

# CMI WORKING PAPER

WP 2012: 5

## Infrastructure policy and governance failures

Daniel Benitez  
Antonio Estache  
Tina Søreide

Chr. Michelsen Institute (CMI) is an independent, non-profit research institution and a major international centre in policy-oriented and applied development research. Focus is on development and human rights issues and on international conditions that affect such issues. The geographical focus is Sub-Saharan Africa, Southern and Central Asia, the Middle East and Latin America.

CMI combines applied and theoretical research. CMI research intends to assist policy formulation, improve the basis for decision-making and promote public debate on international development issues.

# Infrastructure policy and governance failures

Daniel Benitez, Antonio Estache, and Tina Søreide\*

**WP 2012: 5**

September 2012



---

\* 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, Chr. Michelsen Institute (CMI) and University of Bergen, Norway. We are grateful for comments from 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, Arne Wiig and Liam Wren-Lewis.



# Contents

- Abstract ..... iv**
- 1. Introduction.....1**
- 2. From market failure to political failure .....3**
  - 2.1 Why don't governments fix market failures? ..... 3
  - 2.2 'Low accountability' lacks needed nuance ..... 4
- 3. Personal benefits and sector governance distortions.....6**
  - 3.1 Populism: short-term power-hunt (power through democracy) ..... 6
  - 3.2 Patronage (power through undemocratic mechanisms)..... 8
  - 3.3 Industry-friendliness (legal money-hunt) ..... 10
  - 3.4 Corruption (illegal money-hunt) ..... 12
- 4. The political economy of reform .....16**
  - 4.1 Implications for 'best practice' policy recommendations ..... 16
  - 4.2 Politics as a framework condition..... 18
- 5. Concluding comments.....21**
- References .....22**

# Abstract

Interventions to fix market failures in infrastructure have often resulted in some form of governance failure and this contributes importantly to explain shortcomings in the supply of infrastructure services in developing countries and increasingly in developed countries in crisis. The development community continues to address sector dysfunctions from the sector level, often with a ‘one solution fits all’ approach, instead of approaching the political level, which is considered more challenging. This paper presents a systematic structured review of experiences with policy work in light of political economy explanations. Governance failures have different explanations – including populism, patronage, corruption or ownership shares in the private sector. This paper offers a structured framework for identifying the given governance challenge and discusses the need for more tailor-made approaches to sector-reform.

# 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.<sup>1</sup>

There is widespread evidence of failures or limited successes of previous approaches to secure sustainable service delivery in developing countries and increasingly in developed countries in the context of the crisis. This evidence continues to fuel debates about how the infrastructure sectors can best be organized and regulated. Generally, the difficulties stem from two basic observations: (i) there are many options available for sector governance, and (ii) none seems to work universally. For each of the sectors, 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.

Securing a good policy option 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 constituencies tend to have different perceptions of the ideal policy combination—and in particular, the role of the state in the sector. These differences will often influence the governance of 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 seek to 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, a literature review, 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. Our focus is not the politics per se, but rather how incentive problems in politics affect 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.

The first section of the paper 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. The following section describes systematically how the most common incentive problems in politics will tend to influence sector decisions in infrastructure. Implicitly, this review points at how political incentive problems can be revealed and why they need to be addressed—or at least considered—when recommending a policy

---

<sup>1</sup> 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.

for sector governance. The intrinsic challenge of actually addressing accountability problems is addressed in the third and last section. The most standard recommendations are have to be better adapted to the fact that they are exposed to manipulation for politicians' personal interest.

## 2. From market failure to political failure

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 – such as 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.<sup>2</sup> Evidence, however, suggests that governments are as likely to fail as markets. This section discusses why.

### 2.1 Why don't governments fix market failures?

Multiple goals in politics and the lack of capacity in design and enforcement of policy tools are among the reasons why governments don't manage to fix market failures. However, the risk of failure is also closely linked to the ways civil servants and politicians responsible for fixing market failures in a sector are disciplined with checks and balances and vertical accountability. Infrastructure development—particularly in Africa—is often much slower than demanded by populations and expected by donors, and of relevance to this, Keefer and Khemani (2003) point at how democratization has failed poor voters in many developing countries.<sup>3</sup> Infrastructure pricing policies in Latin America have tended to be much more regressive than claimed by public and private providers, according to 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.<sup>4</sup> Most of the recent research recently surveyed by Cornago et al. (2012) on the incidence of policies aiming at increasing the relative importance of renewable energy sources in the OECD also points to regressive outcomes. Incentive problems behind sector-specific governance distort the effect of policy choices and put huge investments at risk.

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.<sup>5</sup> Distortions in politics cannot be ignored when seeking to explain performance failures. Governments may not be as benevolent as standard policy recommendations for the sector-level tend to imply. Incentive problems among politicians may lead to deviation from what is assumed to be the most welfare-enhancing sector governance strategy, and this impedes sector performance.

In many countries, users and voters increasingly seem to agree with this diagnostic since weak performances are starting to impose political costs. Weak infrastructure performance has triggered electoral discontent and incumbent regimes have been sanctioned democratically. Power outages in Argentina at the end of the 1980s were often cited as part of the social discontent with the incumbent regime for instance. Similarly, a concession of water provision in La Paz/El Alto, Bolivia, originally seemed well-defined, although the outcome was disappointing and led to riots and the government settling back the concession.<sup>6</sup> In recent years, often as a result of the crisis, many more countries, developed and less developed, have experienced some form of social crisis due to high prices or

---

<sup>2</sup> See Laffont and Tirole (1993) and Armstrong and Sappington (2006, 2007) for an overview of regulatory approach on fixing market failures in infrastructure industries.

<sup>3</sup> See also Briceño-Garmendia, Smits, and Foster (2008), Estache and Wodon (2005) and AICD (2010).

<sup>4</sup> This is discussed by Komives et al. (2005, 2007) and Bacon and Ley (2010).

<sup>5</sup> For reviews of corruption in utility provision, see Boehm (2007); Kenny and Søreide (2008); Estache (2009).

<sup>6</sup> See <http://www.democracyctr.org/newsletter/vol60.htm>.

shortage in infrastructure provision which have been widely covered by the press and other opinion makers.

The literature recognizes different ways in which the need for policy intervention can be misused for private benefits 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 supported by theories of industrial organization 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.<sup>7</sup> 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.<sup>8</sup> For practical purposes and sector-specific analysis, however, 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 ‘Low accountability’ lacks needed nuance

Debates about weak sector performance in a country often refer to “political economy issues” or “low political accountability” as an explanation, meaning that the causes of failure have to do with the political level.

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 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 are difficult to implement. Indeed, the meaning of a value-based terminology becomes imprecise when the underlying set of values is inadequately defined.

If the accountability-word is supposed to have a practical effect for sector-policy advice and solutions, it will often require that we are able to separate between accountable and non-accountable choices. This is difficult because the 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 (i.e. accountable) 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.<sup>9</sup>

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.

---

<sup>7</sup> For a recent overview of regulatory capture, see Dal Bo (2006).

<sup>8</sup> 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).

<sup>9</sup> Mueller (2003) offers a useful review of these questions in a public choice perspective.

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 in terms of service delivery outcomes.<sup>10</sup>

A further difficulty of defining political accountability in infrastructure is the fact that 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 the result of energy reforms in Latin America during the 1990s.<sup>11</sup> However, according to Straub and Martimort (2005) surveys on public perceptions showed discontent with the results of reform in infrastructure despite these improvements in sector performance.<sup>12</sup> 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, as discussed by Huber et al. (2009). These examples illustrate the difficulty to keep politicians accountable for the performance of 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. Apparently, it is difficult to make the link between sector performance and policy choices transparent enough for democratic mechanisms to be effective on this area.

In lack of such transparency there is ample room for politicians to benefit personally from influencing policy choices without much risk of being sanctioned by the voters. The next section describes the most common private agendas in politics and how they are likely to bias decisions in sector policy. By systematizing incentive problems we get a framework for nuancing the issue of low political accountability, and thus, it might become easier to develop more tailor-made sector-policy approaches.

---

<sup>10</sup> Deininger and Mpuga (2005) find a positive correlation between the performance of public service delivery and political accountability, but “accountability” is only indirectly measured through corruption (bribes) in society and does not sufficiently reflect political incentive problems and their nuances.

<sup>11</sup> Documented by McKenzie and Mookherjee 2003; Fay and Morrison 2006; Bonnet et al. 2009

<sup>12</sup> Surveyed by data from <http://www.latinobarometro.org/>

### 3. Personal benefits and sector governance distortions

What motivates non-benevolence in politics and how is sector governance affected? The empirical and theoretical literature list a number of incentive problems among politicians with sector oversight responsibility. This section categorizes some of these insights in order to promote learning and better understanding of infrastructure performance and policy failures.

Incentive problems can be categorized in different ways and sometimes, we find the same terminology in use for different incentive problems. In this review, we distinguish between the following power- and money-seeking motivations: (i) *populism*: a strong eagerness to be *reelected*, whatever it takes; (ii) *patronage*: efforts to maintain power by an elite; (iii) an overly strong *industry-friendliness*, for currying future positions in the industry, for example; and (iv) *corruption*: the quest for money—*personal benefits that the politician wants to keep secret*.

Based on a review of theory and empirical cases, this section discusses each of these incentive problems in turn and describe their influence on the implementation of main dimensions of sectoral policy in infrastructure, such as 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.<sup>13</sup> Table 1 – at the end of this section – summarizes the expected consequences for each of the listed incentive problems. We hope this exercise will make it easier for policy-makers to diagnose sector-specific distortions. Section four discusses how such a diagnosis can be useful for developing more targeted policy approaches.

#### 3.1 Populism: short-term power-hunt (power through democracy)

Voters' opportunity to sanction incumbent politicians through the reelection mechanism is a powerful incentive mechanism in democracies. At the same time, this mechanism may also trigger biases among politicians with ambition to keep their party in position.<sup>14</sup> While it is generally well understood that a high-level, short-sighted power-hunt is likely to have negative consequences at the sector level, it can be difficult for voters to reveal the true cause behind specific sector-level distortions. Utility sectors are among the more exposed when political decisions are biased to boost reelection chances for the incumbents. For example, there is substantial evidence of pork barrel influence on infrastructure politics, documented for the United States in the nineteenth century, as well as for contemporary Australia, Canada, France, Italy, Spain and India.<sup>15</sup>

What are the likely consequences of populist incentive problems for the most important sector governance decisions?

**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.<sup>16</sup> As a possible consequence, cost estimates may be

---

<sup>13</sup> Given a large number of references, most of them are placed in footnotes. They have, nevertheless, been relevant for developing the arguments.

<sup>14</sup> See Besley and Coate (1997); Besley (2006).

<sup>15</sup> 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.

<sup>16</sup> 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.

unreliable or the projects may lead to budget cycles—thus increasing the tax burden in the future.<sup>17</sup> A populist politician's strong focus on reelection may reduce his or her propensity to request the background information needed to make informed infrastructure decisions and priorities— or intentionally, procure investment analyses with a specific 'reelection-friendly' result.<sup>18</sup> Moreover, politicians who are overly focused on reelection have been suspected of accepting weak solutions for projects that will harm other regions than their own constituency.<sup>19</sup> Addressing this issue, Cadot et al. (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.<sup>20</sup>

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 high for poor consumers. There are many examples of how 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.<sup>21</sup>

**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.<sup>22</sup> Governments with weak political support are more likely to postpone needed reforms. Not only will they have difficulties building consensus; they will also be careful not to put reelection at greater risk.<sup>23</sup>

**Mode of service provision:** Guasch (2004, 2008) have systematically considered aspects of renegotiation in infrastructure and found a large percentage of government-led renegotiations to 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:** Pricing and access, often used for redistribution policies, can be used strategically to maximize the likelihood of reelection. Any cost reduction, justified or not, is an easy

---

<sup>17</sup> Shi and Svensson (2006) find political budget cycles to play a significant role in developing countries, and particularly where politicians can have substantial personal financial returns from staying in power and where access to information about governance is limited. See also Brender and Drazen (2004).

<sup>18</sup> While a politician may allocate resources for investment planning to signal welfare-orientation, the eventual policy decisions may deviate from the planning recommendations.

<sup>19</sup> Fiva and Natvik (2009) reject the hypothesis that the returns to public capital (investments) are independent of the other policy options.

<sup>20</sup> 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.

<sup>21</sup> For some examples from Africa, see Briceño-Garmendia, Smits, and Foster (2008). For natural gas network connection, see World Bank (2010).

<sup>22</sup> See Sturzenegger and Tommasi (1998) for a good summary.

<sup>23</sup> 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.

way of pleasing voters. What populist politicians – overly 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 sort 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 implemented in ad hoc ways is sometimes seen as a populist decision to attract voters, while possibly damaging to the economy or sector performance in the longer run.<sup>24</sup> 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, which benefits a large share of consumers but at an unsustainable cost, might be perceived to be too risky by politicians overly focused on re-election<sup>25</sup> and thus doomed. In such a case, the political bias explains the continuation of a scheme where those who already have access to network infrastructure services benefit.

There is significant evidence that also tariff setting has been 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 politically overruled, leading to a disappointing result compared to what the ex ante estimations by the regulators 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 would secure access to information on sector performance, like data collection and benchmarking. This is a relevant concern for political incentive problems of all sorts.

### 3.2 Patronage (power through undemocratic mechanisms)

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 to control the country. Patronage is often associated with ‘the resource curse’, referring to countries where revenues from the export of nonrenewable resources have reduced the relative importance of a tax base for those in political position. Democratic support, for example to collect taxes and make other political decisions, is considered less important and the ideas of a “social contract” and democracy are eventually set

---

<sup>24</sup> 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.

<sup>25</sup> 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).

aside. Political attention to what is welfare-enhancing for the society at large weakens accordingly, with potentially detrimental effects on the governance of infrastructure as well as other sectors.<sup>26</sup>

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 arise also 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 the form of power-seeking described here has resulted in power secured for a “club” of allies and eventually, authoritarian regimes.<sup>27</sup>

**Strategic planning:** Patronage-based leadership is often described as “political risk” in investment analyses with references to “low” or “high” political risk, usually depending on the perceived likelihood that the government will keep to pronounced strategies and respect legally embedded property rights. A main goal in the strategic planning by patronage-based leadership will be to keep political control over the sector, regardless of legal frameworks and contracts. Public investment in infrastructure may be kept low, unless it serves the interests of the regime (highways for military operations, for example), resulting in suboptimal investment in long-lived physical assets and human capital, low sector performance, low foreign direct investment, among other problems. The following lack of trust in the government is translated into higher cost of capital and finally into tariffs.<sup>28</sup> In other words, public-private partnerships end up being more expensive than they need to be.

**Market structure:** Distortions of market structures is sometimes linked to political ideology. Left-wing parties might be less inclined to market solutions and tend to prefer public sector involvement.<sup>29</sup> Ideology (and other party interests) is more influential on decisions about ownership and modes of production when the incumbent has strong political support, according to Biais and Perotti (2002), and this will obviously be the case also when the government has ultimate control.<sup>30</sup> Hart (2003) finds initial ownership to be decisive in sector performance in cases of ‘high political risk’. When there is already private participation, political risk tends to increase the use of management contracts, which lower the risk for the private sector while also lowering 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.<sup>31</sup> Technological progress in telecom created new avenues for

---

<sup>26</sup> 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.

<sup>27</sup> 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.

<sup>28</sup> Political risk partly explains cross-country differences in net present value for private investors in similar sectors.

<sup>29</sup> The opposite may also hold, according to Murillo and Martinez-Gallardo (2007).

<sup>30</sup> 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 – see López-de-Silanes et al., 1997.

<sup>31</sup> 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.

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.<sup>32</sup>

**Mode of service provision:** The impact of patronage on modes of service provision may affect contract negotiation and renegotiation. Recent experiences in Bolivia and Venezuela, for instance, show that terms of contracts are sensitive to populist politics. However, as confirmed by Guasch et al. (2003), contract renegotiation can be initiated by firms as well as governments, also in low-trust environments. While renegotiation 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, the challenge in cases of high political risk may rather be the fact that a written contract is rendered useless.<sup>33</sup>

**Pricing and subsidies:** Subsidies are among the instruments that patronage-based leadership regime may 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 electorate in a democracy. Lack of accountability in the use of subsidies to keep 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 tariff increases. These aspects may also prevent the implementation of 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 may also prevent the use of 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 authoritarian patronage-based leadership, 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. 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 (legal money-hunt)

Politicians with sector-oversight responsibility sometimes reveal 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 resulting distortions of industry-friendliness might be similar in these cases, the literature suggests that the aim for career opportunities for politicians and regulators—often referred to

---

<sup>32</sup> Discussed by Murillo and Martinez-Gallardo (2007). See Adenikinju (2005) for a case study of how political dominance in regulation may challenge electricity provision under “club leadership.”

<sup>33</sup> See Green and Laffont (1988); Rey and Salanie (1990)

as “the revolving door”—is less of a welfare-challenge than various forms of lobby pressure or strategic influence from the private sector.<sup>34</sup> Some negative consequences of a highly industry-friendly regime are nevertheless likely.

**Strategic planning:** Private sector interest groups—in engineering or construction, for example, 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 even 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.<sup>35</sup> For example, private sector interests may go in the direction of large projects (hydro-plants, massive transportation system) although 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 more efficient projects (Robinson and Torvik, 2008).

**Market structure:** As a result of private sector pressure, market deregulation to facilitate entry is at risk of being 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 elite in the country. Labor unions can be an important counter-force against an overly industry-friendly regime. According to Shleifer and Vishny (1994), Bertero and Rondi (2000) and Willig (1994), however, such pressures are more likely to influence the organization of publicly controlled enterprises, instead of the market conditions for private firms.<sup>36</sup>

**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 industry-friendly 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. As a result, 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 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.<sup>37</sup>

---

<sup>34</sup> For an overview of this literature, see Dal Bó (2006).

<sup>35</sup> 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.

<sup>36</sup> On the other hand, workers of privatized companies also have large stakes in reform processes and can influence the policymaking process, as shown by qualitative studies of privatization (Murillo, 2001).

<sup>37</sup> See Laffont (2000).

**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 to the benefit of the private sector will often have to be incorporated in the regulatory framework conditions and controlled ex ante by sector experts with a clear welfare perspective.

### 3.4 Corruption (illegal money-hunt)

While the empirical evidence on political corruption is scarce, the incentives and potential impacts of such criminal acts when they happen are more predictable because they are so clearly steered in the direction of those who “buy” political decisions. It might be difficult to single out corruption as the explanatory factor behind a given weakness in sector performance. By intuition, however, corruption will affect performance differently than the other agendas discussed, including decisions about market structure, privatization, and modes of service provision, and it is also very likely that corruption in sector governance will weaken the function of sector oversight systems.<sup>38</sup> By logics, a bribe compensates the politician’s cost of deviating from what is welfare-enhancing—and this can incentivize decisions that clearly are harmful to society (why would there be a bribe if the decision to be bought were in line with public goals?). As a result, the consequences for choices in sector governance can be more severe in the case of political 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 for corrupt benefit.

**Strategic planning:** Corrupt infrastructure politics implies that the allocation of scarce resources to infrastructure projects is driven largely by the search for short-term personal profits for politicians, rather than improved sector performance. The search for projects that can bring bribes can lead politicians to push for unjustified investments. 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. Moreover, it may allow construction companies to inflate their payoffs and consultants to manipulate demand estimates, while politicians take part in the short-term benefits.

**Market structure:** Political decisions on market design and the extent to which a sector should be exposed to competition are exposed to this kind of incentive problems. 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.<sup>39</sup>

**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

---

<sup>38</sup> According to Estache (2006a) corruption reduces sector performance in all the utility sectors. 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).

<sup>39</sup> 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), Bjorvatn and Søreide (2005) and Auriol and Straub (2011). For a brief overview of research on corruption in utilities, see Estache (2009).

easier for a corrupt politician to demand bribes from a weak company that is dependent on subsidies than from 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 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.<sup>40</sup> 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.<sup>41</sup>

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.<sup>42</sup> 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 “corrupt trade.” Firms may be encouraged to offer bribes to reduce their operational risk and thereby secure higher (expected) revenues.<sup>43</sup> 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.<sup>44</sup>

**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 contribute to explain 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).<sup>45</sup>

**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 et al., 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.<sup>46</sup>

---

<sup>40</sup> Auriol and Blanc (2009) explain how corruption may influence privatization and show empirically that social costs of privatization are higher in poor countries.

<sup>41</sup> This argument is spelled out by Bjorvatn and Søreide (2005).

<sup>42</sup> For an overview of empirical evidence on how corruption influences performance through infrastructure procurement, see Della Porta and Vannucci (1999).

<sup>43</sup> See also Hall (2007) concerning the experience of electricity private firms in Latin America.

<sup>44</sup> See Guasch and Straub (2005, 2009) for more discussion

<sup>45</sup> 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.

<sup>46</sup> See Olken (2007) for a study of political corruption and quality of roads. One of the most thorough surveys of corruption, by Hellman et al., (2000) confirm that corruption in regulatory institutions and political corruption tend to coexist.

Table 1 summarizes how each of the incentive problems discussed 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. This section has discussed how each of these dimensions of sector policy can be influenced or manipulated by non-benevolent politicians who seek to pursue one or several personal agendas. The next section turns to options for reform.

Table 1. Summary of assumptions: Sector-level consequences of political incentive problems

Regulatory decision	Populism	Patronage	Industry-friendliness for party revenues or future personal benefit, allies in the industry, usually within legal boundaries	Corruption
<b>Strategic planning of expansion and maintenance of access</b>	<ul style="list-style-type: none"> <li>o Focus on visible rather than needed investments</li> <li>o Voter-dependent expansion of coverage</li> <li>o Low maintenance efforts</li> <li>o Pork barrel</li> <li>o Promises of coverage extension announced but not delivered</li> </ul>	<ul style="list-style-type: none"> <li>o Distortion of planning from efficient allocation of resources</li> <li>o Risk of expropriation</li> <li>o Coverage extension not delivered, not targeted to those in need.</li> </ul>	<ul style="list-style-type: none"> <li>o Distortion of planning from efficient allocation of resources</li> <li>o Cream skimming accepted to allow industry to maximize profits</li> </ul>	<ul style="list-style-type: none"> <li>o Mismatch between budget decisions and spending</li> <li>o Cost overruns</li> <li>o Little incentive to institutionalize accountable supervision</li> </ul>
<b>Market structure</b>	<ul style="list-style-type: none"> <li>o Make reform depend on signaling effects rather than desirable outcomes (price and employment)</li> </ul>	<ul style="list-style-type: none"> <li>o Possible postponement of reforms Opening to competition delayed</li> <li>o Lower FDI</li> <li>o Protection of existing firms</li> </ul>	<ul style="list-style-type: none"> <li>o Depending on who to favor (incumbent, entrant, local, foreign)</li> <li>o Securing margins for the private sector</li> </ul>	<ul style="list-style-type: none"> <li>o Market power privatized to maximize rents to be shared between politicians and firm</li> </ul>
<b>Service provision: SOE, PPP, PPI</b>	<ul style="list-style-type: none"> <li>o Incentive to push for contract renegotiation when elections are coming out</li> <li>o Shift more risks on private sector unless campaign funding is offered</li> </ul>	<ul style="list-style-type: none"> <li>o Management contracts or similar. Biased allocation of contracts</li> <li>o Lack of financing for private investment</li> </ul>	<ul style="list-style-type: none"> <li>o Benefits in negotiation to the private sector group favored (incumbent, entrant, local, foreign).</li> <li>o Risk on government side</li> </ul>	<ul style="list-style-type: none"> <li>o Procurement manipulated.</li> <li>o Joint venture/PPP-demand steered toward specific supplier</li> <li>o Local content requirements misused to encourage bribery</li> </ul>
<b>Pricing and subsidies</b>	<ul style="list-style-type: none"> <li>o Tariff revisions postponed</li> <li>o Discretionary consumption subsidies</li> </ul>	<ul style="list-style-type: none"> <li>o Lack of consistency between policies on pricing/subsidies and actual costs</li> </ul>	<ul style="list-style-type: none"> <li>o Generous producer subsidies</li> <li>o Producer-friendly tax regime</li> </ul>	<ul style="list-style-type: none"> <li>o Leakages in subsidies</li> <li>o Producer subsidies</li> </ul>
<b>Oversight and regulation</b>	<ul style="list-style-type: none"> <li>o Limited oversight in election times</li> <li>o Limited access to information on financial status of SOEs</li> </ul>	<ul style="list-style-type: none"> <li>o Weak access to information</li> <li>o Limited trust in figures</li> </ul>	<ul style="list-style-type: none"> <li>o Few consequences if targets not met by the private sector</li> </ul>	<ul style="list-style-type: none"> <li>o Weak oversight</li> <li>o Limited access to facts about public-private deals</li> </ul>

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

## 4. The political economy of reform

The influence of personal agendas among politicians on the optimal implementation of policies is a general concern and clearly not limited to infrastructure. This literature review of sector-specific factors has nevertheless allowed us to categorize specific mechanisms and identify (verified and likely) consequences at the sector level. The main insight from this review is that political incentive problems can cause serious distortions in sector governance. Planning, budgeting, financing, subsidizing, procuring, staffing, prioritizing, or committing can all be adopted for private benefit. The distinction between the different incentive problems illustrates that distortions in governance are much more complex than a simple corruption problem. What we have seen is that important nuances of the challenges are lost if referred to the challenges with too broad terms, such as “accountability”.

What lessons can be drawn from this exercise? Clearly, deviation from “best practice sector governance” cannot automatically be interpreted as symptoms of governance failure. Repeated deviations from what is perceived welfare-enhancing in a given context, however, can be used for ‘diagnosing’ low accountability. Highly distorting decision-making over time may follow some of the patterns described by Table 1, and the following understanding can be used for designing reform initiatives.

### 4.1 Implications for ‘best practice’ policy recommendations

Consider now the most common policy recommendations for infrastructure governance, listed in Table 2 for the areas of governance decisions discussed in the previous section. What do we know about their likelihood of being manipulated for politicians’ personal benefit? Could it be that some recommendations intensify the problem of political incentive problems? Are some recommendations “safer” than others, given the many distortions discussed?

Consider recommendations on oversight and regulation, for example. 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, and a number of conditions would secure their integrity.<sup>47</sup> Nevertheless, experience has shown clear limits to 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.<sup>48</sup> The aim for true independence will be achieved primarily in the political environments where such independence is less needed.

---

<sup>47</sup> 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).

<sup>48</sup> See Thatcher (2005) and Coen and Thatcher (2008) for discussion and evidence from Europe. For a summary of challenges, see Estache and Wren-Lewis (2009).

Table 2. How exposed are standard policies to private agenda interferences?

	Standard policy recommendations in the sector across policy areas
Strategic planning	<ul style="list-style-type: none"> <li>○ Rely on formal and independent assessment of sectoral needs</li> <li>○ Consult with beneficiaries to get a sense of demand and willingness to pay</li> <li>○ Publicize progress during the electoral period for executive members (use specific output indicators such as connections, MWs, Km,...)</li> <li>○ Get donors to coordinate their reactions to and support for implementation of a sectoral vision</li> <li>○ Decentralize decision making</li> </ul>
Market structure	<ul style="list-style-type: none"> <li>○ Promote unbundling. Increase competition in and for the market when possible</li> <li>○ Allow vertical integration when risk are high or competition limited</li> <li>○ Encourage yardstick competition as a substitute for competition in the market</li> </ul>
Mode of service provision	<ul style="list-style-type: none"> <li>○ Privatize, increase PPPs</li> <li>○ Corporatize SOEs or rely on explicit performance contracts (e.g. OBA)</li> <li>○ Increase public financing, loan financing</li> <li>○ Reduce incompleteness of contract by including decision rules to assign responsibilities for consequences of incompleteness to operator, government and users as clearly as possible</li> </ul>
Pricing and subsidies	<ul style="list-style-type: none"> <li>○ Use price regulation in a smart and transparent way <ul style="list-style-type: none"> <li>○ Use price caps when there is no information to identify manipulation</li> <li>○ Rely more on cost-plus when there is limited information and the aim is to manage risk levels ,</li> <li>○ Use price caps to push efficiency incentives when there is enough information</li> </ul> </li> <li>○ Improve use of alternative tariff structure options</li> <li>○ Introduce subsidy and guarantee budgets (better control)</li> <li>○ 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)</li> <li>○ Introduce ordeal mechanisms as eligibility criteria for subsidies</li> </ul>
Oversight and regulation	<ul style="list-style-type: none"> <li>○ Create a truly independent regulator (separation of powers) <ul style="list-style-type: none"> <li>○ Ensure transparent recruitment of regulators</li> <li>○ Limit future employment opportunities in the sector for ex-regulators</li> <li>○ Ensure independent financing of regulatory agencies</li> <li>○ Adopt competitive wages for regulators and their staff</li> </ul> </li> <li>○ Match regulatory institutions to the general institutional capacity</li> <li>○ Rely more systematically on public hearings</li> <li>○ Ensure that contract renegotiation are cleared by different actors (judiciary, executive, different regulators)</li> <li>○ Disclose information through the introduction of formal regulatory accounting systems and regulatory cost accounting</li> </ul>

Another central recommendation has been to *introduce competition*. Traditionally, infrastructure industries have been organized as monopolies, public or private, often creating substantial rents and thus, vested interests controlled by owners or governments. Through unbundling of services and competition for the market surplus in the sector would be reduced and hence also many of the incentive problems. Competition is supposed to strengthen accountability through pressure from the demand side of the market. In practice, however, the search for more competition in and for the market may have strong interactions with other forms of vested interests. Information asymmetries on costs (and to a large extent on demand as well) in this sector are significant. The problem is not the demand for liberalization, which has so often been criticized, but rather the fact that market reforms have not

been taken far enough and therefore failed to deliver as expected. In other words, competition has not been strong enough to offset the risk of incentive problems.

Similarly, public private partnerships (PPPs) are theoretically a wise strategy, but has often failed because it has relied too much on the strong assumption that the government/politicians will behave like a partner. Government commitment has often failed once investments on the side of the private sector are sunk. In lack of an independent judiciary, the consequences for the politicians have been few – or in some cases, secured popular support from voters who don't see the longer term consequence if private investors are repelled.

*Decentralization* of sectoral strategic decisions to local or regional governments has been considered for some infrastructure activities, such as water, secondary roads, urban transport, and maintenance as a possible option to prevent political interference. While such decentralization is likely to reduce strong control by central actors in the sector, the evidence suggests that it may be even more exposed to incentive problems at the local governance level. For instance, Olken (2007) suggests that distortions associated with politicians' search for monetary and nonmonetary profit can increase, as found in the assessment of road maintenance in Indonesia.

For the bulk of policy options, however, we don't know enough about how they will be exposed to political incentive problems. Reform initiatives at the sector level has to take into account the political regime as a framework condition—at least in a short- to medium-term perspective. The framework for diagnosis presented above be useful to understand *how* it should be taken into account.

## 4.2 Politics as a framework condition

There is striking variation across countries when it comes to political control procedures – including how powers are separated between institutions, the clarity of the rules, and the enforcement of them.<sup>49</sup> 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 political incentive problems. Torvik and Robinson (2008) explain presidentialism as endogenous by pointing at how incumbents in a parliamentary system are inclined to adopt 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 to local governments.<sup>50</sup> The executive authority will often—albeit not always—be substantially stronger in a presidential system than in a parliamentary 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 sector governance. In line with this debate, Ross (2001) points at how state revenues from the

---

<sup>49</sup> See the Open Budget Index (<http://www.openbudgetindex.org>) for variation in control and transparency of budget procedures.

<sup>50</sup> 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.

export of natural resources have increased politicians' propensity to alter core institutions of governance.<sup>51</sup>

Too often have sector governance institutions been created with sector performance in mind, only to be constrained by politicians due to the listed incentive problems. 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—tend to 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.<sup>52</sup> Despite its technical competence, the regulators' role has often been reduced from regulatory authority to oversight responsibility.<sup>53</sup>

Efforts to improve political accountability in infrastructure are unlikely to succeed unless these bigger weaknesses are understood and addressed. 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.<sup>54</sup> This fact contributes to explain why seems to be a best practice sector policy in one country will fail in another.

Over the last decade, as these insights have been more widely understood, new initiatives have been developed to secure better sector performance while at the same time, dealing with the potential incentive problems in politics. There is still a long way to go, but there are indeed some promising efforts. For example, targets for sector performance outcomes, like the Millennium Development Goals (MDGs), provide goals that can be linked to political performance. International benchmarking seems to have potential impact on both accounting systems as well as targets for sectoral performance. Increasingly, benchmarks are used in combination with performance-based aid, which may also be an important approach to addressing the sector challenges and the political incentive problems in combination. As another example, corporatization of public service providers seem to have an impact on the likelihood of political distortions stemming from incentive problems in politics, according to Gome-Ibanez (2006) and Vagliasindi (2009). Sector performance seems to improve as corporate principles and standard business procedures are introduced also in the public enterprises.

The pressure for transparency initiatives have been increasing in most countries over the last decade, on budget decisions as well as sector decisions and performance indicators. This is essential to hold politicians responsible. Combined with sufficient access to information and press freedom, the results

---

<sup>51</sup> 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.”

<sup>52</sup> 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 one of its main responsibilities.

<sup>53</sup> 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.

<sup>54</sup> 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.

from sector governance diagnostic – as discussed above – are likely to affect democratic processes as well as sector governance decisions. Distortions become more visible.

Another positive trend in some countries is better understanding of the importance of various checks and balances. In many countries, the judiciary and the legislative have been essentially excluded from controlling regulators to reduce the number of political, or politically sensitive, actors from the implementation of regulatory decisions. However, when the executive has started 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. It is therefore positive to contract renegotiation more frequently has to be 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.<sup>55</sup>

---

<sup>55</sup> This increased consultation process has been adopted quite successfully so far in Morocco, for example, in the negotiation of water contracts.

## 5. Concluding comments

This paper emphasizes why clear, lucid, and sector-specific insights into the politics of infrastructure management are needed to develop optimal economic policy choices and reform processes. By help of a comprehensive literature review, the paper has described how framework conditions for infrastructure services are exposed to biased political decision-making. Politicians seeking personal benefits can create nonmonetary and monetary rents. This paper has not sought to quantify the problem or its consequences; instead – building on numerous empirical results -- it has explained how the consequences at the sector level can be read as a diagnosis of political incentive problems. For this reason, successful reform must start with an explicit recognition of how distortions may drive policy choices.

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’. 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 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. We have too little evidence on the effectiveness of efforts to prevent incentive problems in politics to 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 a 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.

We hope this paper contributes to more nuanced debate about political incentive problems in infrastructure, makes it easier to identify how political biases distorts sector performance, and encourages policy-makers to learn from the many empirical results and examples presented in the literature.

## References

- Acemoglu, D. 2005. "Politics and economics in weak and strong states." *Journal of Monetary Economics*. 52 (7): 1199-1226
- Ahmad, J., S. Devarajan, S. Khemani, S. Shah. 2005. Decentralization and service delivery. World Bank Policy Research Working Paper 3603. World Bank, Washington DC.
- Ahmad, M. Albino-War and R. Singh. 2005. "Subnational public financial management: institutions and macroeconomic considerations." IMF Working Paper Series 05/108. International Monetary Fund. Washington DC.
- Adenikinju, A. 2005. "Analysis of the Cost of Infrastructure Failures in a Developing Economy: The Case of the Electricity Sector in Nigeria." AERC Research Paper 148. African Economic Research Consortium, Nairobi, with the Centre for Economics and Allied Research, University of Ibadan.
- Armstrong, M. and D. and E.M. Sappington. 2006. "Regulation, Competition and Liberalization." *Journal of Economic Literature* 44(2): 325–66.
- , 2007. "Recent Developments in the Theory of Regulation." *Handbook of Industrial Organization*. Elsevier Publishing.
- Auriol and Blanc. 2009. "Capture and corruption in public utilities: The cases of water and electricity in Sub-Saharan Africa." *Utilities Policy*. 17 (2): 203-216.
- Auriol, E. and S. Straub. 2011. Privatization and rent-generating industries and corruption. In In S. Rose-Ackerman and T. Søreide. *The International Handbook on the Economics of Corruption- Volume 2*. Edward Elgar Publishing.
- Ayee, J. T. Søreide, J. Shukla and T. Le. 2010. "The Governance of Gold in Ghana". Chapter in World Bank volume, forthcoming.
- Benitez, D. 2010. "Bundling Tasks and Contracts: The Case of Public-Private Partnerships." Processed.
- Bertero, E., and L. Rondi, 2000. "Financial Pressure and the Behavior of Public Enterprises under Soft and Hard Budget Constraints: Evidence from Italian Panel Data." *Journal of Public Economics* 75: 73–78.
- Besley, T. 2006. "*Principled Agents? The Political Economy of Good Government*." Lindahl Lectures. Oxford University Press.
- Besley, T. and S. Coate. 2003. "Elected Versus Appointed Regulators: Theory and Evidence," *Journal of the European Economic Association*, MIT Press. 1(5): 1176-1206.
- Biais, B., and E. Perotti. 2002. "Machiavellian Privatization." *American Economic Review* 92(1): 240–58.
- Bjorvatn, K., and T. Soreide. 2005. "Corruption and Privatization." *European Journal of Political Economy* 21: 903–14.
- Black, B., R. Kraakman, and R.A. Tarassova. 2000. "Russian Privatization and Corporate Governance: What Went Wrong?" *Stanford Law Review* 52: 1731–1808.
- Blaustein, Albert. 1993. *Constitutions of the World*: Fred B. Rothman & Company.
- Boehm, F. 2007. Anti-Corruption Strategies as Safeguard for Public Service Sector Reforms. Working Paper prepared for Anti Corruption Training & Consulting (ACTC) and Research Center in Political Economy (CIEP), Universidad Externado de Colombia
- Boehm, F., and J. Polanco. 2003. "Corruption and Privatization of Infrastructure in Developing Countries." Transparency International Working Paper, Berlin.
- Bolton, P. and M. Dewatripont. 2005. *Contract Theory*. Cambridge, Mass: MIT Press.

- Bonnet, C.P., D. Martimort and S. Straub. 2009. "Empirical Evidence on Satisfaction with Privatization in Latin America: Welfare Effects and Beliefs." IDEI Working Paper 566 (March), Toulouse, France
- Brender, A. and A. Drazen, 2004. "Political Budget Cycles in New versus Established Democracies." NBER Working Paper 10539. National Bureau of Economic Research.
- Briceño-Garmendia, C., K. Smits and V. Foster. 2008. "Financing Public Infrastructure in Sub-Saharan Africa: Patterns and Emerging Issues." Background Paper 15 (Phase I), Africa Infrastructure Country Diagnostics (AICD). World Bank.
- Cadot, O., L.H. Roller, and S. Andreas, 2006. "Contribution to Productivity or Pork Barrel? The Two Faces of Infrastructure Investment." *Journal of Public Economics*. 90(6-7): 1133-53
- Candeub, A., B. M. Cunningham, and P.J. Alexander. 2008. "Rule of Law, Regulation and Growth of Mobile Telecommunications." MSU Legal Studies Research Papers 06-19. Michigan State University, College of Law Legal Studies, Michigan.
- Clarke, G.R.G. and L.C. Xu. 2004. Privatization, competition, and corruption: how characteristics of bribe takers and payers affect bribes to utilities. *Journal of Public Economics*, 88:2067-2097.
- Coelli, R., and D. Lawrence, ed., 2006, *Performance Measurement and Regulation of Network Industries*: Edward Elgar Publishing.
- Coen, D. and M. Thatcher. 2008. Network governance and multi-level delegation: European networks of regulatory agencies. *Journal of Public Policy*, 28(1): 47-71.
- Collier, P. 2007. *The Bottom Billion: Why the Poorest Countries are Failing and What Can Be Done About It*. Oxford University Press.
- Cornago, E., A. Estache and R. Foucart(2012), "On the incidence of policies to green energy: how perverse can good intentions be?", ECARES, ULB, mimeo
- Crain, W. Mark, and Lisa K. Oakley. 1995. "The Politics of Infrastructure." *Journal of Law and Economics*, vol XXXVIII (April).
- Dal Bo, E. 2006. "Regulatory Capture: A Review." *Oxford Review of Economic Policy* 22(2): 203-225.
- Dal Bo, E. and M. Rossi. 2007. "Corruption and Inefficiency: Theory and Evidence from Electric Utilities." *Journal of Public Economics* 91(5-6): 939-62.
- Deininger, K. W. and P. Mpuga. 2005. "Does Greater Accountability Improve the Quality of Public Service Delivery? Evidence from Uganda. *World Development*, Elsevier, vol. 33(1): 171-191,
- Della Porta, D. and A. Vanucci. 1999. *Corrupt Exchange: Actors, Resources, and Mechanisms of Political Corruption*: Walter de Gruyter.
- Djankov, S., E. Glaeser, R. La Porta, F. Lopez-de-Silanes, and A. Shleifer. 2003. "The New Comparative Economics." *Journal of Comparative Economics* 31(number): 595-619.
- Engel, E., R. Fischer, and A. Galetovic. 2009. "Soft Budgets and Renegotiations in Public-Private Partnerships." Cowles Foundation Discussion Papers 1723, Cowles Foundation, Yale University.
- Estache, A.. (2007) "Infrastructure and Development: A Survey of Recent and Upcoming Issues", in Bourguignon, F., and B. Pleskovic, Rethinking Infrastructure for Development – Annual World Bank Conference on Development Economics, Global, pp47-82
- , 2006b. "PPI Partnerships vs. PPI Divorces in LDCs." *Review of Industrial Organization* 29(number): 3-26.
- Estache, A. and M. Fay. 2010, "Emerging issues in infrastructure", in D. Leipziger, ed. , Globalization and Growth: Implications for a Post-Crisis World, Commission on Growth and Development, pp151-193

- Estache, A., V. Foster and Q. Wodon, 2002. "Maling Infrastructure Reform Work for the Poor: Policy Options Based on Latin America's Experience," ULB Institutional Repository 2013/43979, ULB -- Universite Libre de Bruxelles.
- , 2009. "Corruption and Infrastructure Services: An Overview." Editorial comments. *Utilities Policy* 17(number): 153–55.
- Estache, A. and L. Wren-Lewis. 2009. "Towards a Theory of Regulation for Developing Countries: Following Laffont's Lead." *Journal of Economic Literature* XLVII(3).
- Fay, M. and M. Morrison. 2006. "Infrastructure in Latin America and the Caribbean— Recent Development and Key Challenges." Directions in Development Series, World Bank, Washington, DC.
- Ferraz, C. and F. Finan. 2007 "Exposing Corrupt Politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes." IZA Discussion Paper 2836, Brazil.
- Fiva, J. H., and J. Natvik Gisle, 2009. "Do Re-election Probabilities Influence Public Investment?" CESIFO Working Paper 2709.
- Flyvbjerg, B. 2008. "Public Planning of Mega-projects: Overestimation of Demand and Underestimation of Costs." In *Decision-Making on Mega-Projects: Cost-benefit Analysis, Planning, and Innovation*, ed. Hugo Priemus, Bent Flyvbjerg, and Bert van Wee, 120–44. Cheltenham, UK and Northampton, Mass.: Edward Elgar.
- Gasmi, F., O. Nomba Um, and L. Recuero. 2009. "Political Accountability and Regulatory Performance in Infrastructure Industries: An Empirical Analysis." *World Bank Economic* 23(3):509-531.
- Goldstein, M. and A. Estache. 2009. "The Scope and Limits of Subsidies. In *Stuck in the Middle—Is Fiscal Policy Failing the Middle Class?* ed. A. Estache, and D. Leipziger, 75–96. Washington, DC: Brookings Institution Press.
- Gomez-Ibanez, J.A. (2005. EDM (Energie du Mali). Case 1811.0. Kennedy School of Government, Harvard University,
- , 2007. "Alternatives to Privatization Revisited: The Options for Infrastructure." World Bank, Washington, DC. Processed.
- Gomez-Ibanez, J. 2007. Alternatives to infrastructure privatization revisited: public enterprise reform from the 1960s to the 1980s. SSRN (Social Science Research Network)
- Green, J., and Jean-Jacques Laffont. 1988. "Contract Renegotiation and Underinvestment Effect." Processed.
- Guasch, J. L. 2004. "Granting and Renegotiating Infrastructure Concession: Doing It Right." WBI Development Studies, World Bank Institute, World Bank, Washington DC.
- Guasch, J. L., J. J. Laffont and S. Straub. 2003. "Renegotiation of concession contracts in Latin America: Evidence from the water and transport sectors." *International Journal of Industrial Organization*. 26 (2) 421-442.
- , . 2005. "Infrastructure concessions in Latin America : government-led renegotiations," Policy Research Working Paper Series 3749, The World Bank
- , 2006. "Infrastructure Concessions in Latin America: Government-led Renegotiations." *Journal of Applied Econometrics* 22(7): 1267–94.
- Hellman, J.S, G. Jones, D. Kaufmann and M. Schankerman, 2000. Measuring governance, corruption, and state capture: How firms and bureaucrats shape the business environment in transition economies. Policy Research Working Paper No. 2312: The World Bank, Washington D.C.
- Hall, David. 2007. "Electricity Companies in Latin America 2007." Public Services International Research Unit. Available at [www.world-psi.org](http://www.world-psi.org)

- Harstad, B., and J. Svensson. 2008. "From Corruption to Lobbying and Economic Growth." Processed.
- Hart, O., 2003. "Incomplete Contracts and Public Ownership: Remarks and an Application to Public-Private Partnerships." *Economic Journal* 119: 69–76.
- Henisz, W. J., and B. A. Zelner. 2006. "Interest Groups, Veto Points, and Electricity Infrastructure Deployment." *International Organization* 60 (Winter): 263–86.
- Hiriart, Y., and D. Martimort. 2009. "How Much Discretion for Agencies? A Political-Economy Perspective on Risk Regulation." IDEI (spell out), Toulouse. Processed.
- Huber, Evelyn, Jennifer Pribble, and John D. Stephens, 2009. "The Politics of Effective and Sustainable redistribution." In *Stuck in the Middle—Is Fiscal Policy Failing the Middle Class?* ed. A. Estache, and D. Leipziger, 15–188. Washington, DC: Brookings Institution Press.
- Keefer and Khemani. 2003. "Democracy, public expenditures, and the poor: understanding political incentives for providing public services." *The World Bank Research Observer*. 20(1):1-27.
- Kenny, C. 2006. Measuring and reducing the impact of corruption in infrastructure. World Bank Policy Research Working Paper 4099, Washington D.C: The World Bank.
- Kenny, C. 2007. "Infrastructure Governance and Corruption: Where Next?" Policy Research Working Paper 4331. World Bank, Washington, DC.
- Kenny, C. 2009. "Measuring Corruption in Infrastructure: Evidence from Transition and Developing Countries." *Journal of Development Studies*: 45 (3): 314 – 332.
- Kenny, C. and T. Søreide. 2008. "Grand Corruption in Utilities." Policy Research Working Paper Series, World Bank, Washington, DC.
- Khemani, S. and W. Wane, 2008. "Populist Fiscal Policy." World Bank Policy Research Working Paper No. 4762. Washington D.C.: World Bank.
- Komives, K., V. Foster, J. Halpern, and Q. Wodon. 2005. "Water, Electricity and the Poor. Who Benefits from Utility Subsidies?" World Bank, Washington, DC.
- and Roohi Abdullah. 2007. "Utility Subsidies as Social Transfers: An Empirical Evaluation of Targeting Performance." *Development Policy Review* 25(6): 659–79.
- Laffont, J.J..1999. "Political Economy, Information, and Incentives." *European Economic Review* 43(number?): 649–69.
- . 2000. *Incentives and Political Economy*. Oxford University Press.
- .2005. *Regulation and Development*. Federico Caffé Lectures, Cambridge University Press.
- Laffont, J. J, and J. Tirole. 1993. *A Theory of Incentives in Procurement and Regulation*. Cambridge, Mass.: MIT Press.
- Leblanc, W., J.M. Snyder, Jr, and M. Tripathia. 2002. Majority-rule Bargaining and the Underprovision of Public Investment Goods." *Journal of Public Economics* 75(2000): 21–47.
- López-de-Silanes F., A. Schleifer, and R.W. Vishny. 1997. "Privatization in the United States." *RAND Journal of Economics* 28(3): 447–71.
- Manzetti, L.1999. *Privatization South American Style*. New York: Oxford University Press.
- Martimort, D., and E. Iossa. 2009. The Simple Micro-Economics of Public-Private Partnerships Working Paper No. 08/199, Centre for Market and Public Organisation Bristol Institute of Public Affairs, Bristol.
- McKenzie, D. and D. Mookherjee. 2003. "The Distributive Impact of Privatization in Latin America: Evidence from Four Countries." *Economica*, Spring 2003.

- Mehrotra, S. 2006. "Governance and Basic Social Services: Ensuring Accountability in Service Delivery through Deep Democratic Decentralization." *Journal of International Development* 18(number?): 263–83.
- Mueller, D.C. 2003. *Public Choice III*. Cambridge University Press.
- Murillo, M. V., and C. Martinez-Gallardo. 2007. "Policymaking Patterns: Privatization and Regulation of Latin American Public Utilities." *American Journal of Political Science* 51(1, January): 120–39.
- Murillo. 2001. *Labor unions, partisan coalitions and market reforms in Latin America*. Cambridge University Press.
- Olken, B. 2007. "Monitoring Corruption: Evidence from a Field Experiment in Indonesia." *Journal of Political Economy* 115 (2): 200–49.
- Priemus, H., B. Flyvbjerg, and B. van Wee, eds., 2008. *Decision-Making on Mega-Projects: Cost-benefit Analysis, Planning, and Innovation*. Cheltenham, UK, and Northampton, Mass.: Edward Elgar.
- Puntillo, R. 1996. "Mass Privatization in Poland and Russia: The Case of the Tortoise and the Hare?" *Journal of Emerging Markets* 1(number?): 7–28.
- Rey, P., and B. Salanie. 1990. "Long-term, Short-term and Renegotiation: On the Value of Commitment in contracting." *Econometrica* 64: 1395–1414.
- Robinson, J.A., and R. Torvik. 2005. "White Elephants." *Journal of Public Economics* 89(2–3): 197–210.
- Robinson, J.A., R. Torvik, and T. Verdier. 2006. "Political Foundations of the Resource Curse." *Journal of Development Economics* 79: 447–68.
- Robinson, J.A. and R. Torvik. 2005. "White Elephants." *Journal of Public Economics*, 89, 197-210
- Ross, L. 2005. "Law, Endowments and Property Rights." *The Journal of Economic Perspectives* 19(3): 61–88.
- Ross, M. 2001. "Does Oil Hinder Democracy?" *World Politics*, 53 (3):325-361
- Schlirf-Rapti, R. 2005. "The Privatization of EDM S.A. in Mali—Doomed by design."<sup>56</sup>
- Seim, L., and T. Soreide. 2009. "Bureaucratic Complexity and Impacts of Corruption in Utilities." *Utilities Policy* 17: 176–84.
- Stern, J., P. Levine, and F. Trillas. 2002. "Independent Utility Regulators: Lessons from Monetary Policy." *Regulation Initiative Working Paper*, 52.
- Stigler. 1971. The theory of economic regulation. *The Bell journal of economics and management*.
- Straub. 2009. "Regulatory Intervention, Corruption and Competition." *Review of Industrial Organization*. 35 (1-2): 123-148.
- Straub, S. and D. Martimort. 2005. "Infrastructure privatization and changes in corruption patterns: The roots of public discontent." *Journal of Development Economics*. 90(1): 69-84.
- Straub, S. 2008. "Infrastructure and Development: A Critical Appraisal of the Macro-level Literature," ESE Discussion Papers 178, Edinburgh School of Economics, University of Edinburgh.
- Sturzenegger, F., and M. Tommasi. 1998. *The Political Economy of the Reform*. Cambridge, Mass.:The MIT Press.

---

<sup>56</sup>[http://gsbnet.uct.ac.za/mir/admin/documents/Mali%20EDM%20CASE%20study%20June%2016%202005%20R.Schlirf\\_14\\_12\\_2007\\_13556.pdf](http://gsbnet.uct.ac.za/mir/admin/documents/Mali%20EDM%20CASE%20study%20June%2016%202005%20R.Schlirf_14_12_2007_13556.pdf)

- Thatcher, M. 2005. "The third force? Independent regulatory agencies and elected politicians in Europe." *Governance*, 18(3): 347-373.
- Tremolet, S. 2005. "Mali Case Study." KfW /TRC Economics.
- Vaglisasindi, M. 2009. "Improving the Performance of Infrastructure State-owned Enterprises." Processed. World Bank, Washington, DC.
- Valero, V. 2010. "Government Opportunism in Public-Private Partnerships." Processed.
- Wieland, B. 2006. "Special Interest Groups and the 4<sup>th</sup> Best Transport Pricing. CNI-WP 2006-13.
- Willig, R. D. 1994. "Public versus Regulated Private Enterprise." Proceedings of the World Bank Annual Conference on Development Economics 1993. Washington, DC: World Bank.
- World Bank. 2009. "Enhancing Planning and Control to Increase Efficiency of Public Spending." Public Expenditure Review, Report No. 44350-CV.
- 2010. "Peru Natural Gas Study."
- World Bank/Foster and Briceno-Garmendia. 2010). *Africa's Infrastructure: A Time for Transformation*. Washington, DC: World Bank.

**CMI WORKING PAPERS**

This series can be ordered from:

**CMI (Chr. Michelsen Institute)**

Phone: +47 47 93 80 00

Fax: +47 47 93 80 01

E-mail: [cmi@cmi.no](mailto:cmi@cmi.no)

P.O.Box 6033 Bedriftssenteret,  
N-5892 Bergen, Norway

Visiting address:

Jekteviksbakken 31, Bergen

Web: [www.cmi.no](http://www.cmi.no)

Price: NOK 50

Printed version: ISSN 0804-3639

Electronic version: ISSN 1890-5048

Printed version: ISBN 978-82-8062-436-9

Electronic version: ISBN 978-82-8062-437-6

This paper is also available at:  
[www.cmi.no/publications](http://www.cmi.no/publications)

**INDEXING TERMS**

Political economy

Infrastructure

Regulation

Reform

Interventions to fix market failures in infrastructure have often resulted in some form of governance failure and this contributes importantly to explain shortcomings in the supply of infrastructure services in developing countries and increasingly in developed countries in crisis. The development community continues to address sector dysfunctions from the sector level, often with a 'one solution fits all' approach, instead of approaching the political level, which is considered more challenging. This paper presents a systematic structured review of experiences with policy work in light of political economy explanations. Governance failures have different explanations – including populism, patronage, corruption or ownership shares in the private sector. This paper offers a structured framework for identifying the given governance challenge and discusses the need for more tailor-made approaches to sector-reform.