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Dealing with Politics for Money and Power in Infrastructure

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Dealing with Politics for Money and Power in Infrastructure

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Abstract

Policy recommendations for infrastructure provision usually build on a well-established understanding of best practice for sector governance. Too rarely are they adapted to the country-specific political environment even if this is an area where policy choices are likely to be subject to private agendas in politics. The fact that such private agendas are often ignored goes a long way toward explaining why infrastructure policies fail and why best practice can be counterproductive. While non-benevolence and rent-seeking are well described in the literature and anecdotes abound, there is only limited consideration of how the different incentive problems in politics impede policy improvements in infrastructure. This paper addresses why politics in infrastructure cannot be ignored, drawing on theoretical results and a systematic review of experiences. It reviews how different private agendas in politics will have different impact for sector-governance decisions – and hence service delivery. The concept of best practice in policy recommendations should be reconsidered in a wide perspective and allow for tailored solutions based on an understanding of the given incentive problems. Policy recommendations should take into account how coordination trade-offs may complicate efforts to reduce the possible impact of private agendas on infrastructure policy decisions. While more transparency linked to service delivery indicators is a "safe" recommendation, it is also clear that the demand for good governance will not be sufficient to secure political accountability in a sector with huge vested interests combined with complicated funding schemes and complex contracts.

[1] Daniel Benitez, World Bank; Antonio Estache, ULB - Université Libre de Bruxelles and ECARES–European Centre for Advanced Research in Economics and Statistics; and Tina Søreide, World Bank. We are grateful for review comments to this paper. In particular, we would like to thank Pedro Antmann, Jean-Jacques Dethier, Marianne Fay, Luis Guasch, Clive Harris, Kari Heggstad, Phil Keefer, Ivar Kolstad, Atsushi Iimi, Stuti Khemani, Marisela Montoliu Munoz, Jordan Schwartz, Francesc Trillas and Liam Wren-Lewis.

1. Introduction

Despite the very clear evidence that a well-functioning infrastructure system is needed for economic development, there is substantial variation across countries in infrastructure supply and quality. Many researchers blame lasting differences in the availability and quality of basic infrastructure services like roads, electricity, and water for a large part of growth divergences.[2]

The failures or limited successes of previous approaches to make systemic and lasting improvements in service delivery continue to fuel debates on how the infrastructure sectors can best be organized and regulated. To a large extent, the challenge stems from two basic observations: there are many options available, and none seems to work universally. For each sector, there are alternative market structures alternative forms of ownership, different contract arrangements between the various actors, various allocations of responsibilities, and alternative institutional arrangements for regulation. Picking the right combination of these various policy options has proved to be an overwhelming challenge for many policymakers.

Choosing between competing policy options can be particularly difficult if those involved in infrastructure politics have multiple goals. There is a crucial political dimension to decisions about infrastructure that tends to be underestimated in much of the advice given to governments. Each country has different initial conditions and reasons to choose a given policy combination. Moreover, within each country, different politicians and their constituency may have different perceptions of the ideal policy combination—and in particular, the role of the state in the sector. These differences across countries will often come into play in regulated industries like water and electricity utilities, ports, toll roads or airports, where services are so essential, while the risk of market failure is high.

This paper addresses governance failure as a likely explanatory factor behind unsuccessful infrastructure policies and weak sector performance. Certainly, we recognize the fact that politicians will generally make sector decisions in line with strategies for better sector performance for the benefit of the society. When sector performance is weak, there can be numerous legitimate explanations–including institutional capacity constraints. This paper, however, zeroes in on the ways that sector politics may be biased, and often rendered ineffective or even result in perverse outcomes, when policymakers have personal motivations that constrain their focus on welfare for the society as a whole. Empirical information about the nuances in such political distortions is close to nonexistent, although the intuition about the resulting biases in sector governance can be very clear. Based on such intuition, literature reviews, and experiences in the sectors, this paper explains how infrastructure reform is exposed to political distortions and discusses how these insights can render policy choices more realistic and effective.

The focus of this paper is not the politics per se, but rather the outcomes of infrastructure decisions that matter for growth and poverty reduction. In this context, political incentives matter only insofar as they substantially impede outcomes and lead to weaker service delivery. Better understanding of the political realities may result in more realistic performance targets and provide country-context guidance for "second best"— deviation from more standardized "best practice" in policy recommendations to "second best" outcomes.

Understanding decisions to deviate from best practice driven is not straightforward. Such choices will always demand a more comprehensive appreciation of the given country context at the specific time when a diagnostic is being conducted. Real life choices often require arbitration across conflicting recommendations from theory and best practice. Relevant research has been carried out to understand the politics behind sector regulation in social science, but hardly any research has focused on infrastructure specifically and hardly any builds on the recommendations in regulation theory.[3] Rather than presenting results, this paper proposes a research agenda.

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[2] See, for instance, Estache and Fay (2010) for a survey of articles investigating the impact of infrastructure on growth and development (and Straub (2008) for a focus on the growth impact.

[3] For more discussion, see Keefer and Kemani (2004); Mehrotra (2006).

The next section explains the difference between *market failure* (which legitimizes regulatory interference) and governance failure (on why optimal solutions for sector governance have not been implemented), while clarifying connections between political distortions, framework conditions for the sector—and hence sector performance. Section 3 explains how the most common private agendas in politics will tend to influence sector decisions in infrastructure. Implicitly, this section points at how political incentive problems can be revealed and why they need to be addressed—or at least considered—when recommending a policy for sector governance. The intrinsic challenge of actually addressing accountability problems is addressed in Section 4. Based on these discussions, Section 5 lists standard policy recommendations for infrastructure governance and discusses their exposure to different political distortions. Several innovative initiatives for better sector performance seem promising to reduce the consequences of a weak welfare-focus in politics. Conclusion follows.

2. From market failure to political failure in infrastructure

The (informal) limits to the ability of governments to deliver in their efforts to correct market failures in infrastructure highlight the political economy of reform as a central policy issue. The case for accountability in sector-specific governance is clearly a cross-cutting issue closely linked to accountability at the top political level. This paper addresses policy choices and implementation in the sector and how accountability can be addressed from a sector-perspective.

2.1. Why don't governments fix market failures?

At the very basic level, the case for government intervention in infrastructure is generally well recognized and understood and stems from the existence of well-documented market failures in the sector (scale effects, provision of essential services, investment risks). Theory also tells us that governments can react to market failures with a menu of instruments, including price and quantity regulation, taxes, subsidies, assignment of property rights or simply by taking over a firm or a sector.[4]

Evidence, however, suggests that governments are as likely to fail as markets. Multiple goals in politics and the lack of capacity in design and enforcement of policy tools are among the reasons, as discussed. Undeniably, however, the risk of failure is also closely linked to the ways civil servants and politicians responsible for fixing market failures in the sector are disciplined with checks and balances and democracy. Infrastructure investment—particularly in Africa—is often much slower than demanded by populations and expected by donors; see the result of the recent AICD study,[5] for instance, or Estache and Wodon (2005) – while Keefer and Khemani (2003) point at how democratization has failed poor voters in many developing countries. Infrastructure pricing policies in Latin America have tended to be much more regressive than claimed by public and private providers (Foster, Estache, and Wodon, 2002) and subsidies in the sector have often failed to reach those who need it most and helped instead those who need it least (Komives et al. 2005 and 2007 or Bacon and Ley, 2010). Private agendas behind sector-specific governance put the effect of policy choices and huge investments at risk. Even if difficult in practice to distinguish between benevolent and non-benevolent distortions in politics, the latter category will also have to be addressed.

Indeed, with huge budget allocations, public good characteristics, the essential value of the services, complex contracts, and opportunities to hide corruption, the infrastructure sectors are among the more exposed sectors to biases at the political level.[6] These facts make it quite likely that distortions in politics can be part of the explanation of performance failures. This is why researchers and practitioners alike argue that *governance failure* in the sector should be central to any assessment of the sources of

[4] See Laffont and Tirole (1993) and Armstrong and Sappington (2006, 2007) for an overview of regulatory approach on fixing market failures in infrastructure industries.
[5] See Briceño-Garmendia, Smits, and Foster (2008).
[6] For reviews of corruption in utility provision, see Boehm (2007); Kenny and Søreide (2008); Estache (2009).

performance failures. Governments may not be as benevolent as textbooks and standard policy recommendations imply.

Users and voters increasingly seem to agree with that diagnostic since weak performances are starting to impose political costs. Indeed, there are cases where weak infrastructure performance triggered electoral discontent and the incumbent regime has been sanctioned. Power outages in Argentina at the end of the 1980s offer just one example, cited as part of the social discontent with the incumbent regime. Similarly, the concession of water provision in La Paz/El Alto, Bolivia, seems to have been originally well-defined and implemented, although the outcome was different in practice, leading to riots in the street and the government settling back the concession.[7] Mali, Mexico, Tanzania, and many more countries have experienced some form of crisis due to high prices or shortage in infrastructure provision which have been widely covered by the press and other opinion makers. Just "Googling" water or energy crisis in these countries provides a plethora of anecdotal evidence. Some of the cases resulted in changes of governments.

Political costs and governance failure naturally lead to the question of accountability in infrastructure politics. Incentive problems may encourage deviation from what is assumed to be the most welfare-enhancing strategy, and this impedes sector performance. The literature recognizes different ways in which the need for policy intervention can be misused for private agendas in any sector. With direct relevance to infrastructure, Stigler (1971) asks rhetorically "who will receive the benefits or burden of regulation"—and points at the importance of analyzing not only the need for intervention, but also considering the incentives of those in position to "demand regulation." The public choice literature, public economics, and industrial theory have amply documented government failure associated with logrolling, pork barrel spending, rent seeking, short time horizons, misallocated subsidies, collusion, regulatory arbitrage, or regulatory capture, for instance.[8] More technically, an increasing share of this research models government failure as an agency problem, a lack of capacity, or bounded rationality, reflecting the complex interactions between electorates and politicians, politicians and civil servants, civil servants and private agents, among others.[9]

For policy purposes, the theoretical nuances are often bundled together in the reference to *accountability*. How useful is this term in explaining political incentive problems behind governance failure in infrastructure?

2.2. The case for accountability in infrastructure

Continued governance failure leading to weak performance outcomes is thus bound eventually to raise concerns about political accountability in the sector. This does not mean that the actual policy decisions should be evaluated against a benchmark of "best policy decision practice." One-size policy seldom meets the need, and even less so when democracy gives room for different political views on "policy best practice." The question about accountability should reflect outcomes at the sector level, not process—even if process is important. If we agree that we need to move toward a concept of political accountability for the outcomes—rather than for the adoption of a set of best practices—we should also agree that cross-country variation in infrastructure governance and policy design is to be expected. As process and policies need to be better tailored to performance outcomes, however, a more thorough discussion of the concept of accountability in infrastructure governance is needed.

Political accountability is usually associated with the propensity of politicians and the government administration to act in accordance with expressed welfare interests of society at large and in respect to legislative rules and institutions. In such a sense, accountability will often reflect the "dialogue" between decision-makers and the electorate represented in elections and the public debate, as well as the

[7] See http://www.democracyctr.org/newsletter/vol60.htm.
[8] For a recent overview of regulatory capture, see Dal Bo (2006).
[9] For approaches to regulatory challenges by help of agency problems, see Laffont and Tirole (1993). For a survey of how these government failures explain the various sources governance non-benevolence, see Estache and Wren-Lewis (2009).

opportunity for the electorate to hold decision-makers responsible for their choices. What this means in practice is not obvious. Economists will often avoid the word "accountability" because it describes individual choice without referring directly to incentive structures. Instead, it refers to a set of values that can relatively easily be included in a law or a regulation but difficult to implement. Indeed, the meaning of a value-based terminology becomes imprecise when the underlying set of values is inadequately defined.

If the word is supposed to have a practical effect, it will often require that we are able to separate between accountable and nonaccountable choices. This is a challenge, since a lack of accountability can be covered by so many excuses and truly legitimate concerns. In addition, the reference to "accountability" for practical use will often require a certain agreement about the definition of welfare. For instance, when will it be politically legitimate to benefit subgroups on behalf of the total? Similarly, in the context of efforts to address environmental concerns, how should politicians balance the utility of future generations against urgent development needs? The question of accountability is not only about definition or a benchmark, but about values in a society.[10]

Similarly, "low" or "high" political accountability, which is so often referred to, easily becomes unclear if there is uncertainty about the benchmark from which low accountability creates deviation. Besides, referring to "low" or "high" political accountability to characterize governance will not have practical value unless the sector-specific characteristics are documented. There can be "low political accountability" in a country, and at the same time, high-quality governance in some sectors. This brings us back to the need to relate accountability to sector performance.

The search for political accountability based on the performance of a sector is not trivial, however; Deininger and Mpuga (2005) show that such use of the term "accountability" is possible. Indeed, they find a positive correlation between the performance of public service delivery and political accountability.[11] But the evidence suggests that the link is hard to achieve systematically. Users who are also voters may have a perception about political performance that deviates from actual performance. For example, there is evidence that infrastructure prices in some countries and sectors went down while quality and access increased as a result of energy reforms in Latin America during the 1990s (see, for instance, McKenzie and Mookherjee 2003; Fay and Morrison 2006; Bonnet et al. 2009). However, surveys on public perceptions showed discontent with the results of reform in infrastructure despite these improvements in sector performance (see Straub and Martimort, 2005; Latino Barometro).[12] A possible explanation could be that voters may not manage to unpack the implications of separate elements of reforms if the outcome for the overall economy is perceived to be negative and/or if reforms have led to high unemployment rates (see, for instance, Huber, Pribble, and Stephens, 2009). Clearly, democracy has many benefits, but it is not necessarily sufficiently effective to ensure accountability when it comes to the performance in a sector as complex as infrastructure—which has delayed and quite opaque payoffs on some dimensions, and high visibility in some others, such as access. A more transparent link between sector performance and policy choices is needed for accountability to be effective.

Ultimately, the main message from this discussion of accountability specific to the infrastructure sector is a common one. The devil is in the details, and hence the details about the risks of political distortions need to be understood much better than they commonly are. They also need to be much more transparently handled if users and hence voters are to succeed in getting governments to pick the policies that improve sector performance. These details are driven by the private agendas that in turn may drive non-benevolence in governance—in terms of deviation from outcomes that are perceived to be more welfare-enhancing. The next section turns to the most common private agendas in politics and how they are likely to bias decisions in sector policy.

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[10] Mueller (2003) offers a useful review of these questions in a public choice perspective.
[11] Accountability is indirectly measured through corruption (bribes).
[12] http://www.latinobarometro.org/

3. Private agendas in infrastructure politics

What motivates non-benevolence in politics and how is sector governance affected? Insights into incentive problems among politicians make it easier to understand why "best practice" is difficult to implement. Identifying consequences at the sector level connects performance outcomes to the question of political accountability.

This section discusses some of the private agendas that may explain why infrastructure governance fails. Individual politicians can be thought to weigh their private agendas against their more benevolent concerns. Some sort of governance failure might occur if those in positions of sector oversight responsibility are driven primarily by their private agendas, while at the same time are sufficiently influential and supported. The following four power- and money-seeking agendas will be addressed:

- *Populism:* a strong eagerness to get the individual or party *reelected,* whatever it takes
- *Patronage:* efforts to maintain power by an elite, a form of "club leadership"
- Revolving door and overly strong *industry-friendliness*, such as currying future positions in the industry
- Corruption: the quest for money—*personal benefits that the politician wants to keep secret*

Table 1 summarizes how each of these private agendas may influence the implementation of the main dimensions of sectoral policy in infrastructure: planning of service expansion and quality; market structure; organization and allocation of service provision between the public and the private sector; pricing - including subsidizing; modes of service provision; and oversight and regulation of the service. The design of each of these dimensions of sector policy can be influenced or manipulated by non-benevolent politicians who seek to pursue one or several of the private agendas. The table summarizes the likely consequences; details are explained in subsections that follow, in line with the columns in the table.

Table 1. Sector-level negative consequences of private agendas at the political level

Regulatory decision	**Populism/reelection** Overly strong reelection focus, short-term power-hunt, democratic mechanisms	**Patronage** Maintain and bolster power for an elite/club control over sector, long-term power-hunt, undemocratic mechanisms	**Industry-friendliness** for party revenues or future personal benefit, allies in the industry, usually within legal boundaries	**Corruption** Maximizing personal money-making, secret transactions and benefits for the individual, illegal
Strategic planning of expansion and maintenance of access	o Focus on visible rather than needed investments o Voter-dependent expansion of coverage o Low maintenance efforts o Pork barrel o Promises of coverage extension announced but not delivered	o Distortion of planning from efficient allocation of resources o Risk of expropriation o Coverage extension not delivered, not targeted to those in need.	o Distortion of planning from efficient allocation of resources o Cream skimming accepted to allow industry to maximize profits	o Mismatch between budget decisions and spending o Cost overruns o Little incentive to institutionalize accountable supervision
Market structure	o Make reform depend on signaling effects rather than desirable outcomes (price and employment)	o Possible postponement of reforms Opening to competition delayed o Lower FDI o Protection of existing firms	o Depending on who to favor (incumbent, entrant, local, foreign) o Securing margins for the private sector	o Market power privatized to maximize rents to be shared between politicians and firm
Service provision: SOE, PPP, PPI	o Incentive to push for contract renegotiation when elections are coming out o Shift more risks on private sector unless campaign funding is offered	o Management contracts or similar. Distortion in choice of contract in response to populism concerns	o Benefits in negotiation to the private sector group favored (incumbent, entrant, local, foreign). o Risk on government side	o Procurement manipulated. o Joint venture/PPP-demand steered toward specific supplier o Local content requirements misused to encourage bribery
Pricing and subsidies	o Tariff revisions postponed o Discretional consumption subsidies	o Lack of consistency between policies on pricing/subsidies and actual costs	o Generous producer subsidies o Producer-friendly tax regime	o Leakages in subsidies
Oversight and regulation	o Limited oversight in election times o Limited access to information on financial status of SOEs	o Weak access to information o Limited trust in figures	o Few consequences if targets not met by the private sector	o Weak oversight

Abbreviations: FDI–foreign direct investment; PPP–public-private partnership; PPI–public-private investment; SOE–state-owned enterprise.

3.1. Populism: overly strong reelection focus (short-term power-hunt)

Democracy will generally bring better governance as voters' opportunity to sanction incumbent politicians through the reelection mechanism is a powerful incentive mechanism. At the same time, this mechanism may also trigger biases among politicians with ambitions to keep their party in position.[13] It might be obvious that a high-level, short-sighted power-hunt will have consequences at the sector level, but the specific ways in which it will affect the different sector-specific policy decisions are possibly not so clear.

Utility sectors are among the more exposed to short-sighted decisions biased to boost reelection chances for the incumbents. Moreover, investments are long-lived and have effects on the economy's competitiveness and can also have impacts on environment. For example, there is substantial evidence of pork barrel influence on infrastructure politics. It has been documented for the United States in the nineteenth century, as well as for contemporary Australia, Canada, France, Italy, and Spain, and also for India .[14] In many instances, the projects have been legitimized in some form of demand forecast and these have sometimes been manipulated. Such distortions are found to be particularly common in the context of mega-projects, according to Flyvbjerg (2008), but also very relevant for tariffs in electricity and access to water. Consider the case of a politician who is overly eager to get reelected (through the party or as an individual). How will the populist agenda interfere with the optimal choice of policies in infrastructure governance? Answers are summarized in Table 2; details are offered in the discussion that follows.

Table 2. Likely consequences of populist power-hunt and overly strong focus on reelection

Strategic planning: Identification and prioritization of projects	• Pork barrel and logrolling; infrastructure spending is mostly driven by reelection concerns and political support, rather than by social return • Postponing crucial investment (to favor short-term spending) • Road maintenance, as a labor-intensive activity, often re-scheduled for electoral years • Expanding coverage without systematic concern for the cost of access for the poorest
Market structure, entry and evolution	• Delaying needed reform (liberalization, restructuring) when such decisions are perceived as political risky
Mode of service provision: SOE, PPP, PPI	• Opportunistic behavior: nationalization, expropriation • Contract renegotiation with user-friendly elements
Pricing and subsidies	• Postponing tariff revision and cost pass-through • Discretional consumption subsidies
Oversight and regulation	• Limiting action of the regulatory agency during electoral years • Limiting access to SOEs' financial information

Strategic planning: The fear of not being reelected may drive a politician to focus primarily on projects with visible results in the short run, thereby deviating from what could have brought more welfare for the society at large in the longer run.[15] As a possible consequence, cost estimates may be unreliable or the projects may lead to budget cycles—thus increasing the tax burden in the future.[16] The private agenda

[13] See Besley and Coate (1997); Besley (2006).
[14] For more information about the cases, see Cadot, Roller, and Andreas (2006). In the case of India, most of the data has been based on investment decisions for the roads sector.
[15] Crain and Oakley (1995), analyzing differences in public capital across U.S. states, find that term limits, citizen initiative, and budgeting procedures were significant determinants of the state public capital stock and flow of new investments. The results also suggest that legislative stability and voter volatility are systematically related to infrastructure differences across states.
[16] While little empirical evidence exists on budget cycles in mature democracies, political budget cycles may have some role in new democracies (Brender and Drazen, 2004).

element becomes particularly relevant when investments in the sector are made primarily to boost chances for reelection, without recognition of documented facts on service delivery improvement for the society at large. Moreover, the populist politician's strong focus on reelection may even reduce his or her propensity to request the background information needed to make informed infrastructure decisions and priorities— or have the results of investment analyses biased.[17] Politicians who are overly focused on reelection have been suspected of accepting weak solutions for projects that will not affect their constituency.[18] For instance, Cadot, Roller, and Andreas (2006), using French regional data, show that infrastructure investment are often a byproduct of a politically driven game in which decisions are likely to depart from efficiency considerations.[19]

An overly strong focus on reelection and the associated need for campaign funding may influence the ranking of investment priorities. Extending network coverage may be effective as a political propaganda, but the effect for poor voters may be limited if the policy is not supported with enough budget allocations to reach all segments of users. The regulated price for network connections can be too significant for poor consumers. There are many cases in which networks have been expanded and celebrated as a political decision while in the end consumers cannot afford to pay for access to the extended services.[20]

Market reform: The speed and timing of decisions on market design may change as the populist's focus on reelection surpasses welfare-orientations. Politically unpopular layoffs are a likely short-term effect of divesting state-owned or state-controlled monopolies to competition. Political risk and reelection concerns can explain the timing to implement reform and possible delays.[21] Governments with weak political support are more likely to postpone needed reforms. Not only will they have difficulties building consensus; they would also be careful not to put reelection at greater risk.[22]

***Mode of service provision*:** Studies by Guasch (2004, 2008) systematically considered aspects of renegotiation in infrastructure. They found that a large percentage of government-led renegotiations happen within six months of government elections. These renegotiations and reforms tended to include user-friendly elements, such as reductions on tariffs or postponement of tariff increases.

Pricing and subsidies: While pricing and access are important redistribution policies, they can be strategically used to maximize the likelihood of reelection. Any cost reduction, whether justified or not, is an easy way of pleasing voters and for a minister in charge of a sector, an easy way of achieving continuous popular or business support for its management of the sector. What populist politicians - focused on reelection - may fail to care enough about, however, is how to balance the benefits of subsidies with their costs. In developing countries, subsidies of some form are usually needed to secure access to water, energy or transport services for large segments of users. However, it has proven difficult to factor in the costs of these subsidies into the overall financing strategy of the sector in a transparent and hence accountable way. Combined with a weakening of control mechanisms, ad hoc subsidy budgeting

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[17] While a politician may allocate resources for investment planning to signal welfare-orientation, the eventual policy decisions may deviate from the planning recommendations.

[18] Fiva and Natvik (2009) reject the hypothesis that the returns to public capital (investments) are independent of the other policy options.

[19] See the broader discussion in Mueller (2003). Cadot, Roller, and Andreas (2006) may not find very much impact, but this is just one of many studies supporting these assumptions. Note, however, the results by Leblanc, Snyder, and Tripathia (2002), who analyze underinvestment in public goods by majoritarian voting rule and suggest that pork barrel in project-selection, may actually avoid some inefficient outcomes. To the extent that benefits from such projects are relatively targetable, budget makers will be willing to devote more resources to these projects than they would to more generalized investments. Faced with the choice between an extremely inefficient level of general public investment and a somewhat less inefficient level of targeted investments, the latter may have a stronger welfare effect.

[20] For some examples from Africa, see Briceño-Garmendia, Smits, and Foster (2008). For natural gas network connection, see World Bank (2010).

[21] See Sturzenegger and Tommasi (1998) for a good summary.

[22] Murillo and Martinez-Gallardo (2007) discuss the risk of policy reforms. Smaller electoral margins increase the risks of adopting a potential unpopular policy, as they increase the marginal value of votes. Smaller legislative margins hamper the government's ability to adopt its desired policy and increase the cost of a legislative defeat.

implemented in ad hoc ways is sometimes seen as a populist decision to attract voters, while possibly damaging the economy or sector performance in the longer run.[23]

Severe inefficiencies in sector performance can be hidden behind consumption subsidies.[24] If the electorate is sufficiently myopic or ignorant about the subsequent long-term inefficiencies and fiscal cost when voting, the subsidy strategy may increase politicians' chances of getting reelected. Similarly, the elimination of an expensive consumption subsidy scheme, benefiting a large share of consumers might be perceived to be too risky by politicians overly focused on re-election ,[25] and thus doomed. The result of this political bias is the continuation of a scheme – where those who already have access to network infrastructure services benefit.

Tariff setting can also be misused by politicians focused on reelection. In Cape Verde, for example, the independence of the regulatory authority was questioned when tariff revisions and the pass-through of fuel costs to firms were delayed. The regulatory authority developed a financial and economic model to assess the cost of service provision in electricity and water for tariff determination, but the tariff-setting was nevertheless politically driven, with disappointing results compared to what the ex ante estimations had predicted (World Bank, 2009).

Oversight and regulation: Could sector oversight be kept ineffective to increase chances of reelection? For reasons that may be more or less legitimate, a government may decide not to invest enough resources in activities that provide information on sector performance, like data collection and benchmarking. Such decisions, particularly in the case of state-owned enterprises (SOEs), may limit political actions when the disclosure of information provides evidence of the high cost of policies oriented to win electoral favor.

3.2. Patronage: power through undemocratic mechanisms (longer-term power-hunt)

Politicians can misuse their position in different ways to stay in power. While populist decisions based on increasing the chances for reelection remain within the fold of democracy, decisions motivated by patronage seek to weaken democracy to facilitate for a "club" of allies controlling the country. This agenda is often associated with the resource curse, where revenues from the export of nonrenewable resources have reduced the relative importance of a tax base for those in political position. Democratic support to collect taxes may be perceived less important and the idea of a "social contract" and democracy are set aside. Accordingly, political attention to what is welfare-enhancing for the society at large weakens, with potentially detrimental effects on the governance of infrastructure as well as other sectors.[26]

Revenues from export of nonrenewable resources appear to have intensified the tendency for patronage. Political leaders with control on export revenues can easily pay supporters while preventing the entry of competitors, for example through party structures and control on recruitment to political positions. Relevant examples are Nigeria, Sudan, Equatorial Guinea, Iran and Angola. Tendencies of patronage and

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[23] For example, without questioning the impressive achievement of the Brazilian government in the management of water resources under the Lula administrations, it is hard to forget that a politician considered for the position of Secretary in charge of water policies initially suggested that prices should be driven mostly by willingness and ability to pay, without concern for costs. In other words, subsidies and hence taxpayers would pick up a tab driven mainly by price consultations. The suggestion was never implemented, but it got high coverage in the media and led to sometimes surprising debates. The discussion included the awareness of the fiscal consequences of subsidies and the unwillingness to let regulators work with service providers to end up with financially viable services that could deliver services where they need to be delivered.

[24] Goldstein and Estache (2009).

[25] There are more efficient schemes based on cash transfers designed in a way that minimize the risk of inclusion/exclusion. Such a scheme may have a lower fiscal cost and promote efficient usage when prices reflect opportunity cost. Certainly, this is a superior solution to a wide-based subsidy policy for consumption. For a longer discussion, see Goldstein and Estache (2009).

[26] For a review of these democratic mechanisms, the social contract, and the tax base, see Brautigam et al. (2008**).** Other relevant explanations can be found in Ross (2005) on endowments and political accountability, Robinson, Torvik, and Verdier (2006) on the politics behind the resource curse, and Djankov et al. (2003) on property rights and development.

club-leadership also arise in countries without big endowments of nonrenewable natural resources or by means of getting to power that are not directly linked to the use of these revenues. In a number of countries, including Uganda, Cuba, Venezuela, Ethiopia and Zimbabwe- —radical movements have resulted in political power for a "club" of allies.

The power-seek may build on common discontent in the majority of the electorate; political solutions are presented as if the voice of the electorate is finally being heard. Despite frequent references to "justice," the movement may defend violations of property rights against the private sector or human rights against a minority. Once in power, norms and rules established to secure democracy can be set aside and the radical basis for support can be used to legitimize violation of constitutional rules. The "club" gains ultimate power. The less educated the population, the more exposed it will be to the risk of patronage and eventually club leadership.[27] Resistance requires a majority able to reveal the true intentions of the movement. Table 3 summarizes how infrastructure policy decisions can be distorted by patronage-based movements.

Table 3. Likely consequences of patronage/club leadership

Strategic planning: Identification and prioritization of projects	• Reduced long-term investments • Projects stuck at the pre-feasibility stage because of lack of commitment and low credibility of political decisions keeps • More expensive public-private deals
Market structure, entry and evolution	• Reforms may be postponed. Opening to competition delayed. • Lower FDI, fewer foreign firms
Mode of service provision: SOE, PPP, PPI	• Lack of financing for private investment • Lower sustainability of contracts and higher odds of renegotiations • Management contracts
Pricing and subsidies	• Concerns about the sustainability of subsidies in particular • Lack of credibility to implement screening mechanisms (sophisticated tariff schemes) or the usage of social program databases as a proxy of affordability issues • Lower opportunities to use prices for demand management
Oversight and regulation	• Concerns about the sustainability and enforcement of contracts with private operators – higher return asked in first period, less committed investments • PPP: low sector performance as a consequence of inefficient operation (private) or lack of publicly financed investment

Strategic planning: Patronage-based leadership is often described as "political risk." It is frequently referred to low and high political risk, usually depending on the perceived likelihood among private agents that the government will keep to its pronounced strategies and respect established property rights. A main goal in strategic planning by patronage systems/club leadership will be to keep political control over the sector, regardless of the legal framework and contracts. The consequence is low trust in the government and hence suboptimal investments in long-lived physical assets and human capital, low sector performance, low foreign direct investment, among other problems. The lack of trust in the government is translated into higher cost of capital and finally into tariffs.[28] In other words, public-private partnerships end up being more expensive than they need to be.

Market structure: Strategic decisions about market structure can be particularly difficult to predict if the club leadership is based on wealth from natural resources. If based on radical populism, on the other hand,

[27] See Khemani and Wane (2008) for results on how inequality among voters can intensify private agenda tendencies, populist as well as the 'club leadership'-form. .

[28] Political risk partly explains cross-country differences in net present value for private investors in similar sectors.

its market design will usually be linked to political ideology. Left-wing parties might be less inclined to market solutions and tend to prefer public sector involvement.[29] Ideology (and other party interests) can be more influential on decisions about ownership and modes of production when the incumbent has strong political support, according to Biais and Perotti (2002). When political parties with different ideologies seem to agree on ownership and other aspects of infrastructure politics, conservative and nonconservative parties are found to behave differently, depending on what party is in power (López-de-Silanes, Schleifer, and Vishny 1997). Initial ownership can be decisive in sector performance in cases of high political risk (Hart, 2003). When there is already private participation, political risk tends to increase the use of management contracts, which lower the risk for the private sector and but also lower incentives to invest in innovation and human capital.

The difficulty of implementing market structure reform in a high-risk political environment differs across infrastructure sectors. Reform in the telecom sector has been perceived as less politically risky than reform of the power sector.[30] Technological progress in telecom created new avenues for competition between fixed and mobile services, which offer consumers different options. However, in the power sector, self-generation is not an option for most users. Telecom reform involved promising access to a majority of the population for a service for which they had no access without risking changes in relative prices. Electricity reform, by contrast, entails a threat to subsidized prices enjoyed by large portions of the population—or to free access for the portion of the population that has been stealing energy. As potential losses are more likely to generate mobilization than potential gains, electricity reform has a higher potential for politicization, heightening the impact of political competition on politicians' calculation of whether or not to implement reform (Murillo and Martinez-Gallardo, 2007).[31]

Mode of service provision: The impact of patronage and club leadership on modes of service provision may be best assessed in contract negotiation and renegotiation. Recent experiences in Bolivia and Venezuela, for instance, show that terms of contracts are sensitive to populist politics. However, contract renegotiation can be initiated by firms as well as governments, also in low-trust environments. Guasch et al. (2003) investigate infrastructure concessions in Latin America and find contract renegotiation often occur because there are changes in framework conditions or new information that was not available at the contracting stage.[32]

While renegotiation of a concession may enhance welfare without worsening private interests, it is also the case that governments and firms may act strategically for one another's benefit. Private firms will typically seek to avoid or reduce competitive pressure, while governments may seize efficiency gains beyond those expected by concessional contracts and regulation. While any possible contingency, including the effect of political risk, could be ruled out with a complete contract, it is also possible to design renegotiation-proof contracts to lock up clauses that affect vested interests (Green and Laffont, 1988; Rey and Salanie, 1990). The challenge in cases of high political risk may rather be the fact that a written contract is rendered useless.

Pricing and subsidies: Subsidies are among the instruments a club leadership regime will use to bolster its power. Transfers can be made in the name of subsidies to support members of the elite—in control of utilities and networks, for example. Manipulation and fraud might be condoned with the same purpose. Subsidies and price regulations may benefit consumers if required to strengthen support among the

[29] The opposite may also hold, according to Murillo and Martinez-Gallardo (2007).

[30] Candeub, Cunningham, and Alexander (2008), for example, find that non-democratic regimes with relatively low protection of property rights may well experience mobile network growth, as long as some minimum regulations are in place regarding tariffs, import controls and level of foreign ownership restrictions.

[31] See Adenikinju (2005) for a case study of how political dominance in regulation may challenge electricity provision under "club leadership."

[32] In Chile, the opening of competing roads to a system administrated by private concessionaires raised some concerns, as their regulated revenue decreased as traffic decreased. Losses are likely to disappear, as traffic increases in the medium term, overall. Such a contingency was not laid down in the regulatory contract. It can increase social discontent if tariffs are increased or fiscal resources are used to compensate owners. On the other hand, the stability of the regulatory framework in Chile, in which reputation matters, is likely to protect private interests.

electorate. Lack of accountability in the use of subsidies to achieve private goals, such as political dominance over the sector, may be one of the most difficult problems to overcome when designing a new tariff structure in infrastructure. This is why renegotiations of contracts, for instance, so often result in increases in subsidies to investors to protect users from initially scheduled tariff increases. These aspects lead to a lack of credibility to implement screening mechanisms (sophisticated tariff schemes) or the usage of social program databases as a proxy of affordability issues. The difficulty of securing fair and accountable use of subsidies under club-leadership also may lead to difficulties to use prices for demand management. Manipulation of subsidies impedes the signaling effect of prices and thus the benefit of markets.

Oversight and regulation: Political dominance over all institutions tends to be the norm under club leadership in politics, including regulatory institutions initially intended to be independent. The loss of actual control over tariffs can have painful long-term consequences, as prices and investments decisions become disconnected. Public investment in infrastructure may be kept low, unless it serves the interests of the regime (highways for military operations, for example). Information about sector performance and regulatory decisions is likely to be kept confidential or at least blurred to hinder insights into the regime's performance.

3.3. Industry-friendliness for party revenues and/or personal benefits in the private sector

Politicians sometimes reveal a very strong industry-friendliness. The need for campaign funding may be one explanation. Another is that some politicians might want to use their time in political office to expand their own or their allies' opportunities for private sector positions. While the results in terms of industry-friendliness might be similar, the literature suggests that employment patterns with career opportunities for politicians and regulators—often referred to as "the revolving door"—is less of a welfare-challenge than various forms of lobby pressure or strategic influence from the private sector.[33] What are the likely impacts of industry-friendliness for infrastructure governance?

Table 4. Likely consequences of overly industry-friendly politics

Strategic planning: Identification and prioritization of projects	• Procurement process may veer toward supporting interest groups • Technology and project size may be influenced to less efficient solutions
Market structure, entry and evolution	• Protecting incumbents from market competition, supporting protectionist policies • Limiting public investment in common facilities for market competition
Mode of service provision: SOE, PPP	• Favoring specific providers (incumbent, new entrant, local, foreign) • Inefficient risk allocation: risk is shifted to the state, to the benefit of service providers
Pricing and subsidies	• Consumption subsidies o for users who already have access, instead of access subsidies o for selected industries • Tax exception for suppliers • Lack of interest in fighting nonpayments and losses (theft)
Oversight and regulation	• Industry-friendly terms may be hidden in contracts • Implementation and enforcement may be delayed if reform increases costs for the industry. Low sanctions for contract violations.

[33] For an overview of this literature, see Dal Bó (2006).

Strategic planning: Private sector interest groups—in engineering or construction, for example—as well as individual firms with significant sector experience, will often have an influential role during the planning process of infrastructure investment. Decisions are based on a large set of issues, including geographical location, technology, and labor requirements. The bargaining process with different interest groups may not be expected to deliver an efficient outcome and thus the eventual outcome can often be steered in a direction that benefits the private sector without losing the electorate's trust.[34] For example, private sector interests may go in the direction of large projects (hydro-plants, massive transportation system) where more cost-effective alternatives may exist. Excessively large projects are likely to be preferred to more welfare-efficient projects if the political benefits are large compared to the surplus generated by efficient projects (Robinson and Torvik, 2008).

Market structure: As a result of private sector pressure, market deregulation to facilitate entry can be postponed to please an incumbent provider, for instance. In other cases, privatization by divestiture of public services can be promoted by an industry-friendly politician who attempts to please the interest of a concentrated industrial bourgeoisie in the country. Private sector firms may not reduce the influence of different interest groups on infrastructure politics. According to Willig (1994), the advantage of being private stems from the insulation it brings from arbitrary political and self-serving influences. Public companies, on the other hand, are more prompted to be influenced by interest groups like labor unions (Shleifer and Vishny, 1994; Bertero and Rondi, 2000).[35]

Mode of service provision: The mode of service provision may be biased to benefit specific firms or the private sector in general. This bias may take the form of distortions in procurement rules so that they are not applied to deliver the best combination of quality and price, but steered in a specific direction. With this possibility in mind, PPP details can be designed to make it look like as if a competitive process has taken place, while in reality the terms are made to fit with the favored service provider's interests, whether an incumbent, a new entrant, or a local or foreign firm (see Auriol et al., 2009). In addition, a regime that is overly friendly to industry will be more inclined to accept greater risk on the government's part, while contributing significantly to the investments and placing few if any claims on the government's ownership shares. Regardless of political accountability before or after the deal, the state ends up bearing too much risk, typically over a long period of time.

Pricing and subsidies*:* Politicians, responding to the interest of the private sector, may also adopt counter-intuitive tariff instruments. This is the case of adopting inverted Ramsey prices when there is no clear externality or equity concern or using a flat tariff in the presence of supply rationing. In other cases, some sophisticated solutions can be implemented with very little impact. Examples include congestion pricing or discriminatory pricing with little impact on final prices as politicians attempt to please some groups while protecting others. Wieland (2006), for example, presents many examples of how price structures were modified to please interest groups in the German transport sector. Pricing rules are sensitive to different types of political influence and this complicates discretionary decision making at the regulatory level.[36]

Oversight and regulation: The active role of consumer groups will often be decisive to combat overly strong industry-friendliness in sector governance. However, many of the deals are complicated and critical outsiders may not be able to identify potentially unfair benefits to the service providers. Strategies to avoid manipulation will often have to be incorporated in the framework conditions and controlled ex ante by sector experts with a clear welfare perspective. In practice, there are solutions to prevent risks of hidden benefits to the industry. In Peru, for example, an arrangement was chosen where a major natural

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[34] On the other hand, Henisz and Zelner (2006) pointed out that lobby pressure can have a disciplinary effect on politicians. For instance, a higher level of industrial representation among the consumers of electricity lessens the incentives of political actors to satisfy the demands of concentrated geographic interests, labor unions, and construction firms to build large projects thus reducing the rate of costly infrastructure deployment.

[35] On the other hand, workers of privatized companies also have larges stakes in reform processes and can influence the policymaking process, as shown by qualitative studies of privatization (Murillo, 2001).

[36] See Laffont (2000).

gas pipeline (Camisea) has a minimum revenue guarantee for the service provision. The guarantee is financed through a fee included in electricity tariff —assuming that those who consume electricity benefited the most from cheaper natural gas in power production. No taxpayer money is involved in the payment. If private agendas in politics are a concern, this mechanism would help limit the risk of corruption and reduce potential biases in sector decisions at the government level—particularly those that could reduce commitment to the revenue guarantee.[37]

3.4. Corruption: maximizing personal wealth illegally

While the empirical evidence for political corruption is scarce, the incentives and potential impacts of such criminal acts when they happen are more predictable. Moreover, it might be difficult to single out corruption as the explanatory factor behind a given weakness in sector performance. By intuition, corruption will affect performance differently than the other agendas discussed, including decisions about market structure, privatization, and modes of service provision. It is particularly likely that corruption in sector governance will weaken the function of sector oversight systems. [38]

Despite the data difficulties, there is a growing volume of empirical evidence of correlations between corruption and performance in the utility sector.[39] However, most results describe corruption at the bureaucratic level, often referred to as "petty corruption" (for an overview, see Clarke and Xu, 2002; Kenny 2006, Dal Bó and Rossi, 2007). One of the most thorough surveys of corruption, by Hellman et al., (2000), finds that petty corruption and political corruption tend to coexist. Other empirical studies point at the links between general perceptions of corruption and sector performance. According to Estache (2006a) corruption reduces sector performance in all the utility sectors. The impacts of political and bureaucratic corruption are difficult to separate, however.

Political corruption is related to industry-friendliness and other dimensions of rent-seeking. Even if few cases come to the surface, there is enough evidence to know that there are politicians in most countries who would accept payments or other personal benefits by steering a political decision in a certain direction.[40] For developed countries as much as for developing countries, press accounts relate cases where politicians have benefitted personally from decisions made in relation to infrastructure projects, whether at the construction phase or through renegotiation during the operations phase of the projects. From an economic perspective, the question if corruption has actually taken place may appear irrelevant since nonoptimal solutions—whatever their underlying causes—are what obstructs welfare-improvements.

Even if there are grey zones between corruption and lobbying, however, there are conceptual differences between legal and illegal influence. In contrast to legal lobbying, both parties to the deal benefit, and besides, a corrupt deal is usually secret.[41] Corruption entails an exchange of benefits; a political decision is traded for something of value to the politician in his or her personal sphere. The fact that a bribe benefits the politician personally implies that it can be of miniscule value compared to the possible consequences of an unfavorable decision for the society. These values are of different scales and cannot necessarily be compared. The bribe nevertheless compensates for the politician's cost of deviating from what is welfare-enhancing—and can even incentivize decisions that clearly are harmful to society. As a result, the consequences for choices in sector governance can be more severe in the case of political

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[37] See World Bank (2010).
[38] Kenny and Soreide (2008) provide a literature review of political corruption in infrastructure and discuss empirical estimates of the magnitude of the problem. See also Kenny (2007).
[39] Estache. (2006a).
[40] For information about cases or corruption more generally, see U.S. Securities and Exchange Commission: http://www.sec.gov/; UNICORN: www.againstcorruption.org; Transparency International: www.transparency.org; and U4 Anti-corruption Resource Centre: www.u4.no, for example.
[41] Party contributions may result in benefits for individual politicians. In those cases, the difference between lobbying and corruption can be blurred (Harstad and Svensson, 2008).

corruption, including when compared to the case where industry lobbying is reinforced with campaign funding. The following discussion summarizes how politicians can interfere with the optimal design of sector policy simply to gain personally.

Table 5. Likely consequences of corruption in the infrastructure politics

Strategic planning: Identification and prioritization of projects	• Selection of projects dependent on options for bribes, rather than development plans • Coverage target and access less of a priority
Market structure, entry and evolution	• Risk of collusion • Award procedures manipulated
Mode of service provision: SOE, PPP, PPI	• Mode depends on ties between individual politicians and service providers • SOE may continue if manipulated for corruption • Procurement practices in traditional procurement & PPP particularly exposed
Pricing [[and subsidies	• Subsidies may get lost in corruption • Producer subsidies
Oversight and regulation	• Not a priority • Control on performance and accounting is kept weak • Limited access to information

Strategic planning: A major risk with corrupt infrastructure politics is that the allocation of scarce resources to infrastructure projects is driven more by the search for short-term private profits for politicians rather than weaknesses in terms of sector performance. White elephants, like roads that lead to nowhere and water treatment stations that never work, may be the best illustration of the risks associated with corrupt decision-making processes. The search for rewarding projects can lead politicians to push for unjustified investments. Similarly, they may lead construction companies to overstate their payoffs and consultants to inflate demand estimates, while politicians can take part in the short-term benefits. The often-underestimated consequences of misallocated resources are the rationing of much-needed service expansion. The opportunity cost of making the wrong choices is clearly very high in countries where coverage rates for a basic service are low.

Market structure: Political decisions about market design—and the extent to which a sector should be exposed to competition—are an area where governance failure has been frequently observed. A decision to "introduce competition gradually," for example, may encourage bribes: Unless a bribe is paid, the politicians will not restrict competition. As a similar mechanism to create opportunities for corruption, Rose-Ackerman (1999) notes that "corrupt officials may present information to the public that makes the company look weak while revealing to favored insiders that it is actually doing well." There may be a gap between the actual price of the asset and the price announced in public, with the difference ending up in the pockets of corrupt politicians and their cronies.[42]

Mode of service provision: The direct consequences of political corruption for market structure decisions will depend on how bribes can be extracted. Shleifer and Vishny (1994) explain how the extraction of bribes may be subject to how dependent a privatized firm will be on subsidies. It may be easier for a corrupt politician to demand bribes from a weak company that is dependent on subsidies than to a company that is better able to manage exposure to competition. An implication is also that privatization will be welfare-enhancing if it makes political interference more difficult. Besides, corruption may

[42] For empirical support for theories on corruption and strategic planning on market structure, see the studies of privatizations in South America (Manzetti, 1999; Guasch, 2004) and Russia (Puntillo, 1996; Black, Kraakman, and Tarassova, 2000). For a discussion of how corruption may influence different phases of privatization in infrastructure, see Boehm and Polanco (2003). For a discussion of the status of research on corruption in utilities, see Estache (2009).

increase the political propensity of privatizing market power. A public utility sold with market power (and restricted entry) will increase state revenues and can be defended politically, despite the social costs.[43] Potential investors will profit more, the more market power they can secure, and this may give them incentives to offer bribes. These mechanisms will in turn affect the welfare benefits of privatization.[44]

Opportunities for corruption can be created in auctions, not only in the process of selecting the buyer of a public company (procurement), but also in negotiations about the concession terms and the mode of service provision.[45] The degree of responsibility on the part of the government versus the private sector —to cover unexpected costs or deficiencies in collected fees, for example—may be subject to for "corrupt trade." Firms may be encouraged to offer bribes to reduce their operational risk and thereby secure higher (expected) revenues.[46] Besides, contract/concession details and the allocation of risk are among the questions potentially up for renegotiation. While opportunistic renegotiation can be the result of bribes paid by firms to improve their terms, the political decision on renegotiation is also a tool that can be used to demand bribes from profitable utility providers.[47]

Pricing and subsidies: The mechanisms described by Shleifer and Vishny (1994) are relevant to understand the relationship between corruption in privatization and eventual tariffs in the market. Privatized firms may depend on subsidies, not necessarily because they will not manage the exposure to competition, but because the price is regulated and below production costs. For a corrupt politician, the question of privatization can be steered by opportunities to trade the size of subsidies against bribes from the sector. Clearly, such a "trade" is not possible unless the price is regulated below costs. Political corruption may thus be part of the reason why prices stay regulated, well covered by the political argument that higher prices will hit poorer segments of the population and the industry (as if redistribution in other ways is not an option).[48]

Regulation and oversight: Several results suggest that regulatory reform will reduce the impacts of corruption only insofar as the anti-corruption effort is supported by the political level (Estache, 2009; Gasmi, Noumba Um, and Recuero, 2009). Similarly, Seim and Søreide (2009) find that the effect of procedures for sector governance may depend on the level of corruption. More regulation may provide more opportunities for corruption in countries where this is already a problem, while they serve to secure better sector performance in countries where corruption is less pervasive. Weak control and transparency will obviously make corruption easier for those involved. Political corruption will thus tend to coexist with weak audit capacities, unexplained expenditures, and few if any consequences of underperformance in institutions with sector oversight responsibility.[49]

4. The political economy of reform for infrastructure performance

The influence of private agendas on the optimal implementation of policies is a general concern and clearly not limited to infrastructure. The focus on sector-specific factors has nevertheless allowed us to identify likely consequences at the sector level. A simple stocktaking of revealed incentive problems in politics helps understand how the choice and implementation of sectoral policies are distorted. The resulting delays, manipulation, or truncation of otherwise well-intended policies—which can take place

[43] Auriol and Blanc (2009) explain how corruption may influence privatization and show empirically that social costs of privatization are higher in poor countries.
[44] This argument is spelled out by Bjorvatn and Soreide (2005).
[45] For an overview of empirical evidence on how corruption influences performance through infrastructure procurement, see Della Porta and Vannucci (1999).
[46] See also Hall (2007) concerning the experience of electricity private firms in Latin America.
[47] See Guasch and Straub (2005, 2009) for more discussion
[48] Clearly, the decision to keep prices regulated can be part of a truly benevolent decision. The point here is simply the fact that the argument can be misused to hide corruption because it is associated with a benevolent idea.
[49] See Olken (2007).

under most governance structures—explain why outcomes are so seldom what they are expected to be in the long run.

Even if the nature of the accountability challenge has been identified, however, it is not stratghtforward how this understanding should help improving sector-governance. Policy strategies are complicated by the very nature of private agendas in politics, which also entails resistance against any measures that may reduce the opportunity to pursue those agendas. Even if accountability-increasing initiatives are promoted by civil society organizations, the development community, political groups, the press, and others, the process to improve political performance might be extremely slow in some countries with continued weak performance at the sector level as the result.

The crucial importance of macro-political factors could be seen as throwing into question the relevance of sector-level recommendations. If the bigger governance indicators are what matters, one may ask if we could just as well give up on sector-specific governance until the accountability issues has been "fixed." This would be a misinterpretation, however, since the macro-political accountability indicators are no more than accumulated information about decision making—and the overall impression of how sector governance decisions are being solved. The political regime in a country can be considered a framework condition—at least in a short- to medium-term perspective. Policy recommendations can be promoted most easily at the sector-level and this alone defends a sector-level approach for better policy-choices. The question is if also accountability can be better incentivized from this level and how to adjust recommendations to the given political environment framework conditions.

There are difficulties in promoting political accountability from the sector level, however. Some overall accountability is addressed in this section: the design of constitutional rules adopted to implement democracy in a given country; the reliance on political self-discipline to enforce rules; and lack of coherence between sector specific rules and global rules in countries.

4.1. The design and practical effect of constitutional rules

The functioning of democracy and separation of powers in a country are essential to understand the relationship between accountability and sector performance. Horizontal checks and balances—how the parliament should control the executive, for example—are fundamental principles of constitutional design and to a large extent, underestimated drivers of sector performance. Vertically, the control is manifested in election rules, a free press, access to information laws, and access to education. Countries have budget procedures that involve several governance institutions to secure consistency between development plans and actual spending. When these mechanisms are interfered with—for example if access to information about political decisions is blocked—the incumbent politicians can bias their sector decisions in line with their private agendas more easily.

There is striking variation across countries when it comes to political control procedures, how powers are separated between institutions, the clarity of the rules, and the enforcement of them.[50] Constitutional protection of human rights and control on political powers are not more than a façade in some countries. Other countries focus on constitutional weaknesses just to highlight the fact that it is their own rules that make it difficult to enforce democratic principles. Constitutional weaknesses may themselves be the result of private agendas. Torvik and Robinson (2008) explain presidentialism as endogenous by pointing at the incentives of incumbents in a parliamentarian system to move toward a more presidential system. Over the last decades many countries have tended to concentrate political power in the executive. Constitutional reforms have removed constraints on reelection of individual politicians, while fiscal reforms have provided the national level with relatively more authority on spending decisions compared

[50] See the Open Budget Index (http://www.openbudgetindex.org) for variation in control and transparency of budget procedures.

to local governments.[51] The executive authority will often—albeit not always—be substantially stronger in a presidential system than in a parliamentarian system—where the ministers are accountable to the parliament even if they are appointed by a prime minister. The fact that many countries changed from parliamentary to presidential system in the 1990s, particularly in Africa, and the fact that parliaments are often overruled by strong presidents, as increasingly observed in Latin America, have spurred debate about the mechanisms behind this change and its potential implications for governance. In line with this debate, Ross (2001) points out that state revenues from the export of natural resources have increased politicians' propensity to alter core institutions of governance. [52]

Institutions have been created with sector performance in mind, only to be constrained by private agendas in politics. Better control functions—for example, to secure the quality of audit systems (of SOEs, for instance), or the usage of special funds and investment plans—may be subject to political will, even if initially approved by the same political regime. When "independent" institutions have been created, the executive has sometimes surpassed the power of such institutions by enacting new legislation or ruling out decisions already implemented. For instance, many contract renegotiations between private infrastructure providers and the executive power have undermined the role of the independent sector regulator.[53] Despite its technical competence, the regulators' role has often been reduced from regulatory authority to oversight responsibility.[54]

In sum, from the viewpoint of efforts to improve political accountability in infrastructure, it is essential to recognize that the specific design of constitutional checks and balances may open opportunities for private political agendas, which can have an impact on sector performance. Political models that reduce constitutional checks and balances are clearly more likely to allow for political influence on the regulatory functions. This means that policies to improve infrastructure performance with sector-specific solutions will have shortcomings when political powers are not sufficiently separated. Moreover, any effort to improve the separation of powers within the sector needs to be implemented for the long run. Highly reversible separations lack the necessary credibility to ensure significant improvements in performance.[55] In theory, this should help explain why what seems to be a best practice sector policy in one country will fail in another.

4.2. Reform and self-discipline to improve

The implementation of mechanisms to hold politicians accountable can be a long, drawn-out process in the countries where the need is the most urgent. Similarly, the many initiatives from the development community to promote political accountability have sometimes been met with resistance when politicians are encouraged to accept more controls on their performance. It is not easy to document this resistance since communication strategies can be extensively used by public and private organizations to manipulate public opinion.

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[51] Greater authority in the executive may have increased the attractiveness of minister posts. The party whip has become stronger when party loyalty is rewarded with a now more unchecked minister post, thereby weakening individual voice and opinion at the political level. See Ayee et al. (2010) for discussion of this mechanism.

[52] See *Foreign Policy* July/August 2010 for an updated list of *de facto* and pronounced dictatorships and the link between dictatorship and rank on their "Failed States Index."

[53] An example is the regulatory institution's loss of control of the electricity tariff-setting process in Argentina in 2001. This regulation was kept outside the control of the regulator to adjust for short-term social concerns rather than efficiency. Similarly, the use of energy tariff-setting processes by the Aznar administration in the 1990s to control inflation kept the regulator at a distance from of one of its main responsibilities.

[54] Guasch (2004) shows a strong correlation between contract renegotiation and lack of a regulatory body in Latin America. However, a large share of the contract renegotiations occurred in countries where an independent regulator was in place. For instance, in Argentina, new contracts have been directly negotiated between the executive and private companies— even if this was the legal role of the regulator.

[55] There has been great pressure for more transparency and publicity of political actions over the last decade, expressed in Internet web sites that publish laws and decrees, facts about government procurement and comparison of prices, more comprehensive government statistics, and hence, more information about governance performance.

A government's initiatives to strengthen governance will often seem tautological given the self-disciplinary character of such initiatives, combined with monopoly on political authority. The infrastructure sector offers an impressive volume of anecdotal evidence showing that successful implementation of instruments designed to reduce the influence of private agendas in governance will depend—precisely—on the absence of private agendas in governance. Incumbents can also manipulate public opinion. They can appear to introduce self-discipline and self-regulatory measures through widely recognized reforms, yet leave enough gaps to allow the ex post manipulation of the reforms. A powerful illustration of the difference between the formal and the real independence of regulators are the approaches taken to select the regulators of privatized utilities. Regulators placed in newly created independent regulatory agencies can themselves have strong political or sector-specific connections.[56]

Once initiatives to improve accountability have been initiated, it may be difficult to get a sense of their effect. Are signals of better governance reliable? How quickly and strongly will obstacles to biases be manipulated? How well connected is a politician or a party to the main construction companies, for instance? How strong are dynasties or networks among key actors in some sectors? The evaluation of reforms aimed at introducing self-discipline is essentially challenged by the difficulty of "unbundling institutions," in the sense of separating between the effects of different initiatives (Acemoglu, 2005). How can we tell what specific policy leads to better sector performance if we cannot unbundle economic and political institutions? Both the relative importance of openness to trade or competition, on one hand, and of horizontal checks and balances at the political level, on the other, can be measured in cross-country analyses. Separating their effects on sector performance, however, and determining the causality, will often be difficult since the effects may interact; the effect of trade or competition may depend on the politics, and vice versa. This observation reinforces the case for more specificity than allowed by average outcome effect assessments.

4.3. Reforms at the sector or micro level

Sector-specific regulatory management solutions fall short if underlying conditions about political support are not sufficiently met. For example, procurement rules may not bring the best combinations of price and quality if the political level interferes with the auctions. Real regulatory independence will work primarily in the political environments where it is not needed. Hold-up problems and regulatory capture can rarely be solved through sector-level governance alone. They require significantly more encompassing changes to ensure the sustainability of any effort to reform. Only very localized solutions can avoid the risks of non-benevolence at the political level. The use of contract-based regulation in infrastructure has increased precisely to reduce the risks of capture (Laffont, 2005), but the evidence on its success is mixed. It has worked relatively well for energy and telecom. For water and transport, however, where a large volume of contracts have been renegotiated, it has been less clearly successful. Once more, the message that one-size, sector-specific instruments do not fit all comes across very strongly when macro institutional and governance reforms are unrealistic.

For the development community, the differences in scope for action at the sector and at the macro level must be considered when deciding on the most applicable form of aid. Better level and quality of infrastructure service supply can be made possible in collaboration with a corrupt de facto dictator. However, it will be easier to succeed with initiatives if there is awareness up front about how governance weaknesses and private agenda are likely to impair the projects. It is precisely the risk of hidden agendas in politics that continue to make a case for project or sector finance in infrastructure. Decisions should depend on how well potential non-benevolence in politics can be dealt with in the context of the projects or sector reforms. Donors have a responsibility to avoid extending aid that will be misused for private agendas in politics, with potentially harmful effects on governance more generally. Despite this responsibility—and as will be discussed more in Section 6, there is only very limited knowledge about how alternative forms of aid and policy solutions can be exploited for non-benevolent political decisions with consequences for infrastructure performance.

[56] See Stern, Levine and Trillas (2002).

Clearly, there are forms of aid that are "safer" in terms of governance risks. Targets for sector performance outcomes, like the Millennium Development Goals (MDGs), for example, provide goals that can be linked to political performance. The fact that they may trigger disbursements that other aid forms do not allow suggests that they can incentivize better performance and draw attention to the political responsibility for sector performance.[57]

In the often weak institutional contexts in which infrastructure sectors are likely to need support, the main implicit message of the literature is that tailor-made "second-best" solutions are needed to reach the expected performance levels in a country. The flurry of impact evaluations designed to monitor the effectiveness of aid in the water sector, for instance, shows how attention to institutional details is crucial for a wide range of otherwise relatively standard set of approaches to improve water access and sanitation. It also shows that policy design actually can be tailored to incentive problems in politics or at the regulatory level.[58] In the extreme case of lack of institutions in post conflict situations, Collier (2007) offers evidence of the relative effectiveness of technical assistance or output-based outsourcing, in contrast to other forms of aid. To improve the odds of successful economic transformation of a country or of a sector in fragile states, Collier makes the case for "ex ante governance"—rather than the failed "traditional conditionality" (such as freedom of speech, or securing recognized NGOs to investigate the sector). Helping reduce the odds of private agenda influence on sector politics may also improve the odds of international private financing to the sector.

5. Standard policy recommendations in infrastructure and their problems

The discussions this far may suggest that best practice policy advice for infrastructure governance might have been based on a naïve reliance on political benevolence. Section 3 discussed how the main groups of sector-specific decisions in infrastructure can be manipulated at the political level. The most remarkable observation from a glance at Tables 1 to 5 is how overwhelming the consequences of distortions in politics can be. Planning, budgeting, financing, subsidizing, procuring, staffing, prioritizing, or committing can all be adopted for private benefit. The distinction between the different agendas illustrates that distortions in governance are much more complex than a simple corruption problem. The power-hunt distortions in terms of patronage can be very different than an overly strong focus on reelection, which is also primarily a power-hunt, since the consequences for democracy—and implicitly, for infrastructure governance—are different. There are also nuances when it comes to the maximization of benefits to the individual. Politicians may be overly friendly to industry because they own shares in industry companies, or are responding to promises of a huge wage and bonuses after leaving office and taking a job through the "revolving door." Some critics may call all of this corruption. The damages of the revolving door for infrastructure provision, however, may be far less damaging compared to clear-cut corruption.

As underscored in Section 4, distortions in politics and their impacts at the sector level cannot easily be fixed through sector-level policy recommendations. This paper provides a basis for questioning the policy decisions that are being recommended by the development community: how exposed are they for private agendas in politics? Under what circumstances can standard policy recommendations make governance more difficult? To assess the relevance of the review so far, this section delivers two diagnostics. The first assesses the extent to which standard policy recommendations for strategic planning, market structure design, modes of service delivery, pricing or subsidies, and regulating are likely to reduce the consequences of political distortions. Second, the section lists some policy approaches that could help mitigate the effects of political distortions on the expected performance of a sector.

[57] This is the main motivation for the "MDG contracts" allocated in the form of budget support by the EU Commission to well-performing countries, for instance.

[58] Laffont (2000) explains how incentive regulations can be adjusted to deal with non-benevolent or self-interested politicians.

5.1. Standard policy recommendations under political distortions

The most standard policy recommendations for infrastructure are listed vertically in Table 6, using the same categories of policy decisions as listed in Section 3. The four private agenda discussed in Section 3 are listed in the columns, primarily to illustrate how limited knowledge is about how sector-policy recommendations are exposed to these forms of political distortions. (Most recommendations are followed by question marks, since it is also difficult to suggest how policy choices can be manipulated for private benefits).

How exposed a policy recommendation is will depend on the circumstances (such as the level of institutional competence and capacity, access to information, and the general level of education in the country), as well as constitutional characteristics (such as whether the country has a presidential or parliamentary constitution, is a federation, follows civil versus common law). While all these different dimensions and framework conditions are relevant to understand how policy recommendations are exposed to political distortions, this section will consider only the relationship between a policy recommendation and the political environment where private agenda (for some reason) can distort sector politics.

The list of common policies in Table 6 is not intended to be exhaustive; it covers a reasonable share of the policies commonly recommended to improve the performance of infrastructure sectors. The interaction is discussed for each policy category. Discussion of each category of policy recommendations follows the table.

Table 6. How exposed are standard policies to private agenda interferences?

	Standard policy recommendations in the sector across policy areas	Assumed impact of policy on scope for achieving private agenda objective			
		Populist/ reelection	Patronage	Industry-friendliness	Corruption
Strategic planning	o Rely on formal and independent assessment of sectoral needs	**-/?**	**-/?**	**-/?**	**-/?**
	o Consult with beneficiaries to get a sense of demand and willingness to pay	**?**	**?**	**?**	**?/+**
	o Publicize progress during the electoral period for executive members (use specific output indicators such as connections, MWs, Km,…)	**-/?**	**0/?**	**0/?**	**-/?**
	o Get donors to coordinate their reactions to and support for implementation of a sectoral vision	**-/?**	-	-	-
	o Decentralize decision making	**?**	-	**?**	**?**
Market structure	o Promote unbundling. Increase competition in and for the market when possible	**0**	**-/?**	**-/?**	**-/?**
	o Allow vertical integration when risk are high or competition limited	**0**	**+**	**+**	**+**
	o Encourage yardstick competition as a substitute for competition in the market	**0**	-	-	-
Mode of service provision	o Privatize, increase PPPs	**?**	**?**	**?/+**	**?/+**
	o Corporatize SOEs or rely on explicit performance contracts (e.g. OBA)	**?**	**?**	**?/+**	**?**
	o Increase public financing, loan financing	**?**	**?**	**?/+**	**?/+**
	o Reduce incompleteness of contract by including decision rules to assign responsibilities for consequences of incompleteness to operator, government and users as clearly as possible	**?/+**			
		-	-	-	-
Pricing and subsidies	o Use price regulation in a smart and transparent way	-	-	**?**	-
	o Use price caps when there is no information to identify manipulation				
	o Rely more on cost-plus when there is limited information and the aim is to manage risk levels ,				
	o Use price caps to push efficiency incentives when there is enough information	-	-	**?**	-
	o Improve use of alternative tariff structure options	-	-	-	-
	o Introduce subsidy and guarantee budgets (better control)	**?**	**?**	**?**	-
	o Rely more effectively on tax-related data or consumption surveys to reduce the risk of omissions or undesired inclusion in subsidies (improve information for targeting)	-	-	-	-
	o Introduce ordeal mechanisms as eligibility criteria for subsidies				
Oversight and regulation	o Create a truly independent regulator (separation of powers)	**-/?**	**-/?**	**-/?**	**-/?**
	o Ensure transparent recruitment of regulators				
	o Limit future employment opportunities in the sector for ex-regulators				
	o Ensure independent financing of regulatory agencies				
	o Adopt competitive wages for regulators and their staff				
	o Match regulatory institutions to the general institutional capacity	-	-	-	-
	o Rely more systematically on public hearings	-	-	-	-
	o Ensure that contract renegotiation are cleared by different actors (judiciary, executive, different regulators)	**?**	**?**	**?**	**-?**
	o Disclose information through the introduction of formal regulatory accounting systems and regulatory cost accounting	-	-	-	-

A *plus* for the given agenda means that the recommendation can be particularly exposed to manipulation (if that agenda is a problem in politics); a *minus* means that the recommendation is unlikely to be manipulated for the given private agenda; a *zero* means that it is neither more or less likely to be exposed; a *question mark* means that it is difficult to draw any intuitive suggestion about how exposed the recommendation is.

Strategic planning: A cornerstone of any intervention in infrastructure is the assessment of the needs and costs. As discussed in Section 4, these assessments can be manipulated in many different ways and will not necessarily be reliable. A major challenge is to ensure that forecasts have not been manipulated either to inflate costs or to increase the apparent desirability of an investment or policy intervention. Priemus, Flyvberjg, and van Wee (2008) document numerous case studies in which these needs assessment and their costs have served a political agenda and have been revised once the projects had been approved. This is why assessments of needs and cost cannot be relied upon as an approach to mitigate the main sources of private benefits associated with infrastructure politics. At best, more assessments may initially limit the scope for financial corruption. In practice, assessments will often be managed—i.e. costs underestimated and benefits overestimated-- to ease their popular or legislative endorsement.

Consultations with beneficiaries may have limited impact to offset potential distortions due to private agendas since they can relatively easily be manipulated. Most companies and politicians are specialists in communications, and it is difficult to carry out independent consultations. Efforts to publicize progress during the electoral term for executive members—in terms of specific output indicators such as connections, MWs, and Km—may help restrain private agendas, but need to be managed independently. Hiding undesirable information about service quality associated with increasing quantity of service is not uncommon. The fact that quality indicators are so hard to obtain for benchmarking purposes is probably not a random event. Donors can play an important role by demanding various types of controls and benchmarking. Donor coordination in these contexts may increase transparency of collective achievements if done well. This is particularly needed in a sector where the respect of the sovereignty of the state has traditionally made it possible for governments to manipulate data.

The *decentralization* of sectoral strategic decisions to local or regional governments is another policy option considered for some infrastructure activities, such as water, secondary roads, urban transport, and maintenance. While such decentralization is likely to reduce strong control by central actors in the sector, the evidence suggests that it does not necessarily reduce the impact of other private agendas. For instance, Olken (2007) actually suggests that distortions associated with the search for monetary and nonmonetary profit can increase, as found in the assessment of road maintenance in Indonesia. Ahmad et al. (2005) explain how the effect of decentralization on sector performance will depend on a "framework of accountability relationships," which must be characterized for the given case in a three-way sense policy makers, community makers, and service providers (vis-à-vis each other). Thus it is difficult to generalize about the risk of political distortions under this recommendation.

Market structure: Traditionally, infrastructure industries have been organized as monopolies, public or private, often creating substantial rents and thus vested interests controlled by owners or governments. Although the *introduction of competition* through unbundling and competition for the market reduces surplus in the sector, this alone may not be the full solution in all settings. The search for more competition in and for the market may have strong interactions with other forms of vested interests. In theory, competition strengthens accountability through pressure from the demand side of the market. Information asymmetries on costs (and to a large extent on demand as well) in this sector are strong, however, and vested interests generated by the beneficiaries controlling the political agenda may prevent the benefits of market reform. In other words, competition may not be strong enough to offset the risk of private agenda biases.

The common characteristics of the sectors (like scale effects, essential services, investment risks) often limit the possibilities for competition and may justify continued vertical integration of key activities. This was the case in Cameroun, for instance, when the government, with the support of the key donors, decided to auction a vertically integrated energy company as a way to manage risk perceptions for foreign investors—in contrast to what had been advised in the previous years. Clearly, when it is difficult to draw welfare benefits from competition in a market, it will usually be easier for the few players involved to generate rents. Governments should be able to constrain the financial rents through regulation of prices, qualities, and technological requirements—or tax the private sector to allow a redistribution of part of the rent. In practice, however, regulation tends to be only moderately effective at best and imperfect quite often. If the regulatory solutions maintain enough information asymmetry in favor of the operators and

politicians, it may actually reinforce the scope for private benefits at political levels. In other words, as revealed by standard regulation models (see Estache and Wren-Lewis, 2009), for instance, vertical integration may buy a reduced fiscal cost as compared to competition, but may do so at the cost of a stronger scope for private monetary and nonmonetary benefits.

An often recommended form of competition in infrastructure is *yardstick competition*. The model for yardstick competition still must be improved in several ways, but evidence shows that it can be effective in reducing undesirable effects of excessive sector control by few actors and of the scope for monetary and nonmonetary benefits. By providing international or interregional benchmarks for cost and other performance indicators, the risk of private agenda influence on sector decisions can be reduced .[59]

The literature on infrastructure reform suggests that political consensus about market structure and ownership builds commitment around the chosen market design, while it limits the potentially negative impact of politicians driven primarily by reelectoral concerns betting on the discontent of voters. In general, unbundling, privatization, and nationalization of private services are decisions that involve a large number of political actors. The consent of these players over the long run matters too, even if the reform can be originated or proposed by the executive with support by the parliament. This is because the outcomes of reforms can be slow to come in infrastructure. The time it takes to build a road or a water treatment station can overlap with a local, provincial, or national election—which offers opportunities for strategic uses of happiness or unhappiness with reforms. What needs to be avoided is an unsustainable market structure, where long-term commitments are made without sufficient and reasonable long-term support from key stakeholders. Decisions that simply privatize market power without protections through regulation for users are likely to be questioned sooner or later and lead to policy reversals if this support is not achieved and/or if some of the infrastructure fails to provide as scheduled or promised. To some extent this was the experience in the failed privatization of water and energy in Mali and of water in Bolivia, for instance. This is why competition combined with fast payoffs seems to work better. In the telecom sector, the unbundling of telecom services and the opening to private actors in a much more competitive environment has often been effective because the fast access and affordability improvements created the majority constituency needed to avoid the reversal of policies. Users were better off and private actors were making profits without much reason for any of the two parties to feel penalized, while there were few opportunities for strategic manipulation by politicians—even if controversial decisions, initially hidden by success, may come back to haunt reformers—as is currently the case in the telecom sector in Ghana. Clearly, the effectiveness of market reform depends on the quality of institutions in general, and not just sector regulation.

Mode of service provision: Table 6 indicates high uncertainty about the extent to which most common policy recommendations will be exposed to private agenda biases in governance. To reiterate, the risk will depend on the circumstances, as well as initial conditions, the timing, the specific contractual form, and auction design—indeed, on so many aspects that a generalization of risks would easily appear ideologically tainted.[60] Trying to improve the governance and accountability of the large number of public sector providers in the sector through *corporatization and other forms of incentive-based contracts* (such as output-based aid) may reduce potential distortions stemming from private agendas in politics . This is clearly an area where more research is needed, as shown by Gomez-Ibanez (2006)**.** Vagliasindi (2009), however, documents quite systematically the circumstances under which reform of state-owned enterprises (SOEs) may prevent politicians and regulators from capturing parts of infrastructure rents. In particular, sector performance improves as corporative principles and standard business procedures are introduced.[61]

Increasingly, researchers tend to suggest that policy makers and advisors have relied too much on the private sector.[62] A combination of private operation and public financing will sometimes generate better

[59] See Coelli and Lawrence (2006), for instance, on the role and practice of benchmarking.
[60] See the reviews of empirical studies in Kenny (2007) and Kenny and Soreide (2008).
[61] See also Bertero and Rondi (2000).
[62] See Martimort and Iossa (2009); Engel, Fisher, and Galetovic (2009).

sector performance if sectors must be regulated anyhow, while the government must invest. When renegotiation takes place, for example, the public sector often ends up subsidizing operations it initially was not supposed to support. The choice between public and private service provision may not be as straightforward as it has often been treated. There is insufficient basis for a categorical conclusion that public service delivery will be more exposed to political distortions than highly regulated but private service delivery.

Public-private partnerships (PPPs) may tie objectives between different types of players. This solution, however, relies on the strong assumption that the government/politician behaves like a partner. In practice, public-private partnerships in the utility sectors are prone to renegotiation. Indeed, PPPs can increase the risk of weak government commitment (Benitez 2010; Valero 2010). Private investors are easily repelled from investment if government commitment is unreliable and the judiciary is not independent enough. Various aspects of the financial market may serve to strengthening property rights in these contexts. As an example, the capital structure of the private firm can be built up with a share of debt financed in the local market. Firms may prefer to replace equity with debt if they believe that the government may seek to avoid intervention that may harm the local financial market.[63] A standardization of the contract design may also help when the government has limited human resources. Contracts are sometimes written and structured in a way that makes it difficult for those involved to get a full understanding of the details. The government and the private supplier may have different interpretation of how different clauses interact. For instance, price or quality regulation is in general described in different chapters or contract sections that are difficult to follow and may lead to different readings of the contract.

The fact that imperfect contractual arrangements can be renegotiated can be exploited for private agenda.[64] When initial contractual terms allow for more rents than expected ex ante, it is not uncommon that governments propose or introduce a review of initial commitments. While government-led renegotiation may sometimes be welfare-enhancing, the evidence suggests that political actors may use the process as an opportunity to pursue their private agenda (Guasch, Laffont, and Straub, 2005). Similarly, governments have sometimes negotiated early termination of long-term power-purchase-agreements implicitly to introduce market reforms (competition) not compatible with these PPAs. This has been the case when a single-buyer model has been replaced by a competitive wholesale market. Moreover, a long-term power-purchase-agreement can also be the subject of revision when the political consensus weakens, such as after a change in government, when the adoption of such a structure has not been discussed enough with relevant political actors. In general, it is important to recognize that the terms of the renegotiation and any associated monetary compensation can be the means by which politicians can take actions favoring their private interest. A checks and balances system that involves different political actors (legislative, judiciary, regulator) can help reinforce the contract and balance different interests without penalizing the users or the taxpayers.

In response to renegotiation and the unreliability of more traditional forms of contracts on service delivery, contracts have become more precise as to how to deal with the responsibility of contract failure. A lesson learned from the first ten years of intense efforts to get the private sector involved is that predictable and clear terms for suppliers are more important than size of rents promised by the (initial) contract. More precise allocation of responsibilities improves sector performance through the reduced opportunity to attain private benefits through renegotiation or deviation from the contract.

Pricing and subsidies: Price regulation is one of the most common policy instruments considered as part of reforms—even if in practice it is not used as much or as well as it should be used. The assessment of the potential of the instrument increasingly goes beyond a discussion of how to ensure that tariff levels reflect cost recovery efforts. The policy discussion has moved more toward the question of how to steer incentives toward cost reduction, innovation, and needed investment.

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[63] The cost of debt and equity already includes a risk premium to compensate for regulatory risk. The lack of commitment will end up by affecting the capital structure of the regulated firm.

[64] See Guasch (2004) and the many follow-up papers.

Both the lessons from regulatory changes forced by contract renegotiation and a better conceptual understanding of the relevant drivers of the optimal regulatory choices (Laffont, 2005; Armstrong and Sappington, 2007; Hiriart and Martimort, 2009) show, however, that the same model for incentive compatibility will not apply in all settings. At different stages of development and for different distortions in politics, it makes sense to have different "degrees" of incentives built into the optimal regulatory regime, and hence into the average tariff level and structure. How well this is done will influence the scope for biased sector decisions—with potentially harmful impacts on the framework conditions for financial, social, and operational performance of the sector. In principle, pricing properly will help reduce the scope for distortions because it will reduce the scope for residual political interference in the process.

Policy advisors often recommend that the use of subsidies in infrastructure be followed by *a program to ensure transparency* about how targeted they are so that errors of inclusion and exclusion of specific categories or users can be minimized. Increasingly policy advisors are recommending more transparency about subsidy programs that have lasted for a long time. In practice, this should imply "subsidy budgeting processes." Obviously, such budget-related processes would increase accountability if implemented correctly. Consider how this was done in Colombia in the 1970s and is being done in Canada today, for instance. Just as obviously, politicians hate such budget-related processes since they reduce the scope for discretionary ways of buying votes or buying favors. Increasingly also, as theoreticians start to fully internalize the empirical relevance of information asymmetries, ordeal mechanisms are being recommended to ensure that users who do not really need the support do not try to benefit from these subsidies (see Gruber, 2008). These ordeal mechanisms are actually increasingly popular across sectors. By reducing the relevance of these subsidies for significant tranches of actors, it reduces the value of subsidies and to some extent of pricing manipulations for non-benevolent politicians.

Oversight and regulation: For over 15 years, the creation of *independent regulatory agencies* has widely been seen as the most obvious recommendation to end political interference with regulatory processes. Independent agencies around the world were copied on the models adopted by the United Kingdom under the Thatcher administration. Regulators were to be recruited based on their skills, not their political connections. They would be protected from the temptation to favor some operators by barriers to the revolving door: limits to how quickly they could be recruited by the industry once their regulatory tenure had ended. They would be paid high salaries to reduce temptations to accept bribes. The agencies would be granted their own sources of funding to ensure they would not have to rely on budgetary transfers, thereby avoiding the risk of blackmail by governments or parliaments. Clearly, the intention was to let the regulatory agencies be instrumental in reducing or even eliminating private agenda distortions in infrastructure governance. The strategy was strongly supported by economic research based on the research on multiple principals and multiple agents, as summarized in Laffont and Tirole (1993) and Bolton and Dewatripont (2005).

Experience has shown the limits of this recommendation. Few, if any country, have managed to achieve a level of independence consistent with what theory argues is needed to minimize the risks of political capture. Evidence shows that politics still matter in regulation - it shows that politics have managed to steer regulatory decisions through loopholes in regulatory mandates and obligations assigned to regulatory agencies.[65] The main sources of weak sector performance are limited capacity, limited ability to commit, limited resources, and limited credibility, as summarized in Estache and Wren-Lewis (2009). In sum, regulation does not seem to have been taken seriously by many governments. It is being paid lip service through the creation of a regulatory institution for which formal regulatory power is dominated by real political power.

5.2. Recommendations and new approaches: some comments on innovative approaches

Failures in reaching expected sector performance in infrastructure have made policy advisers more humble in their reform ambitions and more careful when they make recommendations for new

[65] See Thatcher (2005) and Coen and Thatcher (2008) for discussion and evidence from Europe.

institutions. Increasingly, advisors recognize the necessity to make better efforts to match regulatory functions and institutions to the general institutional capacity of countries in which these institutions are being introduced. Over the last decade there has been significant attention to preemptive efforts, including transparency, "filters," and third-party control and indicators of performance. The progress toward correcting reactions on weak performance has been slower, although the current trend toward more performance-based aid and lending might prove to have decisive impacts on the incentives to secure service delivery regardless of private agendas.

The donor community can recommend many initiatives more forcefully. Transparency can be linked to performance much more systematically if there is better access to information about infrastructure service delivery. Data collection efforts are generally weak in most developing countries and these will have to be strengthened for the link between performance and transparency to work. Moreover, efforts to quantify the losses from political distortions in a sector or a big project could possibly have a strong signal effect.

While procurement rules have been improved in almost all countries over the last decade, there is still a lack of understanding of the link between corruption and the creation of rents. Competition authorities should also be promoted in countries with small markets. Their role is more important in infrastructure, the more unbundled the sectors. This paper, in particular, points to the need for political economy analyses. These could be better integrated in development strategies, including the World Bank background work for Country Assistance Strategies (CAS).

In addition, several initiatives that have been used more frequently over the last decade lack much evaluation but will almost certainly have a positive impact and reduce the risk of private agenda distortions. These include simplification of regulatory responsibilities, public hearings and transparency around the decision-making process, international benchmarking, as well as a broader involvement of governance bodies.

Simplifications of regulatory responsibilities: If distortions of some form are likely, simplified forms of regulation will sometimes work better than more ambitious programs, since the deviation from what is supposed to take place will then be made more visible *Contract-based regulation,* for example, can improve the transparency of regulatory processes if organized around clear rules and where contractual incompleteness can be subject to independent arbitration. This is how water regulation functions in Romania, for example; it is the way many railways are regulated in Africa; and it is how some road concessions are supervised in Latin America.

Reliance on contracts and quantitative assessment of performance are increasingly supported by sound *regulatory accounting* (see the experiences in countries as different as Colombia, Mali, Morocco, Niger, the Philippines, and Peru). These more innovative programs share an effort to rely more systematically on public hearings. Operators, however, will not necessarily appreciate the idea of public hearings.[66] In Mali, for example, the regulator decided to publish all accounts in the press to allow anyone to express their concerns with the failures of the private operator and of the government. That case actually resulted in the operator leaving the market, which was seen as a failure by some, but could just as well be seen as a success in view of the fact that the original reform had failed to deliver the most important purpose of the reform: an effective increase in service coverage to be pre-financed from private resources.

Transparency: Following the evidence, it has become common to argue for public hearings to secure dialogue and consensus. Price revision, investment plans, de-carbonization of power generation, and other actions with high impact on welfare will benefit from public discussion. Similarly, disclosure of information about the decision-making process behind policy choices and transparency in the fiscal cost of financing infrastructure activities are essential to reducing corruption and misallocation of state

[66] It is fascinating to read how so many different accounts of the Mali experience have managed to come up with so different explanations of the source of the problem. It is particularly interesting to note that the academically oriented case studies have managed to provide a very smooth story that does not reflect the intense political pressure the regulator has been subject to from national as much as foreign actors. See, for instance, Gomez-Ibanez (2005); Schlirf-Rapti (2005); Tremolet (2005).

revenues.[67] Transfers to finance operational and capital expenditures in utilities, revenue guarantees in PPPs, or other forms of public funding in infrastructure are not necessarily well audited or accounted for in financial statements and government budget. For instance, governments may not follow best practices to account for contingent liabilities[68]—sometimes not included at all in budget laws. Contingent liabilities are hidden cost for the society and should be priced according to the risk they represent. Examples like the case from Mali suggest that efforts to reduce information asymmetries, in line with recommendations in research, may have drawbacks/trade-offs. While understanding of the trade-offs has grown, there are far too many countries that lag behind on initiatives to allow independent control of political and regulatory performance. With the risk of political distortions in mind, policy advisors can safely argue for external audits, transparency, and independent expert assessments of regulatory solutions.

International benchmarking: The use of standards has increased over the last decade. ISO standards extend not only to quality but also to procedures. There is international benchmarking of accounting systems at all levels of governance, as well as of service delivery, and some systems are designed to engage different stakeholders (multistakeholder groups) for better performance.

Benchmarking of sectoral performance can be used as an independent assessment of the quality of sector management and ultimately help prevent non-benevolent interference, including corruption. While benchmarking can influence sector performance through implicit or explicit competition in a given market, it can also create positive synergies and create expectations in large voter groups for the prospects for wider sets of reforms at the sector or at the general level. Education, media debate, and participation of the civil society can eventually create demand for this type of accountability.

Broader involvement of governance bodies: A lot of anecdotal evidence suggests that one of the underestimated roots of the institutional failures to reduce the interference of private political agendas in infrastructure resides in the initial efforts to keep the regulator independent by excluding it from the more general checks and balances procedures of governance. In many countries, the judiciary and the legislative are essentially excluded from controlling regulators to reduce the number of political, or politically sensitive, actors from the implementation of regulatory decisions. When the executive starts to expand its powers and its leverage of a sector—in particular, infrastructure, in view of the size of investments and types of contracts involved—it should also expand its checks and balances base. This is why it is becoming more common to see contract renegotiation cleared by different actors (judiciary, executive, different regulators) in government. This broader involvement of governance bodies improves the odds of accountability simply because it increases the requirements of disclosure and control, including the introduction of formal regulatory accounting systems such as regulatory cost accounting. Such an increased consultation process has been adopted quite successfully so far in Morocco, for example, in the negotiation of water contracts.

6. Concluding comments

This paper emphasizes why clear, lucid, and sector-specific insights are needed into the politics of infrastructure management and reform to identify the optimal economic policy choices. Framework conditions for infrastructure services are exposed to biased decision making. Politicians with private agendas can create nonmonetary and monetary rents. This paper has not sought to quantify the problem or its consequences; it has described the likely impact at the sector level by pointing at how the biases may

[67] Ferraz and Finan (2007) examine whether access to information enhances political accountability. Comparing public spending in Brazilian municipalities audited before and after the elections, the authors show that the audit policy reduced the incumbent's likelihood of reelection by approximately 20 percent, and was more pronounced in municipalities with radio stations.

[68] A contingent liability may be incurred by an entity depending on the outcome of a future event such as a court case. Many governments use such a mechanism to guarantee repayments to lenders of SOEs. The likelihood of loss can be described as probable, reasonably possible, or remote.

serve some politicians' private agendas. On this intuition, the paper has discussed common policy recommendations, pointed at how little is known about their risk of political manipulation, and discussed a number of policy initiatives that can improve sector performance—even if there are distortions at the political level. Clearly, there is a way forward and an agenda for gradually and credibly improving performance with proper instruments and mechanisms. At the same time, the challenges described are among the most difficult in development economics—and the question of how to incentivize accountability at the sector level is far from solved.

The discussion has shown that the adoption of academic ideas for policy choices in this sector needs to be less dogmatic than it has sometimes been. Theoretical models and successful practice are based on important assumptions of benevolence and structures that constrain the influence of private agendas. The paper argues that a successful solution to a specific problem must start with an explicit recognition of how distortions may drive policy choices. The possible presence of distortions should be better incorporated or discussed in the theoretical and empirical results on which policy recommendations— and hence the effectiveness of economic policies—rely. Failing to do so increases the odds of a disappointing reform in the sector. Success and failure in infrastructure performance are not just about the economics of infrastructure. It is about how implicit assumptions about politics and government drive the economic choices—that is, the economics of reform processes.

From an operational viewpoint, the message that stands out is that anyone interested in thinking through the design or reform of infrastructure policies needs to adjust the current received wisdom in a few ways. First, politics cannot be ignored. In operational work dealing with major sector reforms, it is essential to explicitly recognize when, why, and how to adapt policy design to the political environment in the country in which the infrastructure intervention is being considered. Doing so is often likely to lead to "second-best solutions" in which competition may be less strong, regulation less incentive-oriented and regulatory institutions less important to achieve a minimum level of accountability than some may hope. Second, it is essential to put the concept of sector "best practice" in a wider perspective. While established solutions may fit with a wide range of circumstances, the details of politically viable solutions will often be sector-, time-, and location-specific. Third, the process of reducing the possible impact of private agendas in sector governance may itself create added transactional and coordination costs. This is acceptable only if these costs are compensated by significantly improved sector performance. For example, politics-proof solutions may reduce the political flexibility to adjust quickly to an unexpected change of framework conditions.

Indeed, this paper is not proposing a set of general solutions, but recommendations whose relevance depends on the characteristics of the given country and industry. While the recommendations aim primarily at reducing consequences at the sector level, the underlying causes behind weak political accountability may require more fundamental changes. Finally, the overview of research suggests that efforts that increase transparency stand better chances of being strongly correlated with success than those that ignore transparency. Not only should we be better able to reveal the political propensity to let private agendas influence sector decisions, we should also seek to improve policy advice for better service provision by placing the challenges and their solution in light of political distortions. The recommendation is in line with a number of recent initiatives in the donor community—the World Bank included—to obtain better understanding of the political economy of sector governance. This paper has sought to pinpoint some of the challenges in infrastructure—and most importantly, to raise awareness of the distortions and their consequences among policy advisors and encourage researchers to go more into depth as to the mechanisms.

From a more global development perspective, the paper has explained why the influence of private agendas on political decisions is a fundamental obstacle to successful economic policies across sectors and hence to growth. The solutions discussed focus on the sectoral dimensions of the problem. This may help in the short run, but is not enough to achieve sustained performance improvement. Initiatives for sustainable development will not succeed unless they are in line with a more global political consensus about the importance of accountability and hence transparency. More systematic regulatory accounting guidelines, more consultations, stronger collective concerns with outcomes, and more effective

enforcement of liability rules are all examples of sectoral changes that applies across sectors and reduce the scope for manipulation of sector politics for some form of personal benefit. Without a broader legally supported commitment and support from all branches of government, the instruments for sector governance are all highly reversible— and can be manipulated—as discussed in Section 5.

From a research perspective, this paper shows that many doors still need to be opened. Most of the evidence on the effectiveness of policies is anecdotal or biased toward politics, economics, or finance. Very little of the evidence is based on assessments cutting across fields and very little does justice to the complexity and subtlety of the solutions needed to ensure that private agenda do not interfere with sector performance. Even when empirical evidence is available, it often yields only a partial sense of the strength of the distortions stemming from political interference. Theoretical models are not sufficiently developed to shed light on these empirically weakly described mechanisms since most of them are specialized and deal with only one sector governance problem at the time. Moreover, few have the ability to tailor their advice to the evolution of the conditions in which sectoral reforms are implemented since most of these models are also static—and this in spite of the fact that one of the main performance concerns is the speed at which coverage improvements are achieved, which is essentially a dynamic problem. The upshot is that there is a huge research agenda. The case for humility when making policy recommendations should be as great as the gap in knowledge.

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