversial and desirable, but it may also be completely unrealistic under certain circumstances. This is the case in situations where there is neither a strong social consensus nor a stable authoritarian government. Even when either of these conditions exists, the technical skills required for sophisticated, long-term development planning might not be present.

Moreover, while some issues demand a long-term approach, many others can be addressed with short-term solutions (even if it is hoped that small, incremental changes will have cumulative effects in a consistent direction). The proper time frame for each PDP is the result of a combination of political and technical conditions. The following discussion is organized in two broad parts: first, time horizons for "change of development path" PDPs are discussed, followed by other issue-driven time horizons.

5.2.1 "Change of Development Path" and Other Long-term Policies

If the issue at hand requires truly long-term PP4PD, as is the case with development path-changing policies, how should the government organize itself? The simple answer is: in such a way that long-term policy continuity is guaranteed. The more complex answer is to look at the conditions under which such continuity can be reasonably guaranteed. The following are three possibilities.

5.2.1.1 A Stable Authoritarian Regime with a Competent Bureaucracy and Well- trained Technocrats.

Under this scenario, the highest guarantees of continuity can be offered—until the regime ceases to be stable. In exceptionally well-managed processes, the "authoritarian" phase of cooperation, policy design, and implementation may eventually yield to democratic processes under the umbrella of strong national consensus on key development issues. This seems to have been the story of the most successful Southeast Asian countries.

However, these circumstances are exceptional—ineptitude and corruption characterize authoritarian regimes more often than not—and the empirical evidence does not support the hypothesis that authoritarian regimes, in general, lead to higher rates of economic growth. Rather, they exhibit higher growth volatility (Pritchtett and Werker, 2012). At any rate, one would not want to promote an authoritarian regime under any circumstances, so the question is whether such a long-term, comprehensive effort can be successful under democratic circumstances, and the answer is yes.

5.2.1.2 A Democratic Regime with Strong Consensus on Key Development Issues

Remarkable continuity can be attained under scenario two, particularly when participation of civil society organizations helps bridge the transition from one government to another. The consensus may result either in a dominant party remaining in power for long periods (more likely in a parliamentarian than in a presidential regime) or in alternations in power that do not entail great changes in national development strategy. In Europe, Ireland is an example of democratic, rather than autocratic, policy stability (Paus, 2005), while in Latin America, Chile is an outstanding example. In all cases, however, the economic crisis of 2008–09 has tested the consensus. In Ireland, it collapsed, and in Chile social tensions are evident.

5.2.1.3 Policy-specific Stability

Even in cases where long-term policy stability may not be feasible, it might be possible to attain policy-specific stability: that is, stability for a particular PDP. Two mechanisms may be useful tools to achieve such policy-specific stability:

- Special regimes or autonomous entities could be created within the public sector, as has been done extensively in Costa Rica (Cornick, Jiménez, and Román, 2013). The public sector could further credibly commit to policy stability by either entering into binding long-term agreements with the private sector, incorporating the private sector into the higher decision-making levels of special task-forces or autonomous entities, or assigning certain tasks and working in cooperation with non-profit private organizations. Examples include the collaboration between the Trade Ministry and CINDE in Costa Rica and between the government of Chile and Fundación Chile.

- Governments can signal their commitment to policy stability by entering into binding agreements with international organizations, in the context of multilateral development aid and/or loans, or trade negotiations, in which case bilateral agreements may be enough.

Additionally, there may be cases where a country reaches consensus on a particular policy, even if there are strong disagreements regarding the overall development strategy. Such consensus may be enough to guarantee policy stability on a particular issue.

5.2.2 Issue-driven Time Horizons

The nature of the policy may dictate the appropriate time horizon for PPC. For many issues, such time horizons could be relatively short—short enough in some cases to achieve significant results within the term of one government. The following are some general suggestions.

5.2.2.1 Horizontal and "Market-enabling" PDPs May Live Forever

Horizontal PDPs can be thought of as developing the institutions required for the efficient operation of markets, subject to social preferences on equity, equality, environmental conservation, and others. This is also true of the provision of public goods and services that are required for the creation and efficient operation of a market, even if those public goods and services are sector- specific.

From this perspective, well-justified, welfare-enhancing horizontal productive development policies (low cost, efficient contract enforcement, for example) and market-enabling policies (standards for approval and labeling of food products, for example) could, in principle, live forever, subject only to adaptation and learning requirements that allow them to respond to a changing environment. Policies that enable joint public-private cooperation in the discovery of new ways to increase productivity in existing activities or new productive activities into which the economy may diversify would also fall into this group of potentially permanent policies.

These types of policies could be undertaken, and gradually improved, under less restrictive conditions than path-changing programs: a country may gradually build and improve its road network, for example, without needing wide-ranging, long-term agreements on the grand design of its productive development policies. One road may by particularly valuable to exporters and another for producers for the local markets, but over time, a network that serves all major production centers and connects them to ports and airports can be built. Changes in government may imply changes in priorities without destroying what has been built before.

5.2.2.2 Sector-specific, Incentive-based Proposals Should Have an Expiration Date

Vertical, incentive-based PDPs (as opposed to market-enabling ones) should always die: an incentive-based vertical PDP that is required in perpetuity to make an industry viable is a failure; a PDP that can be dispensed with is a success. This is exactly what Rodrik (2004) intended when he suggested that incentive programs should always have sunset clauses.

This is the case because, if the goal of PDPs is to strengthen the productive structure of an economy, eventually the industry that receives the benefits from the PDP must be able to exist on its own. If sector-specific tax incentives are necessary for self-discovery, once a country discovers that it is good at producing x, then, after a while, it should become possible to produce x profitably without public support. The same is true for agglomeration externalities. As for coordination failures, for example between private firms and universities and other research centers, once a framework for collaboration has been established and successful cases have been developed, it should be possible for scientists, researchers, and entrepreneurs to organize, by themselves, profitable models for collaboration.

Note that none of the above implies that particular types of PDPs should eventually disappear: public intervention may be permanently needed to promote self-discovery. But once a sector has achieved self-discovery, policy support should move on to a new, potentially successful sector or activity: after some time, the country has to either discover that it is good at producing x and so the PDP is no longer required, or that it is bad at x, in which case the PDP can no longer be justified.

There is another reason why vertical PDPs should be temporary: the objective of PDPs is to increase productivity, induce self-discovery, and accelerate sustainable growth, not to offer permanent jobs for bureaucrats. A PDP that lasts forever offers bad performance incentives for the bureaucrats in charge of it as well as for the private sector actors that benefit from it. A PDP with a definite time horizon creates an incentive for good performance, insofar as this good performance has an impact on the career path of the technocrats in charge. If properly designed, it may send a clear signal to the private sector that aid is at hand for liftoff, but that perpetual, free, first-class tickets will be issued to no one.

5.2.3 *Implications for Public Sector Organization*

The first implication is negative: policies with horizons that are longer than the time horizon over which a reasonable degree of policy stability can be guaranteed should not be attempted. It is preferable to start small than to be grandiose and lose credibility.

The second implication is positive and general: to the extent possible, policy and political time frames should match: a 12-year program may have a better chance of success if it is broken down into three four-year phases (coinciding with presidential terms), each of which yields hard-to-reverse results while hopefully creating social and political support for policy continuity. While the point may seem obvious, in many cases over-ambitious assessment and planning efforts take the better part of the term of an administration, the end result being a multi-volume final report, quickly set aside by a new government with different priorities (if not with the urge to discard anything its predecessor might have worked on). The early stages of competitiveness strategies in Colombia are a good illustration of this (Meléndez and Perry, 2010).

A third implication, which is positive, specific, and perhaps controversial, is that vertical, time-constrained policies should be undertaken by temporary entities, not permanent ones. These ad-hoc, temporary entities could conceivably be nested within larger, permanent organizations, but should themselves be temporary, with clearly defined results-based goals. For example, if a task force for the creation of a biotechnology cluster is created, after a reasonable period, say five to eight years, one of three things might have happened: a) a dynamic, self-sustaining cluster has developed. In this case, the task force has fulfilled its mission as it is no longer necessary; b) a public-sector incentive-dependent cluster has been created. In this case, the program succeeded in creating private rents but not in the creation of a high productivity, dynamic sector, in which case it should be closed; or c) no cluster has been developed, in which case the program has been a failure, and it should be closed down.

It is possible that as the cluster develops, some services, either public or private, need to be provided on a permanent basis. This is likely to be the case with certifications of different kinds. These services would become part of the permanent public-sector organization, but a concerted PP4PD effort to develop the cluster would no longer be in place.

5.3 The Quality of the Bureaucracy

Just as it makes sense to line up the appropriate (not the highest-ranking) public and private sector representatives and to align policy, political, and organizational time frames, care should be taken to match the technical complexity of the task with the skill sets of the organizations, technocrats, and bureaucrats that will have the responsibility to support it. Best practices should be approached, with caution, both regarding normative frameworks and organizational setup. As Rodrik (2007) put it, "institutional innovations don't travel well"; thus, it should not be assumed that what works well in one country can mechanically be transplanted to another country.

Complex tasks cannot be entrusted to bureaucrats who lack the necessary skills. Good performance can hardly be expected if compensation is independent of performance. By the same token, the application of sound technical criteria cannot be expected if these are routinely overruled or if career advancement is predicated on compliance with political criteria. Government officials cannot be expected to stand firm in the face of undue pressure from rent-seeking private agents if costly legal harassment is the likely consequence. Finally, if corruption is the norm rather than the exception, the bureaucracy can hardly be expected to act according to welfare-enhancing policy design and objectives. In other words, a professional, highly skilled, and high-performing bureaucracy, properly shielded from undue political pressure and legal harassment, and reasonably honest, is a precondition for the successful PP4PD.

Lest the above requirements seem overwhelming and insurmountable for many developing countries, it is important to remember that just as stability requirements for successful PDPs may be policy-specific rather than apply to the whole policy making process, bureaucratic quality requirements may also be, at least to some extent, policy-specific. While "continents of bureaucratic excellency" would be desirable, "islands of efficiency" may do for many purposes.

It could be argued that a good-enough bureaucratic and technical core is needed for all public policy and action, and not particularly so for PP4PD. This is not the case: by definition, a PP4PD demands direct interaction between the public sector, not just in terms of permits, requirements, regulations, and red tape. It requires both sectors to work together, and the public sector technocrats that participate in the process will likely face top engineers, managers, entrepreneurs, and lawyers on the other side of the table. A good-enough bureaucracy becomes critical in ways that are vastly different from what happens in more routine public sector work.

5.4 Protection against Private Sector Capture

As the regulatory capture theory, pioneered by Stigler (1971), has persuasively argued, economic policy is always at risk of being captured by interest groups. Public-private collaboration in productive development policies may make such a risk particularly acute, and protection against capture should be provided. Here are four issues worth looking at.

5.4.1 Close the Revolving Door, but Provide a Career Path

It may be perfectly reasonable for the public sector to hire expertise and specialized, sector-specific knowledge originally developed in the private sector. However, if the career path of engineers, technocrats, and managers moving to the public sector naturally entails a quick return to the private sector, the integrity of their work in the public sector may be compromised. To avoid this, once the transition to the public sector is made, an attractive career path should lie ahead, and a cooling-off period, with adequate compensation, should be mandatory before public servants return to work for the private sector. Note that in the context of our discussion, this in no way prevents the public sector from mobilizing and using private sector knowledge, as, by definition, private sector representatives will be part of PPC4PDP. But they should be so transparently, in the condition of private sector representatives, and not through the back door, with public sector officials working with an eye on their next private-sector job, even while they are in office.

5.4.2 Ensure Transparency and Accountability

Informal consultations may in some cases be necessary, either as a preliminary step to more formal collaboration or as a complement to formal processes, but they only go so far. If the goal is to gain social legitimacy and turn PPC4PDP into a mainstream policy procedure, processes need to be open and transparent. Thus, well-known and publicized rules and procedures for participation in the dialogue and for receiving policy benefits are required. Crucially, legitimacy requires accountability: the results of the process should be evaluated, and the evaluation should not just be available to the public; it should be proactively presented to the public, with emphasis on key stakeholders, as well as wider audiences.

5.4.3 Other Incentives

This subsection is concerned with the impact of incentive packages, including but not limited to monetary compensation, on the likelihood of private sector capture of the public sector bureaucracy. Typically, salaries in the public sector are lower than salaries in equivalent positions in the private sector, and this would be fine (within bounds) if the complete, formal, and informal compensation package in the public sector were competitive. For example, the monetary compensation required to attract the required talent to the public sector is different if holding a public sector job is prestigious or if it is seen as a professional failure or likely the result of corruption. Public sector jobs tend to provide more stability and imply shorter hours than private sector jobs, and this may justify differences in monetary compensation. However, the overall package must be competitive if the public sector wishes to attract and retain the human talent it requires.

However, monetary compensation is just one part of the story. While issues such as motivation and corporate culture are hard to quantify, it is almost certainly true that young professionals, for example, would be more likely to join an organization where the entire body of professionals is highly motivated and skilled, thus making for a challenging and rewarding work experience, than one where the job is dull and the learning curve flat, even if compensation is higher. An organization that has a strong corporate ethos and whose members pride themselves on doing what they do and doing it very well faces different personnel recruitment and retention issues than one that is demoralized and where pessimism has settled among veteran staff.

5.5 Protection against Bureaucratic Capture

While private sector capture is an ever-present danger, and more so in a PPC4PDP context than in others, a well-funded program, supported by international donors and with compensation well above civil service norms (as may frequently be the case) is a tempting target for bureaucratic capture, under which the provision of well paid, stable work for consultants and/or permanent jobs becomes the main reason for the program's continuity. In what follows, some suggestions to minimize this danger are presented.

5.5.1 Outcome-oriented Evaluation: Culture and Means

Does the public sector in general, and the organizations in charge of the PDP under discussion in particular, regularly and periodically evaluate the outcomes of policy initiatives? Is there a feedback loop from evaluation to policy design and implementation? Do the beneficiaries and other stakeholders have meaningful participation in the evaluation? Or are public sector organizations rewarded if they spend their whole budget and punished otherwise, regardless of achievements? All of these questions point in the same direction: if public servants are paid for showing up rather than for producing results, they will certainly show up, but perhaps not much more. Things are worse, of course, if public servants are paid even if they do not show up (Pritchett, 2012).

If evaluations are not regularly performed, the capacity to perform them is most likely not present. Thus, developing information systems, evaluation methodologies, and feedback loops would be a prerequisite for results-oriented, evaluation-driven policy. Feedback loops are particularly important: if nothing happens after evaluations, whatever their results, institutions will pay no attention to them.

While self-evaluation has its value, external evaluation, with the participation of direct beneficiaries and other stakeholders, is a must if evaluation is to serve the purpose of improving policy performance.

Needless to say, evaluation of individual performance is just as important as evaluation of institutional performance. Just as in the institutional cases, information systems, evaluation procedures, and skills will need to be developed, even in some cases where performance evaluation procedures are formally in place but the evaluation is pro forma rather than substantive.

5.5.2 Incentive Alignment

In order to avoid private sector capture, incentives of public sector participants must be aligned, particularly the incentives of the bureaucracy, with the substantial goals of the PDP. This is of individual utility maximization to accept that people do respond to incentives (Coase, 1988).

In the context of protection against bureaucratic capture, we discussed PDP evaluation first, because without it, it would be difficult, if not impossible, to design a system of incentives for bureaucrats that matches PDP goals. (Well-defined and systematically evaluated PDP goals may also serve as protection against private sector capture.) However, once evaluation is in place, the problem of designing the right set of incentives remains. Moreover, different programs will call for different incentives. For example, in development banking or venture capital projects, incentives could be associated with the percentage of ventures (perhaps weighted by the amount of funds allocated to them) that are successful over a sufficiently long period. In FDI attraction programs, it may be feasible to define trends and reward performance above trends. Technical training programs may be evaluated in terms of the rate and conditions of employment of their graduates.

The main idea we are proposing is quite simple: if PDP results have no impact whatsoever on the welfare of those in charge of the policy, whether in the form of compensation, recognition, personal or professional pride, or whatever variables may be appropriate in a particular context, chances are that they will be indifferent to those results, and perform accordingly.

5.5.3 Transparency

Transparency (clear rules, well known by relevant actors; periodic reports on program performance, including costs, beneficiaries and results, etc.) as a way to shield a PP4PD against private sector capture was discussed above. Transparency also provides protection against bureaucratic capture, and for the same reason: it reduces the space for discretionary decisions and deals.

5.6 Protection against Unbounded Financial Risk

Once the public sector engages in a PDP, one of the risks it faces is that of facing demands for allocating more and more funds to it. This is particularly the case if the PDP is not successful, because admitting failure after spending a considerable amount of money might may be difficult and have serious consequences, and it is almost always possible to argue that whatever problems have arisen can be overcome by increasing the budget allocation. Hence, some sort of protection that sets limits on the public sector's financial risk is warranted. The following are some suggestions to limit and distribute this risk.

5.6.1 Explicit Budget Limits

While budgets are always limited, by definition, budget limits are not always explicit. This is particularly so when there is some sort of implicit public sector guarantee behind a program, as can easily be the case in banking-based programs. Moreover, the question of budget limits should not be evaluated over a fiscal period, but rather over the lifetime of a PDP. If $1 million is allocated to a program in year 1, will the allocation be repeated in year 2, regardless of results, and so on in years 3, 4 …n? The fact is that when a permanent public sector is created, it is highly likely that a permanent expenditure is also created. Hence, as proposed earlier in this paper, vertical programs should always be temporary.

In summary, explicit budget limits over the lifetime of the period, subject to renewal only under well-defined conditions, and with termination as the default option, will help ensure better execution discipline, will force explicit evaluations by those arguing for fund renewal, and will make it easier to discard programs that do not work.

5.6.2 Cost Sharing

Public servants always manage "other people's money." When private sector participants in PPC4PDP put some of their own money at risk, greater discipline with respect to project selection and program execution is likely to ensue.

5.6.3 Relevant Information for Decision Making and Feedback for Evaluation

While the mere perception of a problem or set of problems (x is the bottleneck that does not allow us to achieve y) may be enough to initiate corrective action, steady progress demands reliable information, and the government must be ready to provide it. If the government lacks credibility regardless of the quality of the information it provides, it must be ready to hire a credible third party to provide this information regarding the original problem (it may be misdiagnosed; the orders of magnitude may be incorrectly measured, etc.), the actions taken to correct it, and their result.

While this point may seem rather obvious, on a surprisingly large set of issues the information is not forthcoming, and governments do not have the technical capabilities to produce it on short notice. “Red tape is strangling the private sector” is a commonly heard complaint, but other than the information published in the World Bank’s *Doing Business* report, often there are no data on the time and costs involved in obtaining permits and complying with environmental, sanitary, labor and other regulations, and, as Pritchett (2012) has pointed out, the de facto and the de jure impact of regulations may be very different.

5.7 Regulatory Environment

If we assume that breaking the law is never a good idea—at least not in a democratic country ruled by laws—then the best efforts of politicians, entrepreneurs, technocrats, and bureaucrats to increase sector or economy-wide productivity will be defeated if the legal and regulatory environment is not minimally reasonable, stable, and coherent. Thus, while in most cases progress in PPC4PDP will be faster if all parties involved can carry out their tasks within the prevailing regulatory environment, changing the legal and regulatory framework may be the first task that has to be undertaken. This is especially true in “market creation” PDPs, where trading cannot take place unless a specific legal and regulatory framework is set up. Carbon emissions, cross-border electricity trading, and trading in various financial instruments were cited before as examples of this sort of situation. An example includes market liberalization programs, in which a competitive market is substituted for a private or public monopoly.

In cases such as these, the PPC becomes more complex: it is not sufficient to include the relevant public and private sector decision makers and stakeholders. It becomes necessary to get the congress involved (which more or less is synonymous with getting the key political parties involved). Failure to do this may result in proposals agreed by all participants, yet dead on arrival in the congress.

There may be exceptions: if the ruling party has airtight control of congress, the government-private sector dialogue may suffice. If there is a deep-seated social consensus on the issue at hand, the congress may acquiesce to the proposals even if it did not play an active part in their formulation. However, generally speaking, if changing the law is part of the program, engaging the lawmakers early in the process should also be part of the program.

6 Final Remarks

A growing body of theoretical and empirical literature indicates that active productive development policies are a necessary part of the toolkit that needs to be used by countries that are attempting to close the income gap that separates them from advanced economies. Public-private collaboration should be a central component of such policies, as neither the private nor the public sector possesses, by itself, the knowledge and capabilities required to effect the desired productive transformation.

If these premises are accepted, then how should public-private cooperation for productive development policies be organized, if the goal is to increase social productivity and welfare and not simply to increase the rents of the beneficiaries of those policies? And specifically, how should the public sector organize itself to successfully participate in such a collaborative effort?

The main suggestion provided in this paper is that public sector organization should be, first, a response to three key variables: the scope of the PDP, the scope of the intended PPC, and the organizational characteristics of the private sector. Second, the design of public sector organization should address the following issues:

- Appropriate selection of public sector participants
- Alignment of policy, political, and organizational time frames
- The quality and skills of the bureaucracy
- Protection against private sector capture
- Protection against bureaucratic capture
- Protection against unbounded financial risk
- Provision of a minimally reasonable regulatory environment

This framework will help practitioners systematically examine the design of the relevant parts of the public sector, as it engages in collaborative PDPs, and ask whether, given the scope of the PDP, the scope of the PPC, and the characteristics of the private sector, the seven items listed above have been properly addressed.

This is a guide for systematic deliberation. The exercise of discretion and judgment is required. Moreover, any answers developed at any stage regarding the required public sector organization should be regarded as provisional and subject to testing and adaptation. The spirit is that of "experimentalist governance" advocated by Sabel and Zeitlin (2011)his colleagues, or iterative adaptation, as proposed by Pritchett, Woolcock and Andrews (Pritchett, Woolcock and

Andrews, 2010; Andrews, Pritchett and Woolcok, 2012; Andrews, 2013). In that same spirit, the examination of the seven issues and the three key variables in this paper should not be seen as an attempt to come up with a definitive answer. Their usefulness remains to be tested in practice.

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7 Appendix: A Few Special Cases

While the main purpose of this paper is to identify key issues that should be considered in the design of public sector organization for PP4PD, it might be worthwhile to look more closely at some special cases that might be encountered in actual policy settings.

Special Case 1: Grand Dialogues

Grand dialogues (Devlin and Moguillansky, 2009; 2011), organized as open-ended processes to promote competitiveness and rapid economic growth based on a long-term strategy, have been the hallmark of some of the great success stories of economic development in the 20th century. Korea and Colombia are two examples. It is tempting to conclude that a comprehensive, long-term strategy is what is required. This is not necessarily so; several conditions must be in place for such a grand dialogue to be successful.

The first is either continuity in government (if it is an autocratic government, not subject to the discipline of elections) or a broad national consensus on the fundamentals of the strategy. Absent this continuity, the result of a large-scale effort to define a shared strategy might be frustration rather than accelerated growth, as a change in government brings about a change in strategy, and the effort expended up to that point may be wasted.

The second is a government with the technical skills and political authority to carry out the strategy—a political system that is conducive to effective and clear decision making, and a high quality bureaucracy capable of implemented the strategy defined at the political level.

The third is a good transmission chain from the dialogue and its participants to the political decision making apparatus. Although in a different policy area, the fiscal dialogue in Guatemala after the signing of the peace agreements illustrates the perils of a grand dialogue in which the public sector and key organizations of civil society, with a long history of conflict, engaged in a dialogue that excluded political parties, in a society in which the link between political parties and civil society organizations was weak. Against all odds, left- and right-leaning organizations were able to reach an agreement regarding the outlines of fiscal reform in Guatemala on both the income and the expenditure sides. The signing of the Pacto Fiscal was announced as a grand triumph, and indeed it was so. Alas, it went nowhere: the political parties represented in Congress did not feel bound by an agreement they had not signed, and fiscal reform is still pending in Guatemala.

In sum, without the three conditions just discussed, a less ambitious agenda may be warranted. Small confidence-building steps may be the way to jump-start the process, rather than more ambitious efforts that are likely to fail.

How might a government that wishes to engage in a grand dialogue, or a "change of development path" PP4PD, proceed if it finds out that it does not meet the three conditions enumerated? As a first step, the government should strive to provide credible data on key development issues, because without credible data a fact-based discussion cannot take place, and all that can be had is irreconcilable ideological or special interest-based arguments.

As a second step, a series of "issue clarification" dialogues could be organized, with no purpose other than arriving at a generally accepted set of basic facts and, hopefully, a common understanding of the situation. At this stage, neither a shared assessment nor shared action plans are to be expected. The issues to be discussed will depend on the particulars of each situation, as will the selection of participants (though the guidelines presented before might be of some use). The dialogue may bring together different regions of a country, small and large producers of an industry, industry and civil society leaders, and so forth.

As a third step, dialogues aimed at changing the legal and regulatory framework for a certain industry, activity, or cluster may be advisable for several reasons: in most countries, changing the law is difficult. Therefore, a change in the law is more likely to endure than one that is dependent on discretionary administrative decisions. Thus, it may be helpful to gradually create a commonly agreed and stable legal framework.

A long-term but regionally bound PP4PD may be the logical, most feasible next step.

Special Case 2: Sectoral Strategies

The biggest advantage of a sectoral, or a "vertical and narrow," PP4PD is that the number of relevant participants may be substantially reduced in comparison with more ambitious ("wide vertical" or "path changing") projects. It may be easier to find common ground, the decision-making process on the public sector side might be also considerably simplified, and it may be easier to obtain tangible results in the short term. Creating a good enough bureaucracy and a reasonable legal and regulatory environment might be, in this scenario, comparatively simple tasks.

For all of these reasons, "vertical narrow" PP4PD might be a good starting point for private-public collaboration, and should be part of the mix even in "path-changing" projects.

Costa Rica offers a few cases of successful sector-specific strategies that, nevertheless, have not worked as catalysts for further change in the rest of the public sector and in the country's overall productive policy. These focused strategies were built on top of islands of efficiency in the public sector, complemented by idiosyncratic private institutions playing a public policy role (namely, CINDE). The strategy focused on first on electronic components, then on services, and currently on services and medical devices. Intel put Costa Rica on the map (more or less as the Four Seasons Hotel has done for tourism) as an investment destination for high-technology investments. After that initial step, clusters have been gradually built in the three sectors just mentioned. These three sectors share certain traits:

- They can operate effectively within enterprise promotion zones (EPZ), which means that, rather than having to solve all of its infrastructure, regulatory, and red tape problems, the country has to solve those problems only for firms operating within strategically located EPZs. If bureaucratic requirements are such that setting up a firm and obtaining operation permits takes a long time elsewhere in the country, it does not matter as long as setting up and starting operations within an EPZ is a clearly defined and expeditious process.
- They all took advantage of the country's investment, in the preceding decades, in education, training, and language skills. Again, it did not matter, initially, if the country should have trained more engineers, or if it should have had a larger percentage of its population graduating from high school. What mattered was that, in the short term, Costa Rica had a high enough stock of these personnel to make it a competitive destination for this sort of investment, giving the country some time (and incentives) to increase the stock as the strategy unfolded.
- It demanded public sector (and CINDE's) expertise in the modus operandi and requirements of a few industries, rather than on a broad spectrum of industries.

The "island of efficiency" in trade and FDI attraction policies were made possible, in the first case, by special employment regimes, funded by external NGOs, and in the second case by CINDE. CINDE is a private organization, originally endowed by USAID, which works as a de facto public agency established to attract FDI but is not bound by the public sector's cumbersome operating procedures or by its compensation policies, which would not have allowed CINDE to recruit the highly qualified professionals it needs to successfully undertake its tasks. These are hard to replicate institutions. The "parallel public sector" has been closed down by a combination of law and a shift in public opinion that condemns these "off budget" arrangements. For Costa Rica and other middle-income countries, it is unlikely that foreign aid will be widely available to endow FDI agencies, and more unlikely yet that matching this foreign contribution, a public service-oriented, sophisticated private sector will be available to attract such FDI. If as a norm FDI agencies must be funded and staffed by the public sector, replication of the Costa Rican model in this particular aspect will be unlikely.

This targeted strategy took advantage of decades of public investment in education and training, including English language training. However, as Rodrik has reminded us, it is one thing to start a growth spurt and another to sustain it over time. At this time it is not clear whether the supply of skilled personnel (from bilingual call center operators assigned simple tasks, to complex tech support and information processing task assigned to engineers) will grow apace with the potential demand. Human capital may yet become the binding constraint for faster growth of high-tech and skill-intensive FDI in Costa Rica.

Special Case 3: Market Creation

Market-creating interventions are, by definition, vertical interventions whose purpose is the creation of a market where there was none. Nevertheless, they may require the intervention of several line ministries or other public sector institutions. To illustrate: creating a market in financial futures may require only the establishment of rules and requirements by the financial services regulator; in contrast, the creation of a regional energy market will require the utilities regulator to establish rules and regulations, but there will be no market unless infrastructure is built for energy transmission and distribution (which will probably bring several branches of the public sector into the picture, including those responsible for construction of the infrastructure, allocating contracts to private sector firms, and environmental regulation).

In this case, specific knowledge of the market that is being created and its regulation in those countries where it has been successfully created will be particularly important. Foreign expertise may be particularly important for this type of intervention: in a country where a market for a certain product or service has not existed, it is unlikely that experts in market structuring and regulation will be available.

The main question that needs to be answered is how the public sector should organize itself for a PP4PD when the goal is to create a market. In many cases, special legislation will need to be enacted for the creation of this new market. The public sector portion of this process cannot be made up of representatives of the Executive: the consent and cooperation of the congress will be required for the effort to bear fruit. Cooperation, consultation, information sharing and consensus building between the congress and the Executive should be part of the process's blueprint from the very start.

Even though there are no market participants at the starting point, by definition, there will be stakeholders: some agents will lose from the creation of the market, and others will win. The market-to-be may be empty, but potential market participants, both producers and consumers, may be identifiable. The public sector and should do three things, at the very minimum:

- Organize an internal process of consultation and consensus building between key public sector players, including representatives of the Executive, the congress, a legal advisory board, and entities that can provide independent and reliable estimates of costs and benefits.
- Obtain relevant expertise, including private sector expertise. In some contexts there may be resistance to bringing foreign experts to help decide a national issue; the fact of the matter is that the public sector will need technocrats with in-depth knowledge of the type of market that is being created.
- Engage in a consultation process with relevant stakeholders and potential market entrants.

In spite of the above, true PPC may be difficult to organize at the market-creation stage. Once the market is up and running, a more traditional PP4PD can be organized to improve the market and foster its productivity and growth.

Special Case 4: Industry creation interventions

While this is a "red zone" policy according to Trejos (2011), there are enough successful examples (along with some large-scale failures) of this type of policy to warrant consideration. These interventions are not designed to enable the public sector to own and operate a firm in an already established industry; rather, they are a set of actions by the public sector aimed at the creation of an industry that did not exist before, such as was the case of forestry, salmon, and blueberries in Chile or, it could be argued, international tourism in the case of Costa Rica.

Although they both had industry creation as the goal, the instruments used in the two countries just mentioned could not have been more different. In Costa Rica, companies outside the tourism industry were given a tax credit of up to 50 percent of the tax they would have to pay on profits on investments in the tourism industry. Overstating the investments could lead to an effective tax credit of 100 percent, so the investment was essentially free: the money that would have gone to paying taxes could be instead invested in a hotel, with an economic cost of zero for the investor. Any profits after that would be tax-free. All the risk was borne by the public sector, and investors were simply using taxpayers' money and pocketing any profits derived from it.

In Chile, the starting point was public sector ownership of firms that were later sold, at a profit, to the private sector. While it private financing could have been brought into the equation from the very beginning (for reasons already presented in the discussion of development banking), it is clear that in this case, venture capital skills are required, as the task is to raise money, start up, grow, and eventually sell a firm in a new industry. Such skills are not likely to be available within the public sector. Moreover, it might be advisable not only to bring venture capital skills into play, but also to create a non-governmental, mixed-capital organization, bound by venture-capital-like rules, to undertake this task.

Incentive alignment seems particularly important in this case: attracting top investment banking and venture capital skills to run such a project would require competitive compensation; every effort must be made to insure that compensation is dependent on performance. In this type of project, the public sector would take the initiative, but cooperation and partnering with the private sector would still have an important role to play, particularly in the design of the rules of the game, including rules regarding risk and cost sharing with those entrepreneurs that become the beneficiaries of venture capital investments.