

# International Handbook on the Economics of Corruption, Volume Two

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## 5 A fighting chance against corruption in public procurement?

*Gustavo Piga<sup>1</sup>*

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*'When I use a word', Humpty Dumpty said, in rather a scornful tone, 'it means just what I choose it to mean – neither more nor less.'*

*'The question is', said Alice, 'whether you can make words mean so many different things.'*

*'The question is', said Humpty Dumpty, 'which is to be master – that's all.'*  
*(Through the Looking-Glass, and What Alice Found There, 1871, Lewis Carroll)*

### 1. Introduction

Public procurement is said to account for between 15 and 20 percent of the GDP of most countries.<sup>2</sup> The allocation of these funds brings to the fore a vast array of interests, both over specific tenders and also over broad national and supra-national legislation regarding procurement.<sup>3</sup> Those interests are often said to be non-benevolent, that is, prone to generate corruption, in both poor and rich countries. Economic and social development is not sufficient to eradicate corruption. Why is the battle against corruption in public tenders an ongoing problem that weakens the credibility of institutions and governments at all levels of development?<sup>4</sup>

One possible answer is to note that 'transparency', the instrument most widely used in the war against procurement corruption, does not generate the right incentives to avoid improper behavior. The Recommendation of the OECD Council on Enhancing Integrity in Public Procurement contains 10 principles to enhance integrity in public procurement. Principle number 2 sums up quite well the concept of transparency: 'governments should provide clear rules, and possibly guidance, on the choice of the procurement method and on exceptions to competitive tendering. Although the procurement method could be adapted to the type of procurement concerned, governments should, in all cases, maximize transparency in competitive tendering'.<sup>5</sup> Although no one can deny the usefulness of such a principle and the fact that it has been used by many governments, we argue here that transparency in procurement is almost worthless if governments do not also know: (a) how to evaluate procurement activity and reward it when positive performance ensues, and (b) how to open those evaluations to citizens at large. These two requirements are yet to be fully

developed, let alone implemented, even in rich countries. We also argue that, if these two preconditions are met, a country has a fighting chance against corruption in procurement.

The deficiencies in the standard approach against corruption in public procurement are vast and often related to the mixture of far- and short-sightedness in contemporary policies. On the one hand, as Section 2 argues, even benevolent policy makers take far too long a view and do not seem to appreciate the day-to-day dimensions of the phenomenon of corruption. They do not tackle fully or aptly the root of this public failure, which is often a systemic one. Since, as we shall contend, the latter involves repeated and frequent interactions among the same (corrupt) players, corruption ends up often being perpetrated by powerful individuals who are likely to withstand criticisms for infringing one small single misconduct. As such, current regulation and codes of conduct – which are frequently based on sanctioning specific one-shot failures – are too weak to have a significant deterrent impact. On the other hand, we argue in Section 3 that they are also too short-sighted. They do not consider the need for long-run policies that can alter the relative advantage – over the life cycle of an individual – of acquiring productive abilities, rather than simply cultivating improper connections in the procurement sector.

In Section 4 we review the economic literature that highlights the most obvious precautions needed to limit the incentives to commit corrupt acts in procurement. The fact that most of these suggestions have not been adopted by most governments reinforces the thesis either that incompetence pervades most procurement organizations or that these precautions are not adopted because of pervasive, systemic corruption. How then can one effectively fight corruption in procurement?

‘Transparency with little discretion’ in public procurement has had limited success in curbing corruption.<sup>6</sup> Therefore, we argue that governments should shift to a policy that gives ample discretion to officials combined with strong *ex post* accountability for procurement decisions.<sup>7</sup> We shall try to convince the reader that the most relevant precondition to succeed in this complex fight is to take full advantage of web-based technologies that allow one endogenously to build a large constituency against corruption made up of ‘the shareholders of the public administration’, that is, citizens and taxpayers who will help the media and the judicial system to identify cases of corruption.

In Section 5, we study the increasing trend of centralization in procurement, the subsequent crowding out of small and medium-sized enterprises (SMEs) participation in tenders, and the link of both phenomena with corruption. The role of SMEs is important because it appears to be one of the few cases where countries take very different approaches and cannot agree

on uniform worldwide legislation. On the basis of the previous sections, however, we argue that a procurement model, based on protecting small firms, seems apt to obtain higher long-term advantages for society, including a fall in corruption, and should be extended to countries that currently forbid a preference for SMEs.

Section 6 concludes.

## **2. Corruption in procurement**

In very few subfields of economics are definitional issues so prominent and unsettled as in the study of corruption.<sup>8</sup> Lambsdorff (2007: 15), at the beginning of his important book, claims:

Definitions of corruption can be discussed at length without necessarily providing an actual value added to the reader. Still some researchers display their endeavors in this area. They are willing to go into time-consuming debate and are fierce in preferring one approach to another. Such debate, however, tends to absorb much of the energy that is desperately needed elsewhere.

We disagree with this last statement. We share the view expressed by Lewis Carroll that words (like corruption) can be made to mean many different things. If we were to place Humpty Dumpty, who thinks he can choose the meaning of a word, in an environment prone to corruption, what better solution to defuse the anti-corruption battle than having him draft a wrong definition? In this section we propose what we believe is an exhaustive definition of corruption that allows us to consider the largest possible set of situations when public procurement is at risk of being distorted away from its benevolent outcome. In doing so, the reader should recognize, we run the risk of sometimes exaggerating the likelihood of corruption (Type I error), but we shall avoid the risk of missing entrenched corruption that occurs under our nose (Type II error).

Corruption in public procurement faces exactly the same definitional problems that corruption in general has always posed to those who study it. We solve this by borrowing and paraphrasing Lambsdorff's definition, of 'misuse of public power [in procurement] for private benefits' as we find it especially fitting for our purpose. Indeed, thanks to it we shall be able to: (i) include (through the word 'power') both political and bureaucratic corruption in the public purchase of goods, services or works; (ii) include (through the lack of reference to a specific *moment* or *item exchanged* for the corrupt exchange) present and future favors in money or in kind around the procurement activity; (iii) exclude (through the word 'misuse') those bribes around the procurement activity which lead to welfare improvements as they undermine welfare-decreasing regulation or support explicit and approved goals of the public sector; and (iv) include (through

the word ‘private’ and the lack of the word ‘individuals’) those corrupt transactions in procurement activity that provide improper benefit not only to two single individuals but possibly to entities made up of several individuals (‘clubs’ or ‘networks’) whose welfare improvement after the corrupt act stands in contrast to an overall welfare decline for society. As we said above, we consider this definition of corruption in procurement as the widest available. To understand why this choice is made, let us review its underlying assumptions one by one.

*Bureaucrats and politicians: perfect complements?*

We include both bureaucratic and political corruption in our study of procurement. This broad scope seems reasonable, first of all, in the light of judicial evidence. Lambert-Mogiliansky and Sonin (2006: 884), for example, cite the well-known posthumously told (and thereby highly credible) French episode of the *Les Yvelines* case from 2002, which ‘revealed the ways in which corrupt politicians and procurement officials used to initiate and arbitrate collusion in the allocation of maintenance and construction contracts’. Beyond anecdotal accounts, there are obviously strategic complementarities between these two types of corruption. On the one hand, political corruption in procurement makes bureaucrats less worried about the threat of sanctions if they themselves engage in corruption. On the other, bureaucratic corruption seems a necessary accessory for politicians who are less expert about how to mask corruption within the jungle of contract details. A win–win situation, where both parties agree to share the rents of the shady deal at the expense of the public, seems an obvious solution for corrupt officials.

*Time: to build what?*

Procurement is a repeated game with the same actors often involved on both sides of many exchanges over time. This fact necessarily requires an analysis of bureaucratic corruption that does not limit itself to a single tender and that considers the strategic implications of the way ‘time’ can sustain or hamper corruption.<sup>9</sup> The temporal dimension is a key to understanding political corruption in procurement because it may raise the expected corrupt returns from procurement legislation that favors either milder punishment for corrupt acts or ampler room for practices that make corruption easier to accomplish.<sup>10</sup> This effect may be enhanced by learning as politicians gain experience. Coviello and Gagliarducci (2010) analyze a unique dataset on Italian municipal governments that includes all the public procurement tenders administered between 2000 and 2005. They investigate the relationship between the time politicians remain in power and the functioning of public procurement. If ‘it takes time to make

friends', they argue, one would expect long-lasting mayors to collude more with local bidders as political longevity increases. Alternatively, if mayors learn to administer the procurement process more effectively as they acquire experience, the opposite should hold.<sup>11</sup> They find that political longevity reduces the efficiency of public spending, decreasing the number of bidders participating in tenders and the winning discount.<sup>12</sup> They interpret these figures as evidence that repeated interactions between politicians and contractors increase the chances of collusion at the local level.

At the same time, legislation that seeks to punish corruption more harshly also requires time to become more effective. For example, imagine a statute that permits the state to exclude a firm convicted of corruption from bidding on public administration tenders. For how long? One tender? One year? Forever? Clearly, the longer the time the firm is to be sanctioned for, the more effective the deterrent of such a statute in curbing corruption.

*Good corruption is not corruption?*

Although we want to avoid the romantic idea of corruption as a tool to circumvent red tape – still so popular today<sup>13</sup> – there is something powerful in the idea that corruption is bad if and only if it leads to a 'bad' outcome for society. If corruption, especially at the lower level of an organization, (i) arises to avoid a 'bad' regulation or norm and (ii) its outcome – appropriately measured – is not negative for society, then, even when it is illegal or administratively irregular, one should be careful about defining it as corruption. Examples of this partly semantic concern arise, even though admittedly not often, in the day-to-day activity of public organizations involved in procurement activities.<sup>14</sup>

Excluding such acts from the definition of procurement corruption does not, however, end the public policy discussion. Inevitably we should examine the underlying procurement legislation, regulation or act that is circumvented through an illegal payment and ask whether it was created to generate a transfer of rents to the political system and, if and when included in the shady deal, to the bureaucracy. In this case, one should ask whether the law was drafted and approved because of a corrupt exchange. We would then have expanded the scope of our inquiry and be in a position to better spot and sanction corrupt agents and to fix the problem so that it does not occur again.<sup>15</sup>

One of the criticisms of adopting such a stance is that the object of study is lobbying, not corruption. Svensson (2005) claims that the two are different because although lobbying affects all firms in a sector, the return to bribery is private. In reality, for procurement deals involving large cartels, corruption affects all firms in a sector too.<sup>16</sup> Furthermore, in

highly concentrated sectors and/or where the national interest is involved (for example, defense) private rents are obtained predominantly by influencing (that is, lobbying for) general procurement legislation (for example, lack of transparency for bids based on claims of national security). Direct bribes for single tenders are not necessary because the underlying statute assures the favored firms of success.

Another example of where large-firm lobbying may have an impact on subsequent corruption levels is procurement regulation regarding SMEs. In some large economies small firms have reserved access to a substantial share of tenders, and in other countries these set-asides are forbidden by legislation.<sup>17</sup> We shall argue that one explanation for a law that does not favor SMEs – legislation which often produces fights between lobbies representing small and large firms – is that it may make political and bureaucratic corruption in procurement easier to achieve with a few large firms dominating procurement processes.

*One private gain for one (powerful) group of individuals*

Procurement decisions often give private benefits to two key individuals, usually representing the bribe taker and the bribe giver involved in the tender. Petty corruption certainly takes this form. But other types of corruption may dominate.<sup>18</sup> Take, for example, large tenders. Although most public contracts are for small amounts, the largest share by value in public procurement consists of a few large and complex contracts.<sup>19</sup> This concentration has become exaggerated in recent years as new centralized procurement agencies arise in many countries or regions. Large contracts often require the involvement of several large administrative organizations (ministries, authorities, and so on), large firms (often organized into consortia), prominent politicians who have promoted the project, and often many small local political entities with some sort of veto power over the project approval. They also attract the interest of many politicians who seek a reward for their positive intermediation. These contracts thus create the expectation of a diffuse gain for a small but specific group of individuals, especially if they are accompanied by some form of corruption.

This network of interests, possibly due to the fact that most are repeat players, will evolve into a cobweb of relationships organized around a large group of individuals, not necessarily formalized into a party, an economic entity, or a formal association. These networks may evolve in importance to a point where the expected cost of corruption declines as the power of the network increases, due to lower probabilities of being detected, cheated on by partners, charged, or sentenced. At this stage, corruption becomes systemic and the network acquires a tacit and secretive nature that persists over time.

This last suggestion is consistent with other evidence found in cases where bribery takes place. Søreide (2008: 408) notes: that

[F]irms prefer to stay silent about this form of corporate offense even when they have lost important business opportunities and wasted significant amounts in tender expenses as a result. They rarely lodge complaints against the tender procedures, they do not seek legal redress by initiating a court action, and they seldom ask their home country to intervene at a diplomatic level. Furthermore, they do not make liability claims for lost tender expenses, and they do not make their suspicions public in other ways.

Interestingly she goes on to say:

[T]he explanation most frequently cited, though, was a concern about 'future business cooperation,' which was referred to by 31% of the firms. Curiously, firms that had never cooperated *formally* with other firms in the industry were just as concerned about the adverse impact of any whistleblowing on future business cooperation as those that had this kind of cooperation. The concern about business cooperation was significantly stronger among highly profitable firms, whereas firms that operated under a stronger degree of price pressure were more concerned about how customers would consider a whistleblowing reaction to corruption.

Once again we might note that a network emerges from these considerations; it is informal and tacit and is more likely to occur in sectors where cartels facilitate this type of interaction.<sup>20</sup>

Indeed one might call it a criminal organization with systemic ramifications. This type of corruption in procurement is obviously systemic.<sup>21</sup> But shifting toward calling corruption an organized crime is a hard choice with vast and sometimes unknown ramifications for those who study it and for law enforcement strategies. For a start, it requires one to go beyond simple bribery. Indeed, procurement relationships among parties often extend over time periods (same firms, same politicians, same bureaucrats). Hence, exchanges based on patronage or cronyism can take place over time and will have a different appearance from simple bribery or extortion. Patronage in procurement involves favoritism in which a party in power rewards groups, families, or ethnic groups for their electoral support through the illegal award of government contracts. These deals might occur months after the electoral support has taken place and for contracts only indirectly tied to the newly elected government (for example, a contract awarded in a local municipality over which the central government has specific influence). Cronyism<sup>22</sup> in procurement is individually based. For example, a politician might appoint a friend as the head of the centralized procurement centralized agency or of a supervising authority for procurement contracts.

These forms of corruption are difficult to fight and ought to make us extremely skeptical about conventional means of fighting corruption, such as the creation of anti-corruption agencies that are likely to be captured by patronage. Wrong (2009) shows how even the well-meaning head of anti-corruption agencies in Kenya had to escape to exile abroad when he sought to inform against political corruption (see Recanatini, this volume, Chapter 19, for a more optimistic perspective). But two additional factors, related to whistleblowing and other legal instruments, should attract our attention.

*Fighting systemic corruption in procurement: some general implications*

*Whistleblowing* Whistleblowing has often been used successfully to break the back of organized crime organizations that rely on repeated interactions within an ‘evil’ network, such as the mafia or terrorism cells. At the same time, some countries have adopted whistleblowing as a tool to fight corruption.<sup>23</sup> However, many countries have not adopted it, possibly because they do not believe that corruption is much of a problem. Or maybe they have not adopted it for reasons that should worry us more.

Analyzing data collected by Batra et al. (2003), Søreide (2008) found a strong positive correlation between the functioning of antitrust institutions in a given country and firms’ reported problems in procurement tenders. Indeed, it could well be that in such an economy even antitrust authorities are undermined by corruption in the form of patronage.<sup>24</sup> This would leave us in a difficult corner where corruption finds strength in its consequences. Accordingly, Søreide (2008: 423) concludes that ‘firms will not engage in whistleblowing against corruption-related challenges in the local business climate unless local levels of corruption are considered to be low’. What gain do we obtain from an instrument whose advantage seems to be capable of being activated only when it matters little?

*Legal instruments* Fighting this type of systemic corruption might also require changes in the definitions of corruption that are found in international conventions and national laws. To take one, very relevant, example, the United Nations Convention against Corruption, which became effective in 2005, defines bribery as:

- (a) The promise, offering or giving, to a public official, directly or indirectly, of an undue advantage, for the official himself or herself or another person or entity, in order that the official act or refrain from acting in the exercise of his or her official duties; (b) The solicitation or acceptance by a public official, directly or indirectly, of an undue advantage, for the official himself or herself

or another person or entity, in order that the official act or refrain from acting in the exercise of his or her official duties. (Article 15)

However, it is startling to note that this document, although it mentions corruption 107 times, never defines the term. If the definition of bribery is as close as we get to a definition of corruption, then: (i) the definition seems to imply that corruption is started by a ‘first mover’, be it the public official him/herself, or the official’s counterpart, and (ii) corruption is essentially a bilateral relation that may well be done in favor of other parties, but that such parties are not in the same position with respect to the two main ones who participate in the act of corruption, and finally, (iii) no mention is made of corruption in the form of cronyism or patronage over and above outright bribery.<sup>25</sup>

If corruption were to be characterized as an organized crime: (i) it would not imply any ‘first mover’ as both parties would likely be part of a larger, common, network; (ii) the responsibility for the corrupt act would be enlarged to consider a larger group of individuals that would include some belonging to the corrupt network even if they were not directly involved in the specific act, and (iii) it would include cronyism and patronage in addition to bribery because both are part of the more complex phenomenon of corruption. Law enforcement would shift away from direct exchanges of favors and more toward fighting powerful networks that sustain themselves in part through procurement.

Under such a systemic definition of corruption, the phenomenon would be quite hard to monitor, discover, charge in court, and punish. It should nonetheless be included in our framework and in possible legislative schemes of reform to fight corruption. One legal model might be the controversial concept of joint criminal enterprise (JCE), which has emerged as an important legal element of prosecution strategy and criminal liability, especially in the context of jurisdictions dealing with war crimes. Laws against participation in a JCE facilitate the proof of individual criminal responsibility. It eases problems of gathering evidence in relation to non-predicate offenses, capturing the responsibility of remote but key actors in criminal organizations (for example, criminal masterminds or ‘godfather’ figures). The European courts are applying this concept to companies involved in business cartels.<sup>26</sup> Could this new legal concept represent the future of the fight against systemic corruption?

### **3. Corruption and incompetence: a vicious circle**

In the previous section we argued that the concept of corruption in procurement should be broadened to include aspects of organized influence,

patronage, and cronyism that persist over time and involve large firms, industry cartels, and high level politicians and bureaucrats. Understanding the 'nature' of corruption in this way will help reformers to fight it with more accuracy and probability of success.

In this section, we instead focus on the question as to whether *all waste in procurement is due to corruption*. Indeed, bad procurement legislation might have arisen from the sheer incompetence of the policy maker. The same is true at lower levels of the procurement organization: waste can result from incompetence in the drafting of tenders.<sup>27</sup> In an often-quoted paper, Bandiera et al. (2009: 1304) show that waste is abundant in the Italian procurement of goods and services, and they manage to distinguish between 'active' waste due to corruption and 'passive' waste due to incompetence. They find that 'on average, at least 82% of estimated waste is passive and that passive waste accounts for the majority of waste in at least 83% of our sample public bodies'. This seems at first glance a surprising and optimistic result for finding a solution to wasteful practices in procurement because it points to education and training as the solution, rather than ambitious cultural and juridical reforms to eradicate corruption.<sup>28</sup>

We believe, however, that the situation is more complicated than this and should be examined further. When discussing Bandiera et al.'s results during a lecture, I was asked by the procurement officer for a military organization: What if the incompetent person has been put there by superiors who sense that a professional person would limit their capacity to guarantee corrupt outcomes? Or that an incompetent person, in charge of the procurement process or of monitoring it, is bound to be captured more easily by more expert firms and might be softly corrupted by gifts, invitations, favors that he does not consider as bribes? Wouldn't this mean that the distinction between corruption and incompetence is an artificial one? And would this apparently only semantic turn have significant implications for the fight against good governance in the work of the public administration?<sup>29</sup>

These questions suggest the possible existence of multiple equilibria in systems subject to corruption and incompetence. On the one hand, one could imagine a country where the level of corruption is so high that acquiring competences is not a worthwhile investment. Much higher yields would be obtained through networking designed to enter the dominant, corrupt crony and patronage-dominated environments, that is, in becoming 'a competent briber'. In return, the resulting pervasive technical incompetence would make corruption run much more smoothly, given the generalized absence of accurate and precise monitoring and the easiness of capture. In this kind of society, high corruption and incompetence would

go hand in hand, reinforcing each other. One could, however, just as easily imagine a country where competence dominates, and as a consequence, monitoring is so effective that corruption cannot get a foothold. The lack of corruption would make the return on networking activities lower than the benefits from acquiring technical competence. In such a world, one would predict a high level of procurement competences together with integrity in purchases. Picci (2011: 116) widens the argument on the relationship between corruption, efficiency and effectiveness arguing that the three concepts 'are strictly linked phenomena'. His examples provide food for thought:

[C]onsider the relations between corruption, and the efficiency and effectiveness of a policy. A public official who receives an illegal sum of money for placing someone at the head of a queue for a service, has an interest in keeping the line long enough. Hence, corruption may cause inefficiency and resistance to change. It is also true that inefficiency may cause corruption. For example, the opportunity is there for an official to exploit, when there is a long line of people waiting, and not otherwise. Moreover, lack of efficiency may lead to corruption, because the higher the complexity and length of a bureaucratic procedure, the more numerous the occasions to circumvent its rules dictating honesty.

Inefficiency, incompetence, and corruption feed on each other. Picci takes the existence of inefficiency as a given (why is there a long line? Or a complex rule or procedure?), but inefficiency could well be generated either by incompetence somewhere else (in drafting the wrong process for avoiding long lines or setting up complex procedures rather than simple ones) or by corruption somewhere else (in drafting processes or procedures). We focus on the issue of incompetence rather than inefficiency for two reasons: (a) if the existing inefficiency (that reinforces corruption) is due to corruption itself, there is little that can be done to fight it; (b) if the existing inefficiency is due to incompetence our conclusions should coincide.<sup>30</sup>

Overall, however, we agree with Picci's conclusion:

[C]orruption cannot be considered in isolation . . . it follows that anti-corruption policies which focus narrowly on the corruption issue will miss the complexity of the relations and are therefore likely to fail. More appropriate, then, are policies which aim to suitably reform prevailing governance systems. . . . This understanding tells us that it does not make much sense to propose narrowly designed anti-corruption policies. On the contrary, both analysis and policy recommendations ought to be forged at a higher level, that is, in terms of general governance. (p. 116)

If there can be multiple equilibria between corruption and competence, expectations and systemic shocks can lead to big changes. A change of

focus by the leaders in the country or in the profession toward efficient and honest procurement might represent one of these positive shifts. As Roberts (2004: 164) puts it, ‘having a leader whose vision is very clear and certain can be highly motivating for employees, inducing more effort and guiding its allocation, because they are sure of what will be rewarded’. Another reform could be a decision to set up a training program in the procurement organization where greater rewards would be obtained through the acquisition and certification of competences. Such programs have indeed been launched, especially in the United Kingdom, in the face of a high turnover of the best procurement officials in the public sector who are bid away to work in private sector procurement.<sup>31</sup> Celentani and Ganuza (2002) argue that high wage differentials in favor of procurement agents act as a deterrent to corruption. Because the literature on corruption and wages shows mixed empirical evidence (see, for example, Sosa, 2004), we stress that we are talking about wage increases that are related to better performance, objectively measured. To add a note of caution, just like the whistleblowing protections mentioned by Søreide (2008), these programs seem to be put in place in countries where corruption is already low. In addition, there is one more issue that might make reform based on competences difficult. Lambert-Mogiliansky and Sonin (2006) correctly argue that when fighting corruption, governments often try to reduce agents’ discretion and thereby decrease their accountability. But such policies reduce the relative value of a career based on competence rather than on corruption because they increase the homogeneity of procurement officers’ capacity to reach the organizational goal, and, therefore, they reduce the possibility that one will be rewarded differentially.

Reducing discretion has other drawbacks that are seldom considered in the fight against corruption. First, rigid procedures may shield procurement officials/politicians from responsibility for poor performance and failures (‘not my fault, the rules’ fault’), while favoritism may be hidden by a wall of complex procedural rules.<sup>32</sup> Second, if the agent is competent, discretion offers valuable flexibility, especially in complex procurement situations. Celentani and Ganuza (2002: 1285) quote Banfield (1975):

[N]arrowing discretion . . . while preventing the agent from doing (corrupt) things that are slightly injurious to the principal it may at the same time prevent him from doing (non-corrupt) ones that would be very beneficial to him. If simply to prevent corruption an agent is given a narrower discretion than would be optimal if there were no corruption, whatever losses are occasioned by his having a sub-optimal breadth of discretion must be counted as costs of preventing corruption.

Finally, a reduction in discretion may not necessarily reduce corruption. Compte et. (2005:2) show that:

[I]ncreasing control on the bureaucrat i.e., reducing the amount of illegal transfer he can accept, does not reduce the ability of firms to collude. The intuition is that corrupt bureaucrats are in a sense in competition with firms for collusive rents. Increasing controls on civil servants reduces the 'price' firms have to pay to sustain collusion, which in turn makes collusion even more profitable to the firms, hence in some cases easier to sustain.

Lambert-Mogiliansky and Sonin (2006: 900) argue that fighting corruption through the removal of discretion would make competences rapidly irrelevant: 'to this aim we believe that raising the level of competence of procurement agents is key. A highly competent agent can be made accountable for ambiguities and other defects in the bidding documents'. They also argue that this accountability might 'mitigate the agent's incentives to reveal private information about defects. Therefore, it might be counterproductive from the point of view of the fight against favoritism', (p. 900). But favoritism can be fought through flexible standards, as argued below.

What emerges from this section, therefore, is that an equilibrium with little corruption and sophisticated competences has to be accompanied by discretion, accountability, rewards for qualifications, and an appropriate benchmarking and sharing of best practices with requirements to identify departures from standards, so as to avoid favoritism.

The most difficult element in this list is 'accountability'. We shall come back often in the next section to the question of how accountability can be improved through the appropriate types of transparency. In moving to discuss procurement reform below, we do not differentiate between incompetence and corruption in procurement, either at the bureaucratic or at the political level. The policies we discuss do not depend upon being able to make a clear distinction between these two phenomena, and as we have argued, they are likely to be deeply intertwined in any case.

#### **4. The fight against corruption: what have we learned?**

##### *Procurement stages*

In principle, corruption in procurement is intended to earn rents for firms and officials through deviations from an ideal benchmark representing the public good. But this ideal benchmark may be difficult to specify, in practice, and it varies depending on time, market, size, and other factors. Only rarely is a true counterfactual available.<sup>33</sup> The typical lack of data *ex post* (itself a feature of public procurement that is sometimes connected with

corruption) means that researchers cannot conduct empirical analyses to measure the impact of corruption. Nevertheless, the consequences of corruption in specific cases have been studied in detail and this has given a basis for a better understanding of how to prevent the problem. We review these features in what follows, often reminding the reader of the implications of systemic corruption for the effectiveness of a reform.

Typically procurement is seen as consisting of three sequential steps:

1. *T: Estimating needs (demand management)* Which goods, services, and public works should be purchased for a public agency? How long should the contracts be in force? Where should the goods be provided (an issue that is equivalent to establishing the geographical distribution of public goods and services and their assignment to suppliers in different locations)? How will they be provided within the organization (an issue that is equivalent to determining the appropriate level of centralization of the procurement process)? Which base price will be at most tolerated?
2. *T + 1: Implementing and awarding the tender (sourcing)* Which criterion (typically: price only or most economically advantageous tender: MEAT) and which contractual feature (typically: fixed cost versus cost-plus alternative) will be used to select and pay the supplier? If the procurement official chooses the price-only criterion, when and how does he/she select the base price over which the tender will be awarded? How does he/she proceed to identify risky bids and deal with them? What kind of auction format does he/she choose (for example, descending bid or sealed bid)? If the official chooses the most advantageous offer, how does he/she choose the number of points to award to quality features of the offer (or of the supplier)? How much discretion should he/she leave to the awarding tender commission in deciding those quality points? And how does he/she go about calculating the method to award points for discounts with respect to the base price?
3. *T + 2, T + 3, . . . T + n: Monitoring quality (supply management)* At the end of the previous stage the procurement official has determined the level of promised quality from the winning supplier, but how does he/she make sure that such quality is effectively provided over the  $n$  periods of the contract or, if not, whether the shortfall was due to opportunistic behavior by the supplier him/herself or to uncontrollable events?

Recently, microeconomists, applying models of (repeated) strategic interaction within a ‘principal agent model under incomplete information’,

have often helped the organization to see procurement not as a simple series of temporal steps to be followed sequentially ‘by the book’, but rather as a ‘dynamic game’. In this game the outcome of the last stage, that is, the quality of the required product or service purchased by the public sector, is strongly affected and sometimes fully determined by the two intermediate steps that are taken earlier and whose outcome cannot be canceled without high costs: (i) the estimate of needs, (ii) the tender design, and the tender award.<sup>34</sup>

If many of the features of stage (3) are not determined in advance in stage (2), there is little legal possibility of carrying out the last stage credibly and effectively if the supplier has been found at fault. Similarly, the likelihood of successfully achieving the features chosen for stage (2) of the procurement process, such as the price and quality stated in the tender documents, depend substantially on how carefully and professionally the demand has been estimated and reported in the tender documents during stage (1).

Imagine that the procurement process was carried out by three different independent individuals who, sequentially, have to decide whether to behave in a corrupt or an honest manner. Now imagine further that there is a (benevolent) principal of these individuals – that is the CEO of the public organization or, better, the citizen-taxpayer – who has the capacity to fully observe the procurement process and to be able to verify the officers’ behavior in court (that is, these officers risk an infinite penalty from choosing a corrupt action). Wouldn’t that principal simply ask each officer to choose the optimal outcome?

Now suppose that such verifiability is not available and that corruption might occur. Even if the second and third officers act optimally, the wrong choices of the first officer (or at the first stage) may lead them to behave only suboptimally for the purpose of the principal. For example, contracts have been bundled in such a way as to make the cartel success inevitable (see below). Or a mistake by the second procurement official at the tender stage might mean that the third one, in charge of supply management, lacked the legal instruments to pursue the ineffective supplier because, for example, they were not specified in the contract. Note that corruption can take place through actions that *per se* require little infringement of the law, if one abstracts from its malevolent intent. We examine those actions in what follows.

#### *Demand management: hiding corruption*

Given the typical long length of tender documents, it is not too difficult to write them so that the needs of the administration are specified in such a way as to increase the probability of the briber being the final winner.

Søreide (2006: 405) quotes the result of a survey among Norwegian entrepreneurs: ‘Does it ever happen that tender specifications are designed to fit with the offer of one specific company?’<sup>35</sup> Some 41 percent of the firms said yes/frequently/often.

This evidence is backed by theoretical research. Kosenok and Lambert-Mogiliansky (2009:109) show that favoritism facilitates collusion because ‘it induces the disclosure of firms’ private information, as this information is used by the corrupt auctioneer to maximize the winner’s rent; it shelters firms from random fluctuations in government preferences, the selected contract specification reflecting the cartel’s interests instead of social preferences’. They find that overall favoritism ‘exacerbates the cost of collusion for society. The contract specification is socially inefficient and the price is higher than with collusion alone’.

It does not make matters any easier that information-sharing during the preparation of offers remains a delicate phase prone to corruption, not so much for lack of regulation, but because it is difficult to detect. Søreide (2006: 405) reports that 49 percent of the respondents said that there will ‘often be negotiations between tender participants and decision-makers during a tender procedure’, without having critical information copied to other tender participants. Less than a fifth of those reporting communication all through the tender process said that such communication is usually copied to all tender participants. Many times, therefore, such asymmetric conversations occur, and information technology (IT) is impotent against them as well as even standard organizational controls. Codes of conduct that describe improprieties in the communication process are certainly helpful in that sometimes employees are clearly unaware of breaking a specific and important rule and, more to the point, such codes make the impropriety of communicating in an asymmetric way more evident and, therefore, more costly, as an employee can be made accountable for his or her actions.<sup>36</sup>

One way to avoid corruption arising from favoritism would be to prescribe the product or service specifications at the central (national?) level.<sup>37</sup> However – given the heterogeneity of needs of a single public administration even for a given commodity/service – standards often cannot be prescribed for every detail that is capable of opening up the way for corruption. Hence, such standards should not be made mandatory, given the fundamental need of each public administration to have the final say on its specific requirements.<sup>38</sup> However, the same administrations should be mandated to explain divergences from any national standard and to make their own standards publicly available. The internet makes this solution much less expensive than it would have been just a decade ago, with the added advantage of generating a vast number of potential monitors, the

public at large, including the more expert part of it, that is, technicians, judges, the press (Picci, 2011).<sup>39</sup> However, this will be true only if the publication on the web is transparent and easy to access with high-quality search engines available to retrieve information.<sup>40</sup>

Some features of the way demand is structured might require special attention as they could potentially hide a more dangerous capacity to set up a corrupt transaction between procurement officials and firms. In particular, a contract's length, division into product lots, geographical focus, and delegation of authority across complex organizations should receive appropriate analysis.

A contract's length<sup>41</sup> often varies also across administrative bodies for the same good or service. Such a difference may be related to the specificities of national markets (public procurement being a market where purchases are often not open to cross-border penetration), but it may also be the case that repeated short duration contracts for the same type of product might make collusion across firms easier (who would agree on sequentially sharing the market of the public sector?). A long-term contract, on the other hand, may increase capture by the supplier by making it harder for the procurer to switch away from him/her thanks to lock-in enhancing strategies.<sup>42</sup>

Why do we care about greater collusion or lock-in in the framework of corruption? Because although these effects could have been generated by mere incompetence in perfect good faith, it is clear that they might have been the consequence of (i) a cartel agreement where the exchange of bribes facilitates the extraction of rents through maintenance of the cartel or (ii) simply a lucrative corrupt scheme. As such, deviations from 'an average' contract length in a given market should be monitored closely in both directions.

Cartels and corruption can be 'strategic complements'. Lambert-Mogiliansky and Sonin (2006), Søreide (2008) and others argue that corruption generates focal equilibria where bidders refrain from competing with each other. Compte et al. (2005: 1) argue that 'a key effect of corruption is to facilitate collusion in price between firms and thereby to generate a price increase that goes far beyond the bribe received by the bureaucrat'. For this reason enquiring about how cartels operate can be tantamount to finding smoking guns for corruption. It is an insight we shall come back to for its relevant policy implications.

Collusion-enhancing corruption is also a concern for another aspect of demand management, the choice of (product or geographical) lots.<sup>43</sup> Imagine, for example, that the procurement official can subdivide the acquisition of computers for the city of Albany, NY, into two tenders, one for southern Albany and the other for northern Albany (or, one for

portable PCs and one for desk-top computers). The available alternative being, for example, one where the City of Albany would simply launch one tender for all types of computers for the whole city. In some cases, officers decide to unbundle contracts to reduce the value of any one contract so as to fall under a regime where more discretionary rules apply (the so-called 'fractionalization', which is often forbidden by the law itself but not always easily spotted), allowing less transparency and more direct negotiations with suppliers. In addition, although there might be many good reasons to divide the tender into two lots, it is evident that if the market were naturally to accommodate only two players, given the dimension of the needs of the municipality, a regulator should check why a choice that made a cartel-sharing agreement easier to implement was chosen by the administration. For reasons seen in Section 3, we care about the end result, not whether the reason for unbundling was incompetence or corruption.

Choosing the base price is often left to demand managers, once they have established the perimeter of the relevant market. Base prices are different from reservation prices, which act as a separator between the in- and out-sourcing decisions. A base price higher than the opportunity cost of out-sourcing would obviously not be welcome and would go against the desire of a benevolent principal as it would risk making the public pay more than the cost of work that was in-sourced. So the reservation price acts as a normative upper bound for base price. Base prices must be set with an eye to current market conditions. Setting a base price lower than the current market price would be risky, simply because the awarding procedure could be canceled for lack of suppliers. So the procurement official has discretion in choosing a base price between the market price and the opportunity cost of out-sourcing. In such cases, how should the base price be set, close to or far above the lower threshold? The answer is not clear-cut. If it is quite likely that the market is dominated by a cartel, it would be unwise to choose a base price too much higher than current market price, simply because it would act as focal point of coordination for the cartel itself, allowing it to bid exactly (and most of the time successfully) at the base price, at the expenses of the citizens and taxpayers. A base price too high in the presence of a concentrated market could be the result of mere incompetence or corruption on the side of the procurement official. A base price too close to the market price, in contrast, might discourage the participation of new players (especially SMEs) and should not be adopted in the absence of clear signs of the presence of cartels.<sup>44</sup> Once more, the existence of standard information available to the public, continuously updated, on base prices could help spot anomalies in specific tenders. Another example from the literature concerns choices about the secrecy of a reserve price rule. Lambert-Mogiliansky and Sonin (2006) detail how the advocates of secrecy, on the

ground that it diminishes the potential for a cartel, neglect the fact that in an environment where collusion and corruption go hand in hand ‘secrecy’ creates a source of rents that favors the realization of both (bad) outcomes.

Finally, one organization might have the duty of selecting the supplier for a group of (usually smaller) entities, aggregating their demands. This is often the case for central purchasing bodies (CPBs). Different ways are available to coordinate such requests, for example:

1. a framework agreement (newly introduced by EU legislation) allows these smaller entities to launch at their discretion their own independent tender on the basis of some common, basic, characteristics, established by the aggregating entity, which through a main initial tender also chooses the subset of suppliers allowed to compete in those sub tenders; and
2. a one-shot unique tender administered and awarded by the aggregating entity and rigidly available for the smaller entities (often called a ‘framework contract’).

Although we know little about the ‘collusion-enhancing’ features of framework agreements, it might be the case that the procurement officials’ choice between (1) or (2) could facilitate the extraction of rents and hence become the focal point of an agreement between the two corrupt parties.

Summing up, procurement law does not rule out behavior in the demand management phase that is capable of increasing the risks of endogenous corruption arising from the procurement officials’ behavior. Systemic corruption makes this phase a particularly delicate one because increases in the likelihood of repeated interaction between the (same) procurement official and the (same) firms help sustain cartels. What could be done in this phase? Kosenok and Lambert-Mogiliansky (2009: 98) argue that ‘increasing the severity of punishment can have a substantial effect on the extent of favoritism’. Obviously this would be true if the antitrust authority is not itself captured by big interests, patronage, and cronyism. Setting non-mandatory standards for tender documents could be helpful in fighting corruption, especially if accompanied by public information of deviations from it. As it is a measure that does not require action by a specific actor once improprieties have occurred, capture is made more difficult, as, for example, when a whole community becomes aware of abnormal standards within its local administrators’ tendering activities.

*The tender phase: no place to hide for corruption?*

Once demand management has been synthesized in the formal tender documents, it is time for procurement officials to inform suppliers that

the moment to participate in the tender has come. If everything has been worked out smoothly in the process of drafting the tender documents there will be no space left for a corrupt agreement. If not, as we said before, it is likely to be too late to reach the perfect outcome for citizens.<sup>45</sup>

Legislation in many countries and among many institutions (see, for example, the World Bank rules for procurement) regulate in great detail the procedural moment of bidding and awarding. It is actually quite amazing, given the critical nature of the entire procurement process, how much the typical public procurement law focuses on this stage of sourcing compared with the other two (demand and contract management). As a result, the likelihood of a corrupt event based on avoiding clearly prescribed rules is very hard and quite unlikely. For example, it is very unlikely that corruption will lead to the lack of publication of the tender as required by the law.<sup>46</sup>

Similarly, the process of closing the envelopes which contain the suppliers' offers is heavily regulated due to the fear that such envelopes might be reopened and modified as a consequence of a corrupt agreement. Lengwiler and Wolfstetter (2006) list in great detail the various forms that corruption could take via tampering with the envelopes. They suggest that many of these methods run the risk of spreading the word among losing suppliers of the bribery attached to the award. Hence, they are risky for bidders and possibly little practiced (even though, as Søreide (2008) mentioned, whistleblowing is unlikely). They also suggest that the increasing use of IT in the form of e-procurement, which allows bidders to encrypt their offers in files that are more secure, makes tampering with the offers an out-of-fashion method to achieve rents via bribery.

In tender documents, strategic choices often are made by the legal department and could facilitate entering into corrupt agreements with suppliers. The most typical items relate to: allowing temporary groupings or temporary consortia, using price-only tenders versus other criteria, determining the number of points and the way of assigning those points to price in a most economically advantageous tender, fixing formulas to deal with abnormally low offers, choosing descending-price versus sealed-bid tender methods.

Temporary groupings of suppliers have often been considered a natural instrument to be used by firms to satisfy public demand, so as to exploit synergies and divide tasks within the firms' offer.<sup>47</sup> Recently, in some countries it has been pointed out that they can be used as a pro-competitive tool, for example by making it possible for small firms to participate in large tenders that they would not have been able to enter on their own. But, some argue that temporary groupings should be forbidden if they involve large firms that can compete on their own; the intent being to limit the possibility

of cartel formation.<sup>48</sup> If in a tender such a prescription is not adopted, one might wonder whether a cartel has been facilitated by the non-naive choice of the corrupt procurement official. One should also be aware that often the imposition of such collusion-enhancing clauses could derive from pressure from firms that have high leverage over the public agency.<sup>49</sup>

Another critical item is the choice of price-only versus cost-plus contractual mechanisms. Bajari and Tadelis (2006) argue that fixed-price contracts awarded competitively, especially in the case of complex projects, generate many downsides. One is an incentive to enter into a corrupt agreement where the winner will deliver at no penalty a lower quality than the one promised. The corrupt firm wins the tender with the lowest price bid thanks to the information advantage the briber has with respect to the other participants. However, in a corrupt environment cost-plus contracts have equal disadvantages ('don't worry about price, it's cost-plus' was a statement often heard at Halliburton as reported by whistleblowers on defense contracts, see Bajari and Tadelis: 137). These can include the possibility of a corrupt agreement based on the lack of monitoring by the procurement official. In the next subsection we discuss how to deal with corruption that implies a lower quality of services.

Direct negotiations instead of open competitive bidding, although often used in the private sector where firms with good reputation are selected, are discouraged in the public sector because of the perceived risks of corruption through favoritism. Unfortunately – and contrary to the general wisdom<sup>50</sup> – open competitive bidding in an environment prone to corruption might not do the job either, especially for complex projects.

The same problems, and even additional ones, arise when the procurement official tries to use scoring rules that allow for the evaluation not only of the price but also of some qualitative feature of the offer (the so-called 'MEAT' requirements).<sup>51</sup> Using price-only tenders or MEAT requirements is a choice where the law leaves ample discretion to the public entity. Choosing the quality criteria to be inserted in the awarding formula ('the scoring rule') requires officials to decide whether the quality points should be left to the discretion of the awarding commission or be fixed *ex ante* in an objective way so that suppliers know before bidding how many quality points they will earn. Although there are ways to reduce the possibility that the awarding committee chooses the 'wrong' bidder,<sup>52</sup> often it is easy to include in such committees even a single individual who is capable, with his/her expertise, to steer the other members toward rewarding with 'too many points' a specific offer which is linked to a bribe payment. In that case a price-only formula or a MEAT criterion with objective point determination could reduce the benefits of making a payoff.<sup>53</sup>

Often firms awarded discretionary quality points renege on these same

promises at the contract management stage. If this happens, it indicates that a shady deal may have been signed earlier on.<sup>54</sup> Policy considerations again would seem to suggest the elimination of discretion on the side of the commission and reliance instead on technical quality specifications. Although this might imply that either a price-only tender or an objective scoring rule should be used, Lambert-Mogiliansky and Kosenok (2009: 111) argue that discretion on scoring rules is ‘used to add design flexibility, which generally increases competitive pressure’. They argue (p. 111) that according to Compte and Lambert-Mogiliansky (2000) ‘the decisions relating to technical specifications are even more sensitive to capture than those that relate to the scoring rule, because they are linked to higher rents. Only when the first price auction is associated with standardization of the technical specifications can the agent’s discretion be truly reduced’.<sup>55</sup>

Choosing a MEAT criterion increases discretion not only through quality scoring but also through the methodology chosen to translate the offered price into points. The main differences are interdependent and independent formulae (see Dini et al., 2006). Only under the latter can firms know the number of points they will be allocated before they know their rivals’ price offers. What matters here is that interdependent formulae have been used in some cases to make collusion easier in the face of competition from members external to the cartel. For example, in a tender in Italy for food coupons for public employees (a unique Italian tradition) the tendering body selected the interdependent formula:

$$\text{Price Points} = \begin{cases} 50 \times \frac{P_{\min}}{P_0} & \text{if } P_0 \leq P_{\text{average}} \\ 50 \times \left( \frac{P_{\min}}{P_0} \right) \times \left( 1 - \frac{P_0 - P_{\text{average}}}{P_B - P_{\text{average}}} \right) & \text{if } P_0 > P_{\text{average}} \end{cases}$$

where  $P_{\min}$  stands for the lowest price among the ones offered,  $P_0$  the price offered by the firm,  $P_B$  the tender base price and  $P_{\text{average}}$  the average price offered. The formula is meant to reward fewer further discounts under the average price than the ones between the tender base price and the average price if the distribution of bids is quite concentrated. Although 10 firms participated in this tender, eight formed a cartel to let one designated firm win the contract. In the presence of one aggressive bidder that did not belong to the cartel and that obtained the highest number of points for its price, the solution adopted by the cartel was to coordinate and have the seven losers belonging to the cartel post a relatively high price so as to raise substantially the average price and ensure that the designated member of the cartel would not lose excessively from price competition. With the

point-price distance minimized in this way, the member of the cartel was able to win the contract through higher quality. The cartel (which eventually was sanctioned by the Italian antitrust authority) would have had a substantially lower chance of winning had an independent formula been chosen.<sup>56</sup>

A similar type of corruption risk occurs if there is a high probability of default or a low probability of profitably completing the contract. Although in the United States and a few other countries surety bonds within rather liquid surety markets are used to insure the procurement official from the risk of default, in many other countries, where such markets have not blossomed, one of the most common tools to avoid default risk is the concept of abnormally low offers (ALOs).<sup>57</sup> Such mechanisms identify prices (discounts) that are 'sufficiently' below (above) the norm (typically measured by the average bid price in the tender) as to be excluded or subject to careful checks. De facto, these are mechanisms that generally make the lowest price bidder a loser in the tender and make the game one of 'guessing' the average price so as to get as close as possible to it. As in the previous example, in many instances there is an abundance of fake offers (often posted by 'fake' firms or firms that are ownership related to the main one) so as to affect the average price and increase the possibilities of winning the tender. Conley and Decarolis (2010) find evidence that cartel firms were using such schemes to win contracts that would have been much harder to obtain were it not for this peculiar legislation. Indeed, the existence of such a rule in Italy derived from a vote by politicians and was not the result of discretionary choices by the procurement officials, hinting at the possible presence of political corruption. The reintroduction of lowest-price tenders was mandated by the European Court of Justice.<sup>58</sup>

A final sensible tender choice is e-procurement. Contrary to many optimistic visions, e-procurement is not always an unambiguous way to disrupt corrupt practices. It is well known that e-auctions (descending price) have the capacity to reveal to participating members of the cartel whether one of their associates is trying to deviate from the cartel, making the tender more favorable to that firm and indirectly to citizens at large. If a cartel is acknowledged to dominate a specific market, it would be wiser for the procurement official to choose sealed-bid offers (even with the help of IT processes) rather than descending-price e-auctions. Still, many procurement officials are fans of e-auctions, as recounted by this testimony of an enthusiastic procurement official:

Thanks to electronic tools enterprises make various offers and at the same time see the others' bids. In this way – already at the psychological level – competition is increased. This in turn leads to better results and savings for

the Public Administration. Bidders are masked with a code, which does not allow them to know the identity of others during the tender. In this way the Administration tries to avoid collusions. (Cited in Magrini, 2005: 36)

The transparency of the process, which may account for these perceptions, hides the famous paradox of information with market power, where more information is often bad for consumers because it makes cartels self-sustainable. We are thus left with the usual question: why should a procurement official continue to use such auctions in a concentrated, cartel-prone, market if not as a way to unduly help the cartel itself?

What to make of all this discussion? Kosenok and Lambert-Mogiliansky (2009:111) argue:

[T]he investigation of collusion is often the jurisdiction of Competition Authorities while that of corruption is the jurisdiction of criminal courts. A first recommendation is to develop cooperation to overcome this institutional separation, so as to improve efficiency in the prosecution of cases that involve both favoritism (corruption) and collusion.

Antitrust authorities also, if not captured by those same actors that engage in corruption, should be involved in dealing with procurement monitoring together with procurement authorities. Denmark and Italy, for example, are two cases where there is (or has been) ample collaboration between antitrust and central national purchasing bodies.

#### *Supply management: revealing corruption?*

How likely are the types of corrupt practices described above to occur in procurement? We believe that they are relatively unlikely. First, changing tender documents provided by firms through additions and/or cancellations could easily be spotted, especially because they relate to the moment – the awarding procedure – that receives the highest level of attention from various stakeholders. Furthermore, as we saw, changing prices by modification of tender documents received is increasingly out of fashion thanks to secure IT. (We are not aware of a fraud implemented over e-sealed offers in a public e-procurement tender.) Second, awarding the tender at a higher price than the market price could be risky as stakeholders can easily benchmark the outcome with the price available in the market.<sup>59</sup> Third, changing (favoritism) the required good or service to be purchased, away from the one needed by society, could be risky due to, again, the ease of spotting deviations from standard documents used by other procuring entities (needless to say, only if corruption is not excessively systemic so as to make benchmarking worthless for the lack of ideal tenders).

So it is only natural that corruption in procurement finds other – more

secure – ways to emerge, feeding itself through an implicit agreement between the two parts of the shady deal to deliver lower quality than the one promised in the winning proposal. This has the triple advantage of having the illegal phase occur away from the spotlight, raising little suspicion because of a low price, making benchmarking harder. Such corruption is monitored less effectively than others: (a) by the press or judges or authorities, as it involves long and expensive periods of monitoring and often higher expertise than is needed for the comparison of a simple price with other prices or of blatant favoritism in the tender documents, and (b) by rival suppliers who cannot properly see the nature of the services delivered, who know that reporting such activity would be costly to prove in court (more costly than identifying a mistake in the tender documents!) and who do not want to destroy good relationships both with the public procurement official and with its rival supplier, who are both likely to be met again in similar circumstances, and who would be extremely upset to see an activity disturbed that has started already and has generated set-up costs for both parties.<sup>60</sup>

It is often the case that an ‘only-price’ tender is fully capable of allocating the contract to the briber, who is not necessarily the most efficient supplier.<sup>61</sup> The difference between the cost of delivering the lower-quality product (due to, for example, delays, worse inventories, lower-skilled consultants, poorer-quality raw materials, lack of promised services, and so on) and the price received is shared largely according to pre-arranged agreements between the two counterparts of the corrupt act that occurred before the bid was offered. One might argue that corruption through lower quality might be unattractive because it requires an exchange of favors that is not contemporaneous and so is subject to time inconsistency. For example, a procurement official could, after some years, renege on his/her commitment not to ask for penalties for a low-quality good, service or work, could ask for a renegotiation or could be rotated with a different official not in charge at the time the deal was struck. We think otherwise. Indeed, in light of the pervasive and systemic corruption of the kind we believe more relevant (see Section 2) – which involves powerful counterparts in the public and private sectors – we do not believe that corruption needs to feed exclusively, or even predominantly, on bilateral contemporaneous exchanges. The presence of patronage and cronyism in a society clearly illustrates that deals can be struck where favors will be returned even with a delay, possibly among successive generations – if such corruption is largely entrenched and part of the culture. It can occur independently of the specific persons who initially struck the deals, as these deals should be seen not as bilateral exchanges but rather as deals between large groups of individuals.<sup>62</sup>

How should we deal with low-quality-driven corruption, taking into account that the social environment might oppose any credible reform that seeks to improve the quality delivered? Many solutions that have been proposed fail to do the job well. First, as we saw in the previous subsection, and contrary to what is often stated, MEAT qualitative criteria do not help to guarantee quality because they reflect only ‘promised’ and not ‘delivered’ quality. Although one would expect that a firm that has won the tender on the basis of specific ‘extra promises’<sup>63</sup> should be monitored carefully, especially with respect to such features, during the life of the contract, there is no reason to believe that a corrupt agreement that would have held with a price-only tender would not hold under MEAT criteria.

Introducing penalties is generally thought to limit the problem of low-quality delivery. However, they are often left unused. Albano and Zampino (2011) show that in 800 inspections between September 2006 and April 2007, 437 were not at the required contractual level. In only 16 cases (3.66 percent) were penalties enforced. Sometimes this happens for good reasons: penalties often generate litigation because they have been set up in an imprecise manner in the documentation phase, they often put relationships with suppliers at risk and might leave the procurement official with fewer suppliers and sometimes no other supplier.<sup>64</sup> Other times, contracts are incomplete, and penalties are not specified for a particular event that was not forecast. Whether these concerns are generated by incompetence or corruption, if a corrupt agreement has taken place penalties will not work under these conditions. Actually, it could well be the case (see Iossa and Spagnolo, 2009) that these same penalties make a corrupt agreement more stable. It does look as if, even in this case, the only credible solution is one where information is provided to the public, possibly benchmarked to other similar contracts.

Looking at the experience of private sector procurement it can be seen that maximizing value for shareholders often requires direct negotiation with a limited set of suppliers that have acquired a ‘reputation’ for doing their job well (Bajari and Tadelis, 2006). Especially if contracts are complex, these private procurement officials shy away from competitive tenders as they suspect that these might encourage excessive price competition detrimental to the provision of the required quality. Fear of corruption and little else drives the choice of the law to refrain from using such schemes in the case of public procurement. However, we saw above that the ways in which corruption can affect public procurement with open bids are of such a vast and differentiated nature that it is questionable whether it would not be more pragmatic, efficient, and effective to adopt the same private practices of negotiating with reputable suppliers by enhancing the discretion of the procurement official. All that has been said so far

raises an important question: what if we were to divert all current public procurement effort toward the build-up of competences, the creation of methods that enhance accountability, and the monitoring of the delivery of the promised quality?<sup>65</sup> Given that – due to the conservative nature of the public sector – such a reform would be hard to digest, a possible compromise would be to focus not so much on the instrument used in the private sector (that is, direct negotiation), but on its quintessential complement: the selection of a supplier with a high reputation.

It is true that reputation, within a culture largely of formal openness like the one that characterizes public procurement, would create two types of explicit criticisms from the lawmaker. First, although reputation can be ‘sensed’, it cannot be measured, and this implies the impossibility of rewarding objectively, violating a fairness ‘principle’ and leaning too much on the side of discretion. Second, reputation, by rewarding the best incumbents, is inherently against small and mainly new firms, violating for many the ‘principle’ of fair competition.<sup>66</sup>

Both these criticisms have been proven weak by some proposals that have been implemented by procurement officials. First, an objective index of reputation can be built over several items of performance during the life of the contract in which the procurement official has an interest; such an index can be monitored objectively by the latter during the life of the contracts.<sup>67</sup> This index could be part of a scoring rule that would reward not so much the quality of the offer but, rather, the quality of the supplier. Being controllable by firms over time thanks to their past performance, it would have the advantage of being measurable by firms ahead of the tender offer. A firm with a higher index of reputation could possibly win by posting a higher price than its less reputable rivals. Second, this indicator, a sort of vendor rating, would not penalize newcomers that have had little chance to participate in tenders in the past if the new entrant is trusted and receives from the procurement official the average reputation of the participating firms or even the highest reputation to begin with.

We mention these new schemes because, in the face of all the difficulties experienced with the current procurement rules and the requests from citizens for a procurement process where quality delivered coincides with the one promised, they might be used more frequently in the future. Ideally, they are able to eliminate the quality problem as they force firms to be interested in delivering quality if they wish to remain in that specific public market.

Do these new methods that reward reputation open up opportunities for corruption? Obviously, yes. Because they are based on inspections meant to survey the delivery of quality, the highest risk is the capture of the inspectors themselves. Also, one worries about the possibility

of favoritism in the choice of the weights and the items that are to be rewarded in the scoring rule. Nevertheless they imply the creation of a team of quality-control specialists that is rarely observed in public procurement offices. Also, if these indicators of performance are published, they may help to induce an outcry from citizens – users of the service being procured – if the (fake) results of inspections bluntly contradict the customer perception of the quality of the same services. Picci (2011) mentions score cards, that is, public disclosure of measures of service quality that convey objective performance indicators or information that is provided by official inspections (of restaurant hygiene, for example). Olken (2007) shows, however, that increasing grassroots participation in monitoring has little impact, due to elite capture and free-rider problems. His important result is based on two experiments. The first studied direct participation in town meetings of villagers, contacted through invitations solicited to counter elite power. The fact that we did not see lower corruption in that case confirms that systemic corruption makes capture of non-elites easier or mutes their protest. The other experiment was based on anonymous comments obtained, according to Olken, ‘without fear of retaliation’, where the results of these enquiries were summarized in meetings. This experiment also led to little whistleblowing. However, this result is hardly surprising, as we consider overly optimistic the expectation that villagers would be reassured by simple guarantees of anonymity. The kind of citizen participation we have in mind, through the web, distances principals and agents and makes the constituency against waste and corruption much stronger, vocal, and less easy to capture or threaten.

Overall, looking at the many possibilities that corruption, especially systemic corruption, has to affect the procurement process one is led to question the solutions offered as they are subject to the famous dictum ‘*Quis custodiet ipsos custodes?*’ – who will guard the guards themselves? Our conclusions, albeit fragile with respect to the feasibility of any anti-corruption scheme over the short term when corruption is of the systemic type, point to the need to reduce the number of rules governing procurement and to focus instead on a government strategy of setting up competence-building programs, together with accountability through quality control. Such accountability should not be intermediated by politicians but managed by the largest possible number of principals. This can occur only when quality control is abundantly and easily monitored by the population at large. Internet and proper search engines are likely to be the most apt instrument to support this fight. Ferraz and Finan (forthcoming) show that strong media impact negatively on the probability of re-election of corrupt mayors and positively on the quality of second-term mayors

(however pushing first-term corrupt mayors to steal more before losing second-term elections).

### **5. Centralized procurement in a systemic corruption environment**

Inevitably, if corruption is systemic, someone is left out from the 'party'. Certainly those with a high level of integrity but also those 'newcomers' who try to enter the system but are typically weaker and thus blocked by incumbents.<sup>68</sup> In public procurement these newcomers are often small firms, which sometimes come with a high degree of potential innovativeness and competitiveness that can be frustrated by corruption, simply because of a lack of a membership in the dominant corrupt network.

The literature has so far given little weight to the issue of small firms in public procurement corruption. Compte et al. (2005: 3) argue that the entry of a sufficiently efficient outsider (that lacks connections, that is, has in effect no bribe capacity), by proposing a low enough price, can make sure that other less efficient firms cannot afford to compete in bribes: 'this behavior kills implicit collusion in the price auction game and, at the same time, mitigates corruption with the bureaucrat'. Small firms can sometimes act as this type of outsider. This relative lack of interest by the theory is strikingly at odds with the policy relevance that small firms have long had in public procurement, as witnessed by legislation both in the EU and the USA.

This is even more true if one considers the current trends in procurement legislation that are increasing the likelihood that small firms will be crowded out in an environment dominated by systemic corruption. Centralization of procurement is one such trend. Centralization implies replacing a large number of small tenders by many government agencies with a lower number of large tenders by fewer bodies, typically delegating greater powers to national procurement officials away from local ones.<sup>69</sup> Centralization has been on the rise in the past decade thanks to the development of information and communication technologies (ICTs) that have made communication and coordination across public purchasers less costly.<sup>70</sup>

The impact of centralization on corruption in procurement is an interesting topic to consider. One could argue that moving the procurement process away from local administrators would make it less sensitive to pressures from local firms to obtain rents, thereby decreasing corruption.<sup>71</sup> Centralizing procurement also makes monitoring a given value of purchases less costly and, therefore, all else equal, the probability of spotting a corrupt transaction larger. Furthermore, given that legislation usually requires more transparency (via publication of above-threshold tenders) the larger the size of the tender, centralization makes a given amount of procurement more visible, leaving less opportunity for corruption.

Even if the chance of being caught is higher, centralized procurement tenders are large enough to attract more firms and to push more entrepreneurs and procurement officials to agree on a bribe.<sup>72</sup> Furthermore, it is likely that systemic corruption will be more effective with a centralized system because a single, dominant network would have to capture only one procurement official.

Centralization also makes the participation of SMEs harder rather than easier because of the bundling of contracts. Although many NCPBs have in the past taken precautions to make participation by SMEs easier,<sup>73</sup> such strategies might not be enough to ensure greater SME participation. In contrast to the EU where legislation forbids it, some of the largest economies in the world (the USA, Brazil, and South Africa) have chosen to avoid the negative consequences of demand bundling by reserving a share of contracts for small firms only.<sup>74</sup> It is hard to imagine that the final decision on whether to ‘protect’ or ‘not to protect’ SMEs is unrelated to pressures on legislatures exercised by associations of SMEs, on the one hand, and by large firms, on the other.<sup>75</sup> Legislation that disfavors SMEs could thus be explained by successful lobbying by large firms seeking to ensure significant private returns. Could it be that such legislation is the fruit of systemic corruption?

Whether the argument above is true or not, there are other reasons to be worried about non-favorable SME legislation in procurement. Bos and Harrington (2010) show that stable cartels are often not all-inclusive. Non-cartel members produce at capacity, and cartel members produce below capacity. They show that a firm finds it optimal not to join the cartel when its capacity is sufficiently low, because the effect of its membership on price is trivial, but, at the same time, it experiences a non-trivial reduction in its output. Thus, they claim that we should not expect a cartel to include very small firms. This potentially important result, if it were related to the literature on the strategic complementarities between corruption and cartels in procurement, indicates that, where corruption dominates, one of its negative effects would be to more easily exclude small firms from winning procurement tenders – via the endogenous creation of cartels including mainly large firms. Thus, legislation that reserves shares in procurement to SMEs might be welfare improving and, symmetrically, its absence could be a reinforcing indicator of the possible non-naïve complicity of legislators in systemic corruption.

## **6. Conclusions**

Transparency is a concept that has often been invoked in the fight against corruption in public procurement. It has even been chosen as the name of one of the most important organizations supporting change in the field,

Transparency International. In procurement, it has been used to justify having countries reach minimum standards of communication to the public about their tenders. However, it has been made to ‘mean many things’, sometimes improperly,<sup>76</sup> as sometimes it simply reduces the speed of change toward better practices in procurement, by convincing procurement officials to concentrate mainly on the mere formality of publishing tenders.

Corruption, too, is a term that has been used to indicate many things, but often its political economy systemic implications have not been highlighted enough. The study of bribery often fails adequately to place bribery in procurement within the larger context of other forms of corruption, such as cronyism and patronage, that make corruption in tenders self-sustaining in the long term as it becomes less easily monitored, more accepted, and more easily coordinated. Systemic corruption in procurement also has unfavorable implications for weaker parties, such as small firms and the mass of citizens and taxpayers.

This chapter has argued that corruption in procurement cannot be effectively limited by concentrating on new rules, new anti-corruption agencies or new tasks entrusted to antitrust authorities that are liable to be distorted (or captured) by the dominant networks to their advantage. Instead, the public tendering process should be opened up: (a) to a variety of stakeholders, so as to make public procurement officials accountable and rewarded (penalized) for their positive (negative) performance,<sup>77</sup> and (b) to participation by small firms that are the ones most likely to suffer from systemic corruption. This can be done mainly by:

1. a national-level determination of non-mandatory standardized technical documents for tenders for specific public markets at a particular time;
2. a requirement that single tendering administrations must detail and publicly justify departures from the standardized procedures in point (1);
3. the use of ICTs to make easily available to the public rigorous benchmark analyses of procurement of different administrations in the same public sector market and that help the media and judges to make procurement officers more accountable for their actions;
4. an internal policy of combining greater discretion for procurement officials with the rewards for professionalism given to those procurement officials who acquire competences in the field;
5. a school program for young students stressing the damage of corruption;
6. a reduction in the role of centralized procurement and/or a policy of reserving a share of the tenders only to small firms; and

7. giving consideration to the possibility of introducing the concept of joint criminal enterprise in procurement, facilitating the proof of individual criminal responsibility by capturing the responsibility of remote but key actors in criminal organizations (for example, criminal masterminds or 'godfather' figures) that operate via corrupt practices.

By implementing these reforms societies may: (i) increase the chances that outside firms (new firms) will enter the market to satisfy public demand for goods, services and works, (ii) push the winner of the tender to quote fair prices and ensure the promised quality to citizens, and (iii) create a culture less tolerant of systemic corruption. In turn, this could create the right environment for procurement officials to abandon the request for bribes and concentrate on acquiring competences and know-how in procurement management, accelerating entry and efficiency. What could start such a snowball effect, whether leadership from above or grass-roots organizations, is a question that deserves to be studied further.

## Notes

1. I wish to thank Raffaella Coppier, Paola Gaeta, Elisabetta Iossa, Alessandro Missale, Riccardo Pacini, Lucio Picci, Susan Rose-Ackerman, Tina Soreide, Giancarlo Spagnolo, Maria Vagliasindi, Alberto Vannucci and participants at the Yale University conference for valuable suggestions. The usual disclaimer applies.
2. See [http://cordis.europa.eu/fp7/ict/pcp/key\\_en.html](http://cordis.europa.eu/fp7/ict/pcp/key_en.html).
3. Legislation reforming procurement is thus always looked at with great interest. The 'Buy-American Act' enacted by the Obama administration and the many negative reactions it has generated worldwide speak for themselves of the strategic weight that procurement holds even in the worldwide political arena.
4. Not only does this lack of credibility negatively affect politicians with respect to their national electorate; it also makes the involvement of rich countries and supra-national institutions in supporting poorer countries less effective. Indeed, rich countries are often heavily involved in financing development projects in emerging economies. These loans are subject to several conditionalities, among them rules that aim to make the associated tenders immune from the risks of corruption. If a rich country does not have a reputation for fighting corruption at home, it loses part of its credibility to recommend all the right practices to the poorer one. The issue is quite relevant for projects intermediated by multilateral development banks which use very detailed procurement rules which poorer countries have to accept. See also the newly established methodology of DAC (Development Assistance group) indicators in procurement that the OECD is pushing for emerging economies to adopt.
5. See <http://www.oecd.org/dataoecd/62/24/41549036.pdf>
6. See Kelman (2002) and Picci (2011) for a similar perception.
7. Some countries at some point in time have done just that. Take, for example, the outcome, between 1993 and 1997, when Kelman served as Administrator of the Office of Federal Procurement Policy (OFPP). See also Kelman (2005).
8. See the work of Rose-Ackermann (1978, 1999) for a first seminal approach on these issues.
9. It is also true that some projects are 'pharaonic', that is, of extremely large value and not repeated over time. However by definition such projects are at risk of grand corruption.

10. Svensson (2005), in trying to differentiate lobbying from corruption, argues that the former implies a more permanent change than the latter. We would claim that lobbying in this sense is simply a 'grand' level of corruption.
11. Note that competence and corruption in this model appear to be almost perfect substitutes, a feature that we shall often come back to, as limited time available in the life of an individual seems to lead to a corner solution in its allocation (individuals spend their time either in acquiring competences or in acquiring skills for corrupt acts).
12. That is, the discount with respect to base price made by the winner, that is, the highest discount.
13. The romantic view apparently is back in fashion. After Huntington (1968: 59–71) defined it as a 'necessary evil' in the quest for modernization of poorer countries, more recently Koenig (2009) has argued that corruption should be 'defended' while Ubeda and Gardner (2010) argue that (a low level of) corruption enhances cooperation in society. See also Coppier et al. (2009) for a model where not fighting corruption stimulates growth if the commitment not to fight it is overestimated by the citizens.
14. For example, the UK 2010 Bribery Act states that 'it is a defence for a person charged with a relevant bribery offence to prove that the person's conduct was necessary for (a) the proper exercise of any function of an intelligence service, or (b) the proper exercise of any function of the armed forces when engaged in active service'. So if 007 were to pay an officer in a foreign country to do so something against the law of that country but that would help the UK national security, would he be defined as a briber or not? While the wording is not too clear to an economist like me, it would seem that one might prove not to be engaged in a 'bribery offence' if performing a national strategic duty of the kind described above. So the act of paying is certainly there, but possibly not the 'bad' for the UK society (from a global point of view things might be different, and defining a UK payment to a foreign official as a 'bad' could come as more natural, highlighting the need to specify the objective function of the specific regulator).
15. For example, by eliminating such red tape or wrong regulation. Lambsdorff (2007) is obviously aware of this strand of the literature and claims that, in this case, 'the standard recipe for containing corruption would be to get rid of government intervention'. He then goes on to claim that without government intervention things would likely be worse. But he presumes that the only alternative is to 'eliminate regulation', while we claim it would be best to 'fix it'.
16. Bos and Harrington (2010) report the variety of cartel practices with respect to the market share they cover, but find that, while incomplete, these typically exclude small firms, an issue we shall come back to later on, but often include most large firms.
17. See, for example, the US experience with the Small Business Act, approved in 1953, where the share of public procurement contracts that SMEs can be entitled to is fixed around 23 percent, while these regulations are currently forbidden by the European Union Directives.
18. See the forthcoming book by Della Porta and Vannucci (2011).
19. In the USA, for example, purchases under \$2,500 usually represent 2 percent of total federal government spending but approximately 85 percent of total procurement transactions.
20. 'The more profit in the market, the more likely corrupt politicians will be to protect the firms in the market. Hence, the more profit in the market, the more hazardous it will be for the potential whistleblower to speak out about a case of corruption when political corruption is a common problem' (Søreide, 2008: 420).
21. Della Porta and Vannucci (2011) offer a careful analysis of such corruption: 'In systemic corruption a fourth condition has to be added to those characterizing structural corruption: (d) third-party enforcers monitor and enforce the respect of the (illegal) norms, guaranteeing the fulfillment of corruption contracts and – eventually – imposing sanctions to opportunistic agents and free-riders of corruption . . . When a third-party enforcement mechanism is operating, more intricate networks of exchange may develop, since both economic incentives and social forces push towards the generalized

acceptance illegal deals. In systemic corruption, thereafter, “the illicit becomes the norm and . . . corruption so common and institutionalized that those behaving illegally are rewarded and those continuing to accept the older norms penalized” . . . When inter-actions take place regularly and frequently, and the allocation of valuable resources is under the influence of public agents, corruption tends to become systemic within the corresponding public organization as soon as norms and third-party enforcement mechanisms emerge’.

22. The word ‘crony’ first appeared in eighteenth-century London, according to the Oxford English Dictionary and is derived from the Greek word *χρόνιος* (*chronios*), meaning ‘long-lasting’.
23. See Spagnolo (2008) and citations therein; see also Søreide (2008) for the critical value of such instruments.
24. See Ciciretti et al. (2010) for a model on the capture of antitrust authorities where they are needed the most, that is, in concentrated markets.
25. Tellingly, the website includes a picture with two hands shaking, exchanging a bank-note, in line with a traditional definition of corruption and shying away from a communication strategy of identifying corruption with one act of a systemic nature as we do. To be fair, the Convention also includes (but not specifically as corrupt acts) illicit enrichment, abuse of function, and trading influence as inappropriate behavior to be legislated against.
26. See <http://www.aber.ac.uk/en/law-criminology/staffdirectory/csh/csh-freewheelin/>. See also Harding (2009).
27. We include in this definition of incompetence anything that implies lower than achievable productivity, including waste due to ‘laziness’ of the public employee, unrelated to corrupt motives.
28. Coviello and Gagliarducci (2010) conclude instead that time is used by politicians to learn inappropriate behavior in procurement. While the result is different, it confirms that competence and corruption compete even in a dynamic long-term setting where learning or networking for private benefits appear to be substitutes.
29. The fact that procurement officers may not always know what is an appropriate behavior in their day-to-day activity stems simply from the fact that there are so many facets that inappropriate behavior may take. Søreide (2005) shows in detail the many behavioral grey areas with which corruption might co-exist. Codes of conduct are often created to raise awareness of those areas, ‘black’ corruption being that which is already forbidden by primary legislation. My personal experience in teaching to procurement officers over the years is that many are often skeptical about codes of conduct within their organization – not to speak of those who feel offended by the thought of reading and studying it because they believe themselves to be ‘inherently’ honest – and that this may also be viewed as a signal of their lack of understanding of all the various complex forms that corruption may take.
30. Indeed, see also Picci’s (2011: 116) example on effectiveness which in this case does not coincide with ours: ‘A corrupt official, or politician, may choose a project because it allows him to extract unlawful rents more easily. Corrupt regimes dedicate more resources . . . and, in extreme cases, they indulge in “white elephant” projects which are so lopsided that they constitute a credible form of patronage, because it is clear that they would be discontinued were someone else to get into power . . . Corruption may cause ineffectiveness, but it is also true that the incapacity of a public administration to choose its projects well may cause corruption. For example, if a project is unsound, and is widely understood to be a waste of money no matter how well it is executed, then moral restraints may loosen up, and people in a position to embezzle funds may do so without being assailed by their consciences’. In this case he deals like us with the concept of ‘incapacity’.
31. The UK Review of Civil Procurement in Central Government (Gershon, 1999) found that ‘in 1997, the procurement function in government lost 17% of its staff . . . there is evidence to suggest that the better staff use their qualifications in order to find more

attractive jobs in the private sector. There is little to suggest that this very serious situation has improved'. And in the Report on Central Government Procurement Salary, October 1999, one could read that 'GPS staff is around 21% worse off than procurement staff in other industry sectors. This excludes company car provision and private health care benefits enjoyed by industry sectors' (see [http://www.ogc.gov.uk/government\\_procurement\\_service\\_gps\\_rewards\\_incentives.asp](http://www.ogc.gov.uk/government_procurement_service_gps_rewards_incentives.asp)). Since then many initiatives have been taken to reward the use of qualifications.

32. I owe this point to Giancarlo Spagnolo. Obviously, if rules canceling discretion become pervasive, we enter into a world where benevolent corruption may arise to avoid losing welfare-enhancing opportunities.
33. The idea of creating a true counterfactual, that is, at least two contemporaneous tenders – that differ by only a few factors so as to identify their impact on the tender results – is more doable in the private sector than in the public one, where accusations of fractionalization that lead to lower transparency, incentives to collusion via artificial lots and other reasons could be adducted to criticize such experiments.
34. In what follows we collapse these two last moments into one step for simplicity.
35. This statement has the interesting implication that while tenders might be easy to distort, it is almost equally easy for an expert eye to spot those distortions.
36. It is likely to be the case that a leader who was to strongly invest on ethical matters within the organization and especially on such soft aspects as communication with the suppliers involved in procurement, could go miles in making such behavior too costly to be considered by employees. Leadership in fighting corruption in an organization might, however, run the risk of being perceived as demoralizing and often humiliating, as many persons consider themselves to be 'ethical' and not to need a lesson on it or, worse, being suspected of not being so. Our view on this is rather optimistic in that ways can be found to communicate the proper message but pessimistic in the sense that we do not have an answer as to why should the manager of a public procurement unit invest in ethical behavior in the absence of a clear reward. Possibly then the issue goes even higher in the hierarchy of the procurement process, requiring that the highest-ranked position – maybe so high as not to even be directly involved in procurement – exercises such pressure, such as a minister or even the prime minister. And this would be possible, with all likelihood, if only the voters and the press were to put pressure on the government on ethical issues, and would be unlikely in a systemically corrupt environment.
37. Presumably, writing a national standard that would bluntly favor one or two firms would be exposed rapidly to the public and cancelled.
38. Obviously, this solution begs the fundamental question of who should be in charge of setting the standard. One should wonder also whether a centralized procurement regulatory authority should be able to give its approval to changes to the standards in a tender, within a certain timeframe. Our view of corruption described in Section 2 is pessimistic enough to discourage giving additional power to an institution prone to be captured.
39. Such standards should be updated frequently to take into account developments in technology. They should also satisfy a general average demand and not the one of low-level or high-level sophistication compared to the needs of the country, so as to avoid too frequent and obvious justifications for detachment from the standard. It appears therefore that the procurement tenders of some of the largest buyers, possibly – where available – of the National Central Purchasing Body (NCPB), should fit. Indeed, in some countries already one of the basic advantages for many small administrations is to download through the web the NCPB tenders and tailor those to their specific needs. This is also because in larger organizations (such as the NCPB) one can find a greater and more concentrated level of expertise of purchasers.
40. See McHenry and Pryamonosov (2010) for a failure of the Russian Regional Procurement – amply using IT and internet in procurement – to provide easily retrievable information on tenders from their websites.
41. IT products, for example, have a high obsolescence and possibly require a shorter

- contract length than the management of an all-inclusive service of energy provision which needs time to compensate the supplier for the payment of some fixed costs not reimbursed at the beginning of the contract.
42. It could thus also be the case that a long-duration contract might be the result of a corrupt agreement. Indeed, a long-term contract might result in lock-in of the winning supplier, that in the future will be in a better position to win the contract again, given its knowledge of the client or its capacity to have generated, during the life of the contract, a lower elasticity of demand with respect to price through, for example, habit formation on the part of the client.
  43. See Grimm et al. (2006).
  44. Albano and Dimitri (2008) show that these concerns are relevant for price-only tenders. For MEAT tenders, participation and cost reduction might not necessarily conflict.
  45. Even if such corruption were to be found and the tender subsequently cancelled it would likely imply the late delivery of the goods or services desired by citizens, something therefore suboptimal.
  46. Actually, precise and binding rule-making sometimes leads to an over-reaction by procurement officials so as to comply with the law. For example, in Italy the authority in charge of verifying public contracts has specifically mentioned (and criticized) the fact that several public purchasers publish in excess of what is required by the law – not so much, we might add, to receive more offers from suppliers but so as not to be found guilty of wrongdoing by the authority itself.
  47. It is an instrument that abounds in procurement and that often foreign firms consider necessary to participate in procurement projects abroad funded by multilateral development banks, entering into consortia with local firms.
  48. The Italian Antitrust was likely the first authority to explicitly recommend caution in using temporary groupings for their anti-competitive content.
  49. One typical example the author was involved in as a consultant relates to procurement of banking/treasury services (including overdraft possibilities) for Italian public entities. The participants in the tender are large banks. Treasury services hardly justify the joint supply of more than one firm (bank) for their feasibility. In this specific case, the informal threat to the procuring entity by the large main banks was the possibility of not participating in a tender that would exclude the possibility of temporary groupings. Given that often these public entities heavily rely on cash deficit financing by banks, the cost involved in such a threat was high, especially in political terms. However, even in these cases it is not clear why public entities would not choose to rely on new or non-incumbent banks to provide the same services. Unless one is to suspect, again, a larger network of systemic corruption, surrounding procurement and including the procurement officials and most of the banking system.
  50. See Sweet (1994) for a rather optimistic – but nonetheless typical – view on competitive bidding held by the Ohio Court.
  51. See Dini et al. (2006) for scoring rules features. The auctioneer's abuse of discretion in devising the selection rule has been studied in Laffont and Tirole (1991) and Burguet and Che (2004).
  52. For example, choosing persons outside of the procuring organization, choosing via lottery, barring candidates that have a potential or revealed conflict of interest with respect to suppliers, rotating commissioners. This brings to mind the more general issue of rotation in the procurement office as an anti-corruption device. See, however, Kosenok and Lambert-Mogiliansky (2009) who find no support for the much-advocated anti-corruption policy of reducing the time spent in any particular office, which on the contrary, makes collusion in their model more profitable. See also Compte et al. (2005).
  53. It should be noted that even an objectively determined allocation of quality points, while eliminating the discretionary power of the member of the commission, would still leave discretionary space at the demand management stage when writing the tender documents to select quality points awarded to features that only one firm could obtain. Kosenok and Lambert-Mogiliansky (2009: 109–10) find that 'the equilibrium scoring

rule is extreme. As a consequence, the project that is selected by the procedure tends to be 'non-standard'.

54. When rewarding environmentally friendly features of the good or service supplied, sometimes even if the promise is kept and the feature effectively delivered by the supplier to the public administration, the latter may waste it due to its lack of use of those same features during its day-to-day activities. Imagine, for example, a photocopying machine that allows for the use of recycled paper, and that recycled paper is eventually not used. This is a particular case where waste due to incompetence does not necessarily benefit the supplier, unless one is to believe that the greater need for an environmentally friendly machine was not there to start with and that the procurement official and the supplier agreed to share the benefits of the more expensive purchase. In this case, reporting at the end of the contract the added value of the extra item purchased might increase the accountability of the purchaser, but only if the governance of the organization is such that attention to these practices is monitored effectively.
55. It has been argued (Celentani and Ganuza, 2002) that where corruption is more pervasive, procurement officials tend to switch the formula toward a lower number of points allocated to quality, and that the lower quality that will result in the final offer of the winner has to be included in the costs of corruption. However, this presumes benevolent procurement officials in a malevolent environment, something that our view of systemic corruption tends to downplay.
56. See <http://www.agcm.it/en/newsroom/press-release/1468-peuegriniconsip.html>
57. See Albano et al. (2007).
58. Obviously Conley and Decarolis (2010) are well aware that switching to price-only tenders with no ALO mechanisms not only might not reduce the risk of default but also might encourage corruption through lower-quality delivery. They mention surety markets as the best solution for facing default risk.
59. This is obviously valid only if the cartel in the tender does not also set the price equal to the market price (maybe because the cartel prevails there too), at which point the two would coincide and not be revealed.
60. See, however, Albano et al. (2010) for a more optimistic view.
61. Even if it were the most efficient, the firm would have little incentive to provide the promised quality.
62. In these very corrupt settings whistleblowing legislation, potentially useful, is least likely to be adopted, as whistleblowers are often bound to be considered as shady informers even by individuals that resent corruption.
63. Indeed, one should keep in mind that these promises not only are going to be included in the contract, but in addition they were positively valued by the tender awarding committee and are thus likely to have been the central reason for the defeat of other potential suppliers.
64. See HM Treasury 06 regarding PFI: 'There exists anecdotal evidence that the public sector can be reluctant to levy deductions for fear of spoiling the relationship with the private sector'.
65. See Kelman (2004) on a reform of this kind, which proved to be implementable.
66. Never mind that, as we showed before, ample discretion and lack of competition are often the main characteristics of open-bid tenders admitted by the law.
67. The index is based on numbers that are often determined through inspections during the contract phase and requires the determination of: (a) a memory factor that relates to the period far back over which the performance is evaluated and (b) a weight that needs to be given to the index in the scoring rule.
68. Quoting Niccolò Machiavelli in *The Prince*: 'each candidate behaved well in the hope of being judged worthy of election. However, this system was disastrous when the city had become corrupt. For then it was not the most virtuous but the most powerful who stood for election, and the weak, even if virtuous, were too frightened to run for office'.
69. A unique tender that could indeed be subdivided into many lots. In this case one could always replicate with centralization the decentralized outcome, saving at the same

time the transaction costs that are incurred through many independent procedures. However, it generally happens that the average size of the lots increases with a shift toward more centralization in the procurement governance simply because central purchasers have convex costs in lots in drafting tenders.

70. Centralization has also made the fixed-cost investment in IT technology in procurement (e-proc platforms) more convenient, making the trend self-reinforcing (see Moon, 2005).
71. On the other hand, if the services provided by decentralized purchasing units are closer to the needs of the population, then the decentralized procurement official would be more interested in delivering value for money to his/her fellow citizens than a far-away central procurement official. See Bardhan and Mookherjee (2006) and the related literature.
72. Especially since the probability of being caught under a decentralized scheme rather than under one large contract is likely to be higher, for the same amount of bribe income. Imagine that  $p$  is the probability that I am discovered bribing the NPCB for 10 percent of the £2 million contract, that is, for £200,000.  $(1 - p)$  is the probability of not being found out. If, to reach under a non-centralized governance of procurement, the £200,000 level of bribes I need to offer (10 percent of the contract) bribes to 10 procurement officials that each procure for £200,000, then the probability of not being found out after the tenth bribe is equal to  $(1 - p)^{10}$ .  $[1 - (1 - p)^{10}]$  is therefore the probability that, having bribed 10 procurement officials, I am not found out. If  $p$  is 1 percent, the probability of being found out while bribing the 10 small procurement officials is 9.5 percent. Therefore the probability of a better monitoring technology would have to improve almost 10 times under a centralized scheme to ensure the same expected discovery of the briber. Obviously this holds true for a probability independent of the contract size.
73. Dividing large tenders into many lots, making the possibility of consortia or grouping available only for small firms, reducing revenue requirements for participation and so on (see Dimitri et al., 2006).
74. Interestingly enough, both parties – the countries that do and the countries that do not reserve a share for SMEs – justify their position on the basis of the same concept of stimulating competition.
75. Senator Wright Patnam – fearing that the Small Business Administration would be merged with the Department of Commerce (which he believed was concerned mostly with the needs of large firms) used to argue that: ‘to insert the Small Business Administration in the Department of Commerce would be tantamount to ask that rabbit to bring us that lettuce’.
76. My mind goes to the inappropriate idea that e-auctions, by being transparent, are always useful, without considering that it is a transparency that enhances cartel (and corruption) sustainability.
77. Picci (2011: 116–17) speaks of ‘reputation-based governance’ as the ‘appropriate level of analysis, because it rests on the availability of a set of integrated and highly institutionalized statistics that allow a series of incentives aimed at curbing rent-seeking activities. In the case of corruption in particular, incentives may be based on the availability of measures that somehow proxy the extent of corrupt activities’.

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