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**RULES AND DISCRETION**  
**IN STANDARD AND EMERGENCY PUBLIC PROCUREMENT**

**RELATORE:**

**CH.MO PROF. Paola Valbonesi**


**LAUREANDO: Gianluca Bortoletto**

**MATRICOLA N. 1210686**

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A handwritten signature in black ink, reading "Gianluca Bortolotto". The signature is written in a cursive style with a large, sweeping initial 'G'.



# Sommario

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## INTRODUCTION

Public procurement concerns the purchasing of goods, services and furniture made by the public administration. According to the estimates of the European Commission, the public procurement market is worth on average approximately 1,900 billion euros/year. For Italy, the expenditure for public procurement represents about 10,7% of GDP (in line with the European average). These data highlight the incidence of public procurement on the overall public expenditure and the need for its efficiency and effectiveness in every country.

The contracting authority<sup>1</sup> (CA) has several choices to take about how to award a contract to suppliers. The main one is between auctions and negotiations. In auctions, there is no direct bargaining between the public buyer (PB) and suppliers: in a tender - open or restricted - the latter must submit their offers to the evaluation of the former. Differently, negotiation is a discretionary procedure, as the PB's evaluation of suppliers also involves subjective parameters. Within these two macro-categories, there is a wide range of further options to choose, leading to different awarding designs.

An important part of the supplier's selection process is represented by the qualification mechanisms. Reputational mechanisms assessing suppliers' past performance work as qualification mechanisms: they may represent a strong incentive as a stimulus both for improving supplier's performance and for optimizing the timing in the selection process.

The PB's choice about the qualification mechanism is one stage of the procurement process where the right balance between restrictions and discretion is key. On the one hand, stricter rules to the management of the purchasing process allow to keep the entire process under control; more constraints also limit opportunistic behaviour by the supplier and incentives to bribe the PB. On the other hand, raising the thresholds on procurement contract value – below which PBs' discretionary choices are allowed – may result in greater efficiency and in speeding up the supplier's selection process.

In the first part of this thesis, we first illustrate the main awarding procedures in public procurement. We then focus on one of the main driver for the efficiency and effectiveness of public procurement: the public buyer's competence. The literature shows that the public administration is to be considered not as a single entity, but as a heterogeneous set of multiple bodies and subjects, whose level of competence impacts on procurement efficiency. In

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<sup>1</sup> In this work, the terms “contracting authority” (CA) and “public buyer” (PB) are used interchangeably.

particular, this literature highlights the relevance of competence when the PB has a large degree of discretion. Empirical results show positive correlation between procurement's inefficiencies (whether "active" or "passive") and PB's competence, i.e. larger inefficiency in presence of PB's higher discretion.

The debate in the literature about PB's discretion in procurement also refers to the risk of corruption, one of the main threats in the standard public procurement process. In this respect, recent contributions highlight that the real problem is the low level of competence, and this latter comes often associated with a higher risk of corruption in the public administration.

This problem is aggravated in emergency situations, where the urgency to purchase certain goods and services - in a limited time - forces the contracting authority to carry out extraordinary procedures.

To better study emergency procurement, in this work we study which changes have been implemented at the Italian and at the European level to deal with the COVID-19 pandemic. We use this situation to compare usual regulation on public procurement with the recent emergency at a global level.

In this part of the work, we mainly focus on the exceptions granted by the Italian legal system at a regulatory and procedural level. Multiple new laws and decrees have been enacted with the aim of offering greater freedom to PBs in responding to emerging needs. Besides, on data included in the report conducted by the Italian anti-corruption authority (ANAC), we highlight how in the first phase of the emergency (March-April 2020), the use of more discretionary procedures has increased dramatically.

On the one hand, this increase has allowed to respond more quickly and effectively to the needs of certain goods (in particular those relating to the health sector); on the other hand, the wider use of procedures with fewer advertising requirements highlights a decline in the control systems. This is of particular concern, as in such contexts the incentive for opportunistic and/or corrupt behaviour represents a relevant issue.

Finally, we use the interview conducted with the managers of the Procurement Office of the University of Padua to draw some interesting considerations. The pandemic has caused major repercussions to the economic system, both on the demand side and on the supply side. These changes highlight that, in emergency procurement tenders, the central concern for the PB becomes the availability of the good. Thus, the additional flexibility results important for faster and more effective purchasing process, but it becomes not relevant when the product is not available on the market and there are no alternative supply channels.

Starting from this evidence, we analyse the main effects that the emergency had on the purchasing process (i.e. on prices, delivery timing, and quality of goods and services).

Combining our findings and the data from the ANAC report, we investigate the topic of centralization in the public procurement. On the one hand, we find that a substantial part of the procurement expenditure for the emergency is centralized (through central administration bodies or aggregators); on the other hand, there is a wide delegation of purchasing activities to many central bodies not all used to run procurement procedures. This delegation could result in inefficiency, as in emergency tenders, PB's coordination and bargaining power play a decisive role in balancing the criticalities of the procurement process (i.e. higher prices, timing and technical requirements not respected, opportunistic behaviour of suppliers, ...). Furthermore, exploiting bodies with relevant and competent figures with specific skills in the public procurement sector would allow to avoid duplications of human resources and their related costs.

The COVID-19 emergency is not over yet: for a complete analysis of the procurement implemented in this period and under the new rules, it will be crucial to look at the overall long-term data, eventually comparing with the same procured goods in "normal" period and under "usual" regulation.

This work is organised into three main parts. In Chapter 1, we look at the main procurement procedures available to the PB, and at their costs and benefits considering setting where they are applied. Moreover, we discuss the opportunity of introducing a reputation (i.e. past performance assessment) mechanism in the suppliers' selection phase. In Chapter 2, we study the effects of discretion in public procurement processes under standard conditions, focusing to the role played by the competence of the PB and the risk of corruption. In the last chapter, we introduce emergency procurement and discuss how the risk of corrupt practices can increase in such a setting. We also analyse the main regulatory and procedural modifications introduced as a response to the pandemic crisis, and their effects on the management of the COVID-19 emergency.

Finally, thanks to an interview run with the manager of the Procurement Office of the University of Padua, we describe and discuss the main elements of procurement procedures and contracts implemented by the Office during the COVID-19 emergency. As a final step in the study, starting from the interview and from the available data on Italian procurement in the period March-April 2020, we illustrate the trade-off between centralization and decentralization in COVID-19 emergency procurement.





# 1 PROCUREMENT TENDERS: AWARDING PROCESS AND SUPPLIERS' SELECTION

## 1.1 Awarding Criteria and Auction Procedures

In this chapter we first present the common stages that a typical procurement tender should go through; then, we describe the different options a contracting authority can adopt to award a procurement contract through an auction procedure or through a negotiation. Finally, we focus on supplier's reputation and past performance as relevant elements of the procurement process. As stated in the Italian main procurement regulation (i.e. the so called *Codice degli Appalti*), a typical public tender can be divided into four stages. The initial stage of the procedure consists in the preparation of the announcement, in which the buyer defines the specifics of the good or service needed, and sets the minimum participation requirements potential bidders must have to enter the procedure. These requirements can vary in type and quantity according to the chosen mechanism: open procedures allow almost total freedom of entry and have very minimal restriction to participation; in restricted procedures, access to the tender is subject to compliance with stringent conditions, while in the negotiated ones, participation is subject to invitations of the contracting authority. At this stage, in addition to the minimum requirements necessary to avoid exclusion, the contracting authority has also to specify the criteria for evaluation and selection, through which the various offers will be weighted. In the second stage, the contracting authority selects the participants allowed to enter the tender, using the rule previously set. In restricted auctions and negotiations, this step is usually preceded by a further phase of pre-qualification to determine the actual integrity of potential participants and which, regardless of the mechanism used, should provide for a minimum presence of candidates (variable based on factors such as the country, the value of the tender, ...) to ensure a certain degree of competition in the tender itself. Moreover, to limit discretion in the pre-selection phase and to ensure a

transparent and fair procedure, the requirements for accessing the tender must be as objective and as non-discriminatory as possible (Clarich, 2017).

The third stage is aimed at evaluating the offers received by the contracting authority from all the firms allowed to enter the auction. The main criteria to evaluate bids are based either on i) price or on ii) Most Economically Advantageous Tender (MEAT), a combination of price and elements of quality. The fourth and final stage in public procurement is related to the actual award: the tender commission draws up the final ranking and assigns the contract to the winning firm, performing all the bureaucratic and outline controls (i.e. checking the regularity of the tender and its compliance with the requirements and correctness of the procedure).

### 1.1.1 *Awarding Criteria and Formats*

In this subsection, we discuss the buyer's choice on criteria to evaluate bidders (adopted in the third stage described above).

There are two general criteria for tenders that can be used in the Italian context: the price and the most economically advantage (MEAT).

When the price criterion are adopted, a direct and objective comparison of the price offered by different bidders is implemented, following the auction format adopted. Many methods can be used to rank offers, such as first-price auction or average bid auction. Both auction formats can be considered based on an objective criterion: they allow the PB to evaluate offers simply by comparing the price proposed by the participants in the auction. If the first-price auction is the format the buyer chooses, the supplier offering the lowest price will be the winner one. For first price auction, an additional check is often required to verify any abnormally low offers, since the PB is concerned about the seriousness and sustainability from an economic point of view of these offers (Clarich, 2017). If average-price auction is the format adopted, the bidder who has bid closest to the average of the bids submitted wins the auction (it will explain it better later). Whatever the chosen price mechanism, by using only one and objective parameter, price-based auctions have the main advantages of decreasing the time necessary for evaluating the offers and facilitating their comparison.

The criteria based on MEAT has the purpose to select the best combination between price and other quality parameters. In this case, a qualitative element – i.e. the execution times, innovative methods, or the social and environmental impact - is objectively measured or subjectively evaluated (Decarolis and Giorgiantonio, 2014).

The greater complexity and length of the offer process in MEAT is compensated by a broader evaluation of the offers, perhaps allowing to pay a slightly higher price but in exchange for

proportionally a greater overall service (Decarolis, 2014). On the one hand, there is an advantage in freely choosing the offer deemed most suitable for some specific needs, not focusing only on the price offered; on the other hand, it has the danger of opening up to non-transparent selection mechanisms, leading to less objective judgments and encouraging opportunistic behaviour. The MEAT should be accompanied by strict control mechanisms on the procedure and the subjects of the contracting commission involved in the evaluation. Additionally, the Italian legal system (and not only that one) specifies that with "economically" it means both the convenience of the offer in terms of value for money and the cost-to-effectiveness ratio, such as the cost of the life cycle,<sup>2</sup> offering a further opportunity of choice to the administration that prepares the call for tenders.

Whatever awarding criteria is adopted (price or MEAT) the entry in tender can be open or restricted.

The open auction stands out for being the most accessible among the options available to the public buyer because, as can be understood from the name itself, it has no access restrictions and is open to almost all bidders that want to submit an offer. It has always been the most used because, at least in theory, it is the most transparent and least discretionary mechanism among the most famous ones and which eliminates from the beginning any discrimination in the selection of participants. This is one of the main advantages of choosing an open auction since not limiting access to participation in the tender has the objective of combating favouritism and collusion between participating companies and the client, making it impossible for the latter to create ad hoc requirements and constraints to facilitate certain companies in obtaining the contract (Bajari and Tadelis, 2008).

In the open procedure, the description of the object of the contract must be inserted in the tender notice to make it clear to the participants and in order to public this information before the submission of the offers. Additionally, all firms know that the requirements contained in the announcement will be checked during the evaluation of the offers (Decarolis, Giorgiantonio, 2014). Open procedures have a high level of competition, due to the large number of participants. When a contract is awarded using a first-price auction – i.e. the winning firm will be the one offering the lowest price for the product or service awarded – increasing competition among the bidders reduces the price paid by the public buyer, representing the main advantage of this type of procedure. The less are the requirements of the tender, the greater the number of bidders willing to participate in the tender, the larger this advantage. Moreover, a larger number of participants prevent the risk of collusive behaviours (that are likely to emerge with few

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<sup>2</sup> Art.96, *Codice degli Appalti*.

participants), since it is easier for them to reach any agreement aimed at increasing the final price.

The main difference between the restricted and open procedure is in the tender qualification, where the requirements for the former make the entry process more complex than the former one. The mechanism of the restricted auction, as the name itself implies, limits potential participants to those who respect access restrictions, based on criteria that must be as objective and non-discriminatory as possible. All potential participants able to clear this requirement will be qualified to the next stages: they will receive an invitation letter allowing them to enter the tender and to submit their offers. Otherwise, firms not in possession of the appropriate requirements are disqualified and cannot proceed beyond that stage. As a result, the call for tenders in open procedures tend to necessarily be more specific than those in the restricted ones: in the latter, a detailed description of the good or service awarded can be made in the invitation letters, while in the former this is not possible.

This distinction between open and restricted procedure<sup>3</sup> almost always does not concern a free choice on the part of the contracting authority but is disciplined by precise rules governing when and which options are allowed. Often, these rules are linked to criteria such as the overall value of the object of the contract to be awarded, or to the service sector to be contracted. Starting from 9 January 2020, the new thresholds of relevance for public procurement in the two-year period 2020-21 came into force, above which the European Union legislation governing public procurement applies. The most important thresholds for EU legislations are € 139.000 for most of the supplies and services purchased by central governments and € 5.350.000 for public works contracts (Article 35, *Codice degli Appalti*).

The rules and thresholds help the contracting authority to select the best award procedure in each situation, but the tender design does not end there. In other words, it should determine the so-called tender format, i.e. the general set consisting of two main elements, around which the organization and setting of the public tender revolve: the award procedure, or the procedure through which the public buyer identifies the counterparty with whom to enter into the contract for the needed good or service; the award criteria, or the parameters according to which the offers are evaluated, which complete the first element and which must be decided in harmony with this, as different combinations can lead to totally different results and risks.

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<sup>3</sup> In the Italian legal system, open auctions are called *Pubblico Incanto*, while restricted ones are called *Licitazione Privata*.

### 1.1.2 *First-Price and Vickrey Auctions*

First-price auctions (FPAs) is a mechanism that selects the lowest price offer; it can be adopted in open and restricted procedures and used with/without the mechanism of automatic exclusion for anomalous bids. FPAs have the advantage of being generally faster than other mechanisms, especially selecting the winning bid. Indeed, comparing price, an objective parameter, using an almost automatic procedure reduces economic costs (related to the technical commissions or other) and help to save time and to increase the level of competition.

However, the main limits of this format lie in the ease with which it induces improper agreements between firms and public administration and between firms themselves. This mechanism could increase the risk of corruption, by competing solely on price, it would be sufficient for the corrupting company to focus its attention on the objective of obtaining from the CA, only the information on the lowest offer, and then subsequently, once the contract has been awarded, renegotiate the price through a posteriori agreements (Decarolis, Giorgiantonio, and Giovanniello, 2011). There is also a significant risk of collusion between competing firms, although FPAs are not the worst possible format in this respect. The main issues lie in the lack of non-economic parameters allowing bidders to agree among themselves and to win the contract if the company with the lowest costs is within this "group".

For Italy, Decarolis, Giorgiantonio and Giovanniello (2011) highlighted that, between 2000 and 2007, FPAs was the favourite option for works with a value above the European Union threshold (for those below the threshold legal constraints essentially required the use of other mechanisms) and it represented 33% of the value of the total contracts awarded by the public administration.

From this discussion, it clearly emerges that FPAs are especially suitable for tenders in which the object of the contract is well defined and whose specifications are clear and linear. This situation is recurrent for not very complex projects and for goods and/or services that do not require difficult planning and the PBs aim to minimize costs (Bajari and Tadelis, 2001; Dimitri, Piga, and Spagnolo, 2006). Projects that have these characteristics are often enforced by fixed-price contracts, where the payment amount does not depend on resources used and it does not vary once it is set.<sup>4</sup> First-price auctions, by competing solely on price, are suitable to award fixed-price contracts. An additional characteristic of FPAs exacerbated this problem: in competitive auctions bidders have no incentive to reveal their actual design costs before the auction takes place. As a result, they have additional information on a given project, as compared to the contracting authority. This asymmetry information allows firms to offer low

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<sup>4</sup> Differently, cost-plus contracts refer to contracts' amount that can vary in order to cover the extra costs, occurring after the contract is signed.

bids, knowing in advance the problematic parts and the potential pitfalls of a design where they can renegotiate and extract extra-profits (Tadelis, 2012).

There are some variants of the FPAs that have similar characteristics, but that we will not explore in details. One of the best-known types is the second-price auction, also famous with the name of Vickrey auctions.<sup>5</sup> They have the same aim of first-price auctions, namely the search for the optimal offer through open or restricted auctions with the use of the lowest price criterion. However, the mechanism used is different. In a second-price auction, the firm offering the lowest price wins, but the payment this firm receives is equal to the second-bid received. This has the advantage of allowing the contracting authority no to consider any so-called anomalous individual offers, far apart from rivals. These offers could be synonymous with prices that are not bearable for the buyer but aimed at obtaining a subsequent renegotiation (Delnoij and De Jaegher, 2018).

The comparison between these two mechanisms, that do not use any automatic exclusion systems for anomalous offers is the focus of various studies - Delnoij and De Jaegher (2018) highlight an important aspect to be taken into consideration when selecting the format for tenders: the risk aversion or propensity of bidders. This aspect should not be underestimated because the choice of the tender format has the power to incentivize bidders to take or not to take part in the competition. For example, these authors observe how the first-price auction mechanism is preferred by bidders that have increased risk aversion, while in other cases bidders are much more likely to be attracted to enter a second-price auction. For other cases, or when bidders are almost neutral or in any case have constant risk aversion, Delnoij and Jaegher (2018) instead observe an indifference between entering or not.

### 1.1.3 *Average Bid Auctions*

Average Bid auctions (ABA) is a format where the bids located in the first and last deciles are excluded<sup>6</sup> and “the winning bid is the one immediately below an anomaly threshold resulting from the sum of the average bid (the simple average of all not-excluded bids) and the mean deviation of the bids above said average bid” (Moretti and Valbonesi, 2015). Differently from FPAs, this auction mechanism is characterized by the use of the automatic exclusion option for anomalous bids. This peculiarity makes this format a sort of random draw to select the winning bid because all bids considered too low are automatically eliminated, and therefore they cannot be used as a vehicle to win the assignment and then rediscuss the contract terms. The mechanism

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<sup>5</sup> In honour of William Vickrey, a Professor of Columbia University, who studied and presented it in 1961.

<sup>6</sup> Given the distribution of all the bids received in an auction.

aims at finding the right balance between price and credibility of the offer (linked to higher costs for higher performances). ABA was the most used for public procurement in Italy: in particular for works awarded in the period 2000-2007, it represented 77% of all public tenders, even if in terms of the total value, this percentage falls below 50% (see Table 1, from Decarolis, Giorgiantonio, and Giovanniello (2011)). These data are to be taken with caution because, at least until 2006, the Italian *Codice degli Appalti* obliged its use for all works with a value below the threshold. So, it is complex to establish if these results depend on a free choice or on the lack of allowed alternatives. Since 2016, the amendments of the *Codice degli Appalti* have favoured the adoption of other alternative auction mechanisms, as well (in particular for below-threshold contracts).

Table 1. Number and Value of Awarded Contracts for Each Awarding Procedure

<i>Rilevanza economica dei vari formati di gara (2000-2007)</i>					
Formato	FP	AB	SR	N	Totali
Numero appalti	2.413 [2%]	88.146 [77%]	2.820 [2%]	21.501 [19%]	114.880
Valore appalti	38.492.089.067 [33%]	57.010.891.105 [49%]	12.288.485.873 [10%]	9.634.608.480 [8%]	117.426.074.525

Source: Decarolis, F., Giorgiantonio, C., and Giovanniello, V., (2011).

ABA could provide bidders with incentive to collusion: bidders may seek a collusive agreement to influence the definition of the average price. In fact, focusing on the average of all the bids received, the more the number of collusive firms (also through the establishment of fictitious companies with this specific purpose), the more their power to influence the selection of the winning bid also, making ABAs weak against the risk of collusion (Decarolis, Giorgiantonio, Giovanniello, 2011). Differently, ABA help to decrease the risk of corruption: since ABAs offer a pretty random process of selection of the winning bid, it will become difficult for a corrupt bureaucrat to intervene, affecting the final outcome.

The use of Average Bid auctions reduces the renegotiations between the winning firm and the CA. With ABA, firms will face fewer problems in terms of sustainability of the contract's design and execution costs with respect to FPAs: the price paid by the CA for the awarded contract via ABA is generally higher than the one via a FPA, and this is considered by Decarolis (2018) one of the main reason behind the evidence showing the average costs of ABA auctions, one sixth higher than the FPA).<sup>7</sup> At the same time, ABA may not incentivize firms to make an

<sup>7</sup> Decarolis, F., 2018. Comparing public procurement auctions. *International Economic Review*, 59 (2), 391-419.



offer as close to their costs as possible, causing a loss of efficiency both for the CA itself and for the overall welfare. Decarolis (2018) states that the use of ABA should be reduced because of the inefficiency losses it brings compared to FPAs.

#### *1.1.4 Scoring Rule Auctions*

Scoring auctions (SRA) complete the picture of the main tender formats available to the contracting authority among auctions procedures (open or restricted) to award a procurement contract. This format builds on the most economically advantageous criterion, considering other factors than the price. In this format, the use of an automatic elimination tool for anomalous offers is superfluous as the offers are analysed on several dimensions and therefore any critical issues would already emerge in the evaluation stage (Asker and Cantillon, 2008). In SRAs, a score is assigned to each offer and it weights the price and all the quality elements, defined in advance in the tender document. The bidder that obtains the highest score has the contract awarded. SRAs allow the procurement commission to make an assessment that can include more aspects and parameters than just the price. As a result, offers that with other methods would have been automatically rejected could now represent the best possible choice for achieving the desired final result. This format, exploiting the advantage deriving of evaluating the offer from several points of view (analysing both quantitative and qualitative parameters), allows to reduce the risk of encountering difficulties in the design and execution phase. Indeed, the awarding body can identify any critical elements at a technical level immediately when the offers are submitted, assuming that the evaluations are carried out competently and reliably. One of the most important parts in setting up an SRA is the definition of parameters that will be evaluated in the scoring function, and their relative weight: they should be harmonized together with the price variable, as to determine a so-called "scoring rule" that can express a score through a single unit of measurement (Dimitri, 2013).

Examining the technical specifications of the offers already in the preliminary phase allows SRA to be among the best mechanisms for complex projects, and they are more efficient than competitive auctions in which only the price variable is evaluated (Asker and Cantillon, 2008). On the other side, the adoption of SRA for the awarding of simple contracts/projects could highlight the presence of corruption (Decarolis, Giorgiantonio, and Giovanniello, 2011). Indeed, in SRA, the procurement commission has discretionary power in weighting the importance of various parameters and in evaluating the suppliers' offers: this could lead to the abuse of power and to an increase in the risk of corruption (Decarolis, Giorgiantonio and Giovanniello 2011).

Finally, SRA proves to be an excellent obstacle tool for collusion among bidders: the multiplicity of elements on which each supplier's offer is evaluated makes very difficult to succeed in agreements among firms entering the tender.

## 1.2 Negotiated Procedures

In this section, we consider the awarding procedures based on negotiations. The main difference between them is represented by the possibility for the public buyer to negotiate directly with one or more bidders to discuss the offer contents. Additionally, a pre-qualification mechanism might be included to allow access to the actual negotiation only to some participating firms. This pre-qualification mechanism usually consists of a procedure that involves the invitation of selected bidders by the contracting authority as the only way to enter the public tender. Sometimes, this can be replaced by a procedure where all firms can candidate. But only the candidates with the necessary requirements can access the negotiation stage. The negotiated procedure represents an important tool in public (and also in private) procurement, useful for projects that require high technical skills in the design and execution phase.<sup>8</sup> With respect to an auction format, the selection of a few but valid competitors allows to create a less complex process, avoiding the waste of time and resources caused by a too high number of participants. The key element of this format – at the same time an advantage and an issue - is the greater discretion left to the contracting authority, which can autonomously interact directly with the participating firms. It offers the opportunity to discuss aspects that otherwise would have been subject only to the evaluation and judgment of the public buyer, without giving the possibility to find a compromise with the supplier. The whole discipline about negotiated procedures revolves around this main concept and advantage.

### 1.2.1 Institutional Framework

The Italian and EU law governing negotiated procedures defines the conditions under which negotiations can be used in a very rigid and unequivocal way, highlighting limits about either the value of the contract and the type of asset and/or service object of the tender. According to art. 59, co. 2 of the *Codice degli Appalti*, the negotiated procedure and the competitive dialogue

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<sup>8</sup> Bajari, Mcmillan and Tadelis (2008), state that in the private-sector non-residential building in North California was the most used mechanism (44%) to the detriment also of the open auction (18%).

(addressed below in Subsection 1.2.3, and including elements similar to a negotiation) can be used only for certain types of works, services and supplies: first, the use of this tool is authorized if the subject of the contract implies the use of innovative methods in the design and/or execution stages,<sup>9</sup> or when the technical or financial nature and/or the complexity of the service require prior negotiation so that the terms and requirements of the tender contract are more effectively agreed.<sup>10</sup> Second, this mechanism can be allowed as a backup plan if an auction procedure went void, i.e. it has not selected any winning bidder. In this case, the specifications of the tender notice have to be maintained, inviting only the companies in possession of the predetermined requirements<sup>11</sup> that have previously submitted formally regular offers. In the last chapter, we will examine when these requirements can be relaxed. It may occur in case of emergency and/or urgent situations, when there is a strong need to speed up and streamline the procedures.

Further constraints, in addition to the ones described above, refer to the economic value of the contract: Italian and EU law set thresholds<sup>12</sup> for the contract value below which a certain contract can be awarded through a negotiated procedure or competitive dialogue. The last modification took place through the regulations n.1828 and n.1829 of the European Union, applicable from January 1st, 2020. The new EU thresholds are included in Article 35 of the Italian *Codice degli Appalti*; the negotiated procedure is allowed for service and supply contracts managed by central government authorities (from €144.000 to € 139.000), non-central (set at € 214.000) and for works contracts (€ 5.350.000). Additionally, at the Italian level, the so-called "*Sblocca Cantieri*"<sup>13</sup> decree amends art. 36 of the Italian *Codice degli Appalti*, applicable for the contracts under the EU thresholds. It provides for an overall simplification of the procedures for tenders and assignments. About the contract value, between 40,000 and 200,000 euros for works, and between 40,000 euros and the EU threshold for services and supplies (which are ordinarily set at € 221.000), the Italian law provides for the award through a negotiated procedure with prior consultation of at least 3 participating companies. Instead, according to Art.36, co. 2, lett. a, contracts worth less than 40,000 euros can be awarded through direct assignment even without prior consultation of two or more economic operators.

This brief summary helps to shed some light on the consideration that the Italian legal system is nourishing for speeding up contracts below the threshold, where the limits imposed by the EU law are less stringent.

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<sup>9</sup> Art. 59, co. 2, lett. a, n. 2, *Codice degli Appalti*

<sup>10</sup> Art. 59, co. 2, lett. a, n.3 e n.4, *Codice degli Appalti*

<sup>11</sup> Ai sensi degli Art. 80-90, *Codice degli Appalti*.

<sup>12</sup> For Italy: D.lgs. 50/2016

<sup>13</sup> *Decreto Legge* n.32/2019

To further highlight the differences within the same type of tender format, also with regard to the competitive procedure with negotiation, we can distinguish two important subspecies. They differ for the degree of publicity and discretion left to the public administration in the preparation and actual execution: on the one hand, we have the negotiated procedure with prior publication of the tender notice, through which the contracting authority communicates the opening of the tender to the participating firms; on the other hand, we have the negotiated procedure without prior publication of the notice. This latter is applicable in particular situations and provides that the administration itself can independently identify the firms with which it can subsequently negotiate, without calling the tender (Decarolis, Giorgiantonio, Giovanniello, 2011).

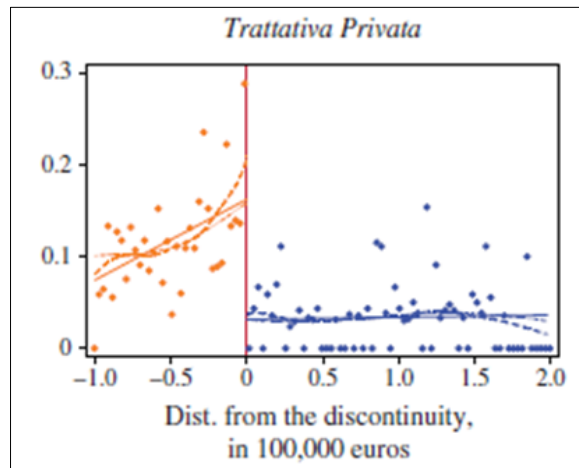
### *1.2.2 Advantages and Disadvantages of Negotiated Procedures*

In the previous section, we described how auctions are a very cost-efficient allocation mechanism for the contracting authority. Various studies highlighted that also a negotiation procedure represents an effective solution. Coviello, Guglielmo and Spagnolo (2018), investigating a dataset of procurement on public works awarded in Italy in the period 2000-2005, underline the importance of negotiation: when allowed by the Italian *Codice degli Appalti*, the so-called *Trattativa Privata*<sup>14</sup> (a type of negotiation) is the contracting authority's preferred awarding format. Using a parametric analysis, Figure 1 shows how this type of procedure is preferred for below-threshold contracts, with a significant difference with respect to above-threshold ones. It implies that the use of negotiated procedure is heavily affected by

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<sup>14</sup> It is the negotiated procedure in which the contracting authority consults the firms and negotiates the terms of the contract with one or more of them.

Figure 1. *Trattativa Privata* Below and Above-threshold



Source: Coviello, D., Guglielmo, A., and Spagnolo, G., (2018).

the presence of the thresholds. The same authors point out that this procedure occurs more frequently when the number of potential participants is lower than the average.

Chever and Moore argue that a similar trend is present also in France (see Tab. 2<sup>15</sup>). The table refers to the French public procurement tenders between 2001 and 2009. It shows that, on average, the number of bidders is lower when a negotiation procedure is applied. Additionally, another important evidence is represented by the ratio number of bidders/number of candidates: this parameter is much lower in the negotiation procedure (0.33) rather than in the open auction one (0.8).

Table 2. Number of Bidders and Awarding Procedure

	(1) Open auction (formalized)	(2) Non formalized procedures	(3) Formalized procedure with a negotiation phase	Average (1) and (2)
<i>Nb candidates</i>	5.4	4.7	11.5	5.0
<i>Nb bidders</i>	4.1	3.8	3.4	4.0
<i>Nb bidders/Nb candidates</i>	0.76	0.88	0.33	0.80

Source: Chever, L., and Moore, J., (2012).

The relationship between the number of participants and the mechanism used is subject of conflicting opinions and studies (Bajari, Mcmillan and Tadelis, 2008; Lalive, Schmutzler and Zulehner, 2015). Nevertheless, some factors suggest there are benefits in having a lower number of participants in the tender. First, when the PB uses a negotiation to select some firms, usually the selected firms are bidders who have skills and competencies to carry out and discuss the required project. Second, a lower number of bidders require less time to evaluate the offers.

<sup>15</sup> Tab. 2. Chever, L., Moore, J. 2012. When More Discretionary Power Improves Public Procurement Efficiency: An Empirical Analysis of French Negotiated Procedures. Working Paper, *IAE Paris, Paris*.

This allows the contracting authority to save time and resources which would have been needed, in an open auction, to evaluate a higher number of participants. To maintain an adequate level of competition, the Italian law requires a minimum number of participants, i.e. three (Coviello, Guglielmo, and Spagnolo, 2018). Additionally, the candidates must submit offers that include various non-monetary characteristics of the good/service provided, and not just the price. As the contract awarding is not price-based only, anomalous offers – i.e. opportunistic bids firm offer with the sole purpose of renegotiating them after the tender has been awarded - are rarely observed. Similarly to scoring auctions, the PB is interested not only in the cost for the realization of a specific project, but also on multiple non-monetary aspects. Indeed, in a first-price auction, the minimization of costs is the unique factor used to judge a public work or a public service. Differently, in scoring rule auctions as well as in negotiations, the main goal is the maximization of the "value for money". Through negotiation or a competitive dialogue, by discussing the offers from many dimensions, - such as the environmental impact, the local business participation or the effects of the project on the population and so on – this goal may become easier to achieve (Manso and Nikas, 2015).

The small number of participants reduces competition between bidders, in turn lowering the possible gain that can be obtained from the contracting authority (Baltrunaite, et al., 2020). On the one hand, on average the prices are higher than those achievable using other allocation mechanisms (Bulow and Klemplerer, 1996); on the other hand, an increase in the number of bidders may lead rational bidders to bid less aggressively (because of the fear of the so-called *winner's curse*). As a result, bids are not necessarily decreasing in the number of bidders, and not even necessarily lower with competitive auctions (Lalive, Schmutzler and Zulehner, 2015). There is also, in the economic literature, a wide debate about how and when negotiation procedures should be used. Various studies have observed how negotiations are the most appropriate procedure when dealing with complex projects (Bajari, Mcmillan and Tadelis, 2009; Chever and Moore, 2012; Dimitri, Piga and Spagnolo, 2006). Those studies highlight it exists at least a positive correlation between the complexity of the project and the choice by the public buyer of a negotiated procedure. Various factors explain this relationship. Most importantly, the literature points out that the higher the complexity of the project, the greater the difficulty in evaluating offers solely on the basis of the price. Indeed, the price is a decisive element for simpler projects, when the technical requirements and the ways in which the work will be performed can be sufficiently determined ex-ante. In the relationship between the complexity of the project and the tender format, the type of contract used to govern the agreement plays a relevant role. This represents a crucial element in the procurement process: the contract states the purpose the CA wants to achieve and it is a protection itself from any

opportunistic behaviour of the winning bidder. Complex projects are often enforced by the cost-plus contracts. Cost-plus are contracts where the contractor is paid for all its allowed expenses, plus an additional percentage to provide the contractor with a profit.<sup>16</sup> This type of contract is preferred when the contracting authority would aim to balance the desire to offer incentives to companies in improving the execution of work with the need to reduce as much as possible ex-post transaction costs (Bajari and Tadelis, 2001).

Alternatively, the contracting authority can use fixed-price contracts, where the contractor is paid a pre-determined amount, regardless of the incurred expenses. Fixed-price contracts are the optimal solution to reduce the costs related to the execution of the project (to be preferred for less complex projects). Differently, they turn out to be a poor choice if the project itself is not completed, if there are many non-contractible parts, or if the project has to undergo substantial changes to its original structure. This happens because renegotiation costs have a significant impact on the overall economic burden to be borne (Bajari and Tadelis, 2001; Gagnepain, Ivaldi and Martimort, 2013). Renegotiation becomes more likely with complex projects, whose initial definition usually undergoes major changes during construction. Indeed, the difficulty to precisely determine ex-ante the multiple aspects and technicalities of a project, forces the counterparties to modify it during its execution, increasing the costs of ex-post adaptation. Additionally, these corrections and interventions lead to delays in the execution of the work, and delays increase probability of not finishing the work. To reduce the risk of these problems, PBs prefer to select reliable firms through a negotiation stage (Bajari, Mcmillan and Tadelis, 2009). In this way, the mechanisms for limiting ex-ante costs are reduced but, at the same time, the renegotiation and adaptation process ex-post becomes more agile and simple (Bajari and Tadelis, 2001). If coupled with appropriate contractual clauses, the negotiated procedure could become a good solution even for high-value projects, usually assigned through a competitive auction.

The above considerations highlight one of the toughest problems to resolve in the relationship between seller and buyer: the adverse selection. It arises from the difference in knowledge between who prepares the tender and the participating bidders. The latter, working in a certain industry or specific field, are usually much more experienced than the public officials evaluating the offers. Adverse selection is particularly relevant when a competitive bidding mechanism is used for complex projects: if the contractor notices any pitfalls in the design he could exploit them to his advantage. It may offer a price lower than the real value of the contract

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<sup>16</sup> Cost-plus contracts are created to protect clients from cost overruns. They are commonly used in situations where the costs are difficult to define ex-ante. Many contracts specify that reimbursement may not exceed a specific threshold, in order to limit any opportunistic behaviour.

and then make the necessary changes once the contract is assigned. In this way, he would obtain extra profits from the renegotiation, and consequently extra costs for the contracting authority (Bajari, Mcmillan and Tadelis, 2008).

Adverse selection is not only linked to the information and skills advantages that bidders have, compared to the public contracting authority. All players, the PB and the bidders, are unwilling to share in-depth details on the tender project before the agreement is reached. The contracting authority aims to provide the proper set of incentives to balance the need of lowering the initial price with the risk of spending too much for the ex-post adaptations (Tadelis, 2012). A bidder could prefer not to expose an issue of the project in order to exploit this knowledge in a renegotiation at a later stage. Through the use of a negotiated procedure, these concerns of pointing out possible weaknesses of the project may be limited. Thanks to the direct confrontation between the parties, it will be easier to obtain an effective solution. Negotiations may also leave room for improvement of the project, avoiding waste of public resources and encouraging firms to contribute to the final result (Tadelis, 2012; Chever and Moore, 2012). The advantages of negotiated procedure are not limited to this point. Negotiation strengthens the relationship created between the contracting authority and private companies. Unlike competitive bidding like auctions, where the parties are limited to the mere formality of presenting and selecting offers, in the negotiation, the parties must interact and cooperate, adapting the proposal of one with the request of the other, and vice versa. The common denominator is the recognition of a dependence on the counterpart: as a result, factors such as cooperation and mutual adaptation become decisive elements for the success of the agreement and of the negotiation process (Manso, Nikas, 2015). This type of relationship may be not only an efficient mechanism for allocating the public procurement, but it can be useful also to create a long-term relationship between the buyer and the supplier. Thanks to the exchange of skills and information, the buyer learns the supplier's ability, and take it into consideration in future tenders (Gagnepain, Ivaldi, Martimort, 2013).

### *1.2.3 Competitive Dialogue*

To reinforce professional collaboration between the contracting authority and tenderers, another alternative type of procedure increasingly used in Europe during the last years is the competitive dialogue. Competitive dialogue aims to increase effectiveness and efficiency in the contract management by the public administration, even in the preliminary stages preceding the presentation of the tender notice. The competitive dialogue is a variant of the negotiated procedure. It differs in the way parties conduct the negotiation. Indeed, the parties involved



must not only seek an agreement and discuss a defined tender notice (as in the negotiations), they have also to cooperate with the aim of writing a notice as complete as possible, analysing aspects and variables, outside the rigid bureaucratic process (Racca and Casalini, 2012). It involves three steps: first, a preliminary selection of the companies (at least three operators) who can take part in the dialogue through invitation or pre-qualification mechanisms. Then, the dialogue stage, where the real negotiations take place. Here, the contracting authority can choose whether to run the negotiations with each participant separately (safeguarding the respect for confidential information and property rights) or all together jointly (eliminating the problem of information asymmetry that may arise in the negotiation). Finally, once the dialogue stage is completed, there is a final tender stage. In this last stage, the contracting authority invites each bidder to submit its final offer, according to the solutions presented and specified in the dialogue stage. Offers can be clarified, specified and refined. However, the details, clarifications, improvements, and additional information cannot have a discriminatory effect, altering the competitive mechanisms (see Art. 64, comma 10, *Codice degli Appalti*). The competitive dialogue aims to reconcile the need for flexibility with the legal and economic constraints dictated by the principles of competition and transparency.

This awarding procedure is particularly useful when the contracting authority is not able to independently establish the requirements and technical specifications of the object of the tender. This situation occurs when the complexity of the projects is quite high and a direct exchange of views with the companies operating in the sector of interest may be useful (Clarich, 2017). Indeed, unlike negotiation, in the competitive dialogue PBs are allowed to discuss with the bidders before the tender is defined. Additionally, this procedure is very useful for the contracting authority to issue a tender as complete and exhaustive as possible.<sup>17</sup> The use of competitive dialogue is limited to "particularly complex" contracts, where the needs of the public administrations and its legal and/or financial aspects necessary to satisfy them would be complicated to determine before the awarding phase (Racca and Casalini, 2012). The award criterion will consequently be the most economically advantageous one.<sup>18</sup> The CA will be able to examine and evaluate all aspects of the offers received, using also the preliminary discussion with the bidders: they can even help define the technical specifications to submit in the decision on the contents of the offer.

The main contribution offered by the competitive dialogue is the increase, with respect to a standard negotiation, of competitiveness in a phase of the awarding procedure under the exclusive competence of the contracting authority. The main risk of this procedure is the PB's

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<sup>17</sup> Art. 64, co. 5, *Codice degli Appalti*

<sup>18</sup> Art. 64, co. 10, *Codice degli Appalti*

lack of skills and technical knowledge of the goods or service to be procured, as compared to the firms providing it. This gap may lead to inefficiencies in pre-assignment, high transaction costs and ex-post renegotiation (Decarolis and Giorgiantonio and Giovannello 2011; Sharma, 2016). Despite the risks of non-objective lending, the competitive dialogue may represent "a structured, formalized and transparent procedure to define the technical specifications for complex public contracts. Additionally, it will be useful to prevent the distortions that may otherwise occur at this stage and undermine the policy goals of public procurement" (Racca and Casalini, 2012, p. 490).

Another limit of the main limitations of the competitive dialogue is the duration of the whole pre-assignment discussion process: since this procedure is composed of several dialogues and evaluation stages, in 67% of the times it lasts from one to two years while one time out of four – generally in case of highly complex projects<sup>19</sup>- it will exceed two years (European PPP Expertise Centre, 2011). In addition to being expensive in terms of the time and efforts to devote to each project, this procedure creates an important opportunity-cost for bidders who have to give up other projects; additionally, bidders have to finance the multiple stages of the discussion involving the various areas of competence of the contract. To mitigate this disadvantage, sometimes a system of incentives and reimbursements is inserted at the discretion of the contracting authority. For example, losing bidders may receive some reimbursements, in order to encourage participation and sharing of the know-how and, for the public buyer, to acquire property rights on relevant non-winning projects or ideas (Racca and Casalini, 2012).

Although the negotiated procedures and the competitive dialogue could be considered less effective tools in selecting the lowest bid, this section highlights how these solutions may represent an important source of advantages for the public buyer. Their positive implications may exceed the benefits of the auction. On the one hand, negotiations, taking advantage of the possibility of analysing all the multiple elements of the offer, minimize the costs to be incurred to correct errors ex-post; on the other hand, an auction can better address the need of transparent procedures possible to avoid favouritism and opportunistic behaviour (Tadelis, 2012; Manso and Nikas, 2015). A possible solution would be to find an option that allows to evaluate and select the best suppliers, before entering the tender. To achieve this objective, the PB can exploit information regarding the suppliers' past performances, like their credibility and their reputation. Using past performance as a criterion, it may act as a filter and qualifying parameter to simplify the choice between different competition formats.

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<sup>19</sup> From the publication of the tender notice until the definition of the financial agreements.

### 1.3 Reputation and Past Performance in Selection Process

The previous sections show that it is not possible to establish which is the best tender format, between auctions and negotiations. Each one has its specific advantages and issues: each one may be the best in certain areas and for certain situations while it may be harmful if used in inappropriate contexts.

There are two main variables to consider in selecting the appropriate mechanism: efficiency and effectiveness. Their role is crucial and they should be the main purpose of every decision-making process that weight costs and benefits. In the public procurement sector, efficiency is often traded for other values and principles the public administration has to pursue. Among them, the need to ensure transparency and honesty and the prevention of opportunistic behaviour are the most important. Their interplay may lead to different outcomes and risks. All these aspects are relevant in any competitive environment and particularly in operations conducted by public administrations. In this case, the consequences of certain actions do not fall only on the public official in charge. Any errors (voluntary or not) lead to responsibilities towards external subjects, such as citizens and firms. Furthermore, errors can cause long-term effects in the relationship between institutions and citizens, undermining the trust of the latter in the former.

This section aims to study the trade-off between the obligation to comply with all the values and principles the public administration has to pursue and the need of efficiency in public procurement. When weighting efficiency and transparency, the level of discretion left to the PB is one of the main decisions to be taken. For example, Moretti and Valbonesi (2015) have pointed out a greater propensity towards the rigidity of the rules to regulate awarding procedures could limit the decision-making freedom of the contracting authority. In turn, this may decrease the efficiency of operations and collective well-being (even if the authors underline the surprising lack of empirical works that could allow to estimate this loss in terms of inefficiency). A solution that has been proposed to solve this trade-off is the use of reputational or past-performance rating mechanisms in the selection of suppliers. They may help the contracting authority in streamlining the awarding procedures, and in increasing the quality and reliability of these processes. This option becomes particularly relevant in auctions procedures, where the PB has no discretion in assessing the quality and the reliability of bidders. Differently, in negotiated procedures, all bidders (and their offers) are individually evaluated in the direct discussion between PB and suppliers during the negotiation (or in the second stage of the

competitive dialogue, see the previous section). This does not mean that these tender formats may not benefit from a possible reputational assessment system of bidders, eventually avoiding the need to carry out additional checks.

The reputational mechanisms use the past performance outcome to assign a score to the bidders. When a bidder complies with the contracting authority's requirement about certain parameters, it will receive a high score which will be taken into consideration for future tenders. In this way, the bidders have an incentive to improve or consolidate their performances. Otherwise, they will be penalized with a negative score, decreasing their chances to access future tenders. These reputational scores can be used in the pre-qualification stage (if present) of open and restricted auctions, before the formal evaluation stage and the final awarding of the contract. This step helps the PB in adopting filtering and evaluation systems before the submission and the evaluation of the offers. Using the past experiences of suppliers, the contracting authority may discard companies with a worse rating. This mechanism of incentives and penalties reward more reliable firms with a higher probability of obtaining future projects, and incentivize the excluded firms in making the necessary corrections to improve their ratings.

### *1.3.1 Regulatory and Institutional Framework*

The regulatory framework for the use of past performances in evaluating public procurement offers changes according to the procurement regulations of each country. In particular, there are important differences between the European Union and the United States. In the latter, the most important contribution in supporting more flexible practices is represented by Kelman.<sup>20</sup> He argued that a bidders' rating mechanism could bring advantages both for the contracting authority and for the private companies that interface with it. He pushed for a reform of the U.S. system: through the Federal Streamlining Act of 1994, public administrations were allowed to use less rigid procedures, increasing the weight assigned to the past performances of suppliers in the selection process. Then, these ratings had to be recorded in order to make them usable in the subsequent selection procedures (Spagnolo, 2012). Using past performances to improve future ones leaves the procedure open to all firms in the selection stage, introducing this parameter as an award criterion parameter. These mechanisms have been already used in the

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<sup>20</sup> Kelman (1990) stated that a too high degree of competition discourages a normal business relationship between public and private agents. It would not allow to create a long-term relationship with suppliers, unless they disappoint the expectations. Kelman underlined how in the public procurement system, public decision-making processes do not exploit factors such as the expertise, the reputation, or the efficiency of the suppliers in the selection of the most appropriate bidder.

private sector, where reputation, rather than the threat of legal retaliation,<sup>21</sup> may act as a guarantee for the respect of the contracts. They should incentivize firms to respect the reliability requirements autonomously, to increase the chances of success in the negotiation phase (Doni, 2006). The important changes suggested by Kelman have raised a wide debate on their effectiveness: in particular, the need to safeguard the competitive environment and not to discourage potential participants is of particular concern. Horner (2002) argues that the interaction between reputation and competitive forces can be advantageous only if past performances are used effectively (Horner, 2002).

Differently from the US, the European Union does not allow the use of past performances and firm's reputation in the awarding mechanism. The main reason of this choice is to preserve open competition, and not to disadvantage potential entrants. When the evaluation of past performances is not well-designed and managed, it might have discriminatory effects: incumbent firms will have more chances to access future tenders because they have an already established score; differently, it would be tough for new entrants – particularly from different countries – to build a good reputational index starting from scratch. EU Member States are allowed to use a reputational index or past performance parameters only in the selection stage, while the award criteria must only consider the elements contained in the offers. This EU rule aims to limit the use of discriminatory parameters against non-national but EU suppliers. In this way, it favours the integration and harmonization between the different legal systems, at the cost of a lower-quality procurement and to an increase in transaction costs (Calzolari and Spagnolo, 2009; Doni, 2006; European Economy Review, 2006).

The Italian legal system, following the European directives, provides for the use of preliminary screening mechanisms that are not linked to past performance evaluation indexes. These screenings are limited to check the presence of technical, legal, and financial requirements of the bidder. They are used to qualify bidders for entry: only those who obtain the qualification can perform and complete all the tasks and activities in the public tender. In particular, bidders wishing to participate in a call for tenders must have a certification by an authorized body (SOA<sup>22</sup>), concerning the size and economic value of the contract and the type/scope of technical work or service requested. Other additional controls concern the financial capacity of the company or the presence of any links with criminal associations) (Branzoli and Decarolis, 2015). Bidders that do not meet these requirements can still submit an offer and bid to win the

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<sup>21</sup> Legal enforcement of the contracts often represents the last resort because of the costs it involves, both from an economic point of view and for the times of justice.

<sup>22</sup> SOA (*Società Organismo di Attestazione*). The SOA Certification qualifies the firms for the execution of public works contracts for an amount greater than 150,000 euros and it confirms that a firm is in possession of all the requisites necessary for public bargaining.

contract. But, if they win, they must subcontract the activities for which they do not qualify to other qualified companies (Moretti and Valbonesi, 2015).<sup>23</sup>

A recent legislative change may suggest a new attitude of the Italian legislator. The latest amendment to the *Codice degli Appalti* (L.D. 50/2016) allowed the use of a bidder rating system based on past performance in the awarding phase. The actual use should be optional and not mandatory for contracting authorities and its effectiveness is not yet assessable<sup>24</sup> (Fiorino et al., 2018). Setting up actual requirements to evaluate the bidders is necessary for the practical application of this new rule. At the moment, these requirements refer to technical, legal and financial aspects of the firm, they do not give a significant relevance on how the firm has operated up to that moment and they do not focus on the evaluation of the firm's behaviour in previous contracts.

Furthermore, the classic auction theory assumes that it exists the so-called "verifiability of the performance": the client is able to check for any leaks in the execution of the contract and, if necessary, retaliate against the other party. But, this assumption is not always true: verifiability is not feasible when the cost of controls and retaliations is higher than the possible gains deriving from a win - or if there is a limit to the reimbursement of the damages. The contracting authority often does not sue a contractor because litigation can take a very long time and produce uncertain results. With such conditions, the enforcement of the contract is difficult to respect, and the injured party risks not having tools to protect against any opportunistic behaviour of the counterparty.

In particular for high complex projects, it is difficult and sometimes impossible to define a priori all the aspects of the work or service to be provided. This creates uncertainty about how to verify compliance, making non-contractable variables an important aspect to keep into account. It becomes necessary to find an alternative option that can weigh in future tenders any past incorrect behaviour, acting as a deterrent for the latter. Inserting a parameter that gives to these behaviours a negative relevance could reduce bidders' opportunistic behaviours. Indeed, the evaluation of past performances may be defined as the creation of a history of the firm which could influence the selection of suppliers in subsequent tenders (Doni, 2006).

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<sup>23</sup> The subcontracting practices are another relevant aspect when we talk about public procurement. The bidders can be divided in fully qualified bidders and partially ones. The possibility to submit an offer even if the bidder is not qualified for the activities creates different subcontracting strategies. For example, it emerged how firms that have to mandatory subcontract (because not in possession of the requirements) offers higher prices than the ones who are not forced to do it (Valbonesi, 2012). It will be mentioned later about the impact of subcontracting on corruption.

<sup>24</sup> As the specific guidelines have not yet been defined by the competent authorities.

### 1.3.2 *Reputation, Competition and Collusion*

The incompleteness of contracts represents one of the key issues in the public procurement and it is heavily related to the moral hazard problem and adverse selection. It arises within the relationship between the contracting authority and private agents: the latter may adopt opportunistic behaviours through very aggressive offers; those offers have the sole objective of winning the contract and then renegotiate ex-post to obtain extra profits, exacerbating the problem of public administration inefficiency. When auctions are used as awarding procedures, any bidder can exploit these opportunistic behaviours. They may occur once the contract has been obtained (ex-post) but also in the selection phase (ex-ante). In the first case, the winning bidder wins the auction offering a very low price for the execution of the work. The low price is linked to low quality, complicated and/or expensive to control for the public buyer. This allows the supplier to force changes to the original contract, by re-discussing its terms to bear the costs of higher quality ex-post (Gagnepain, Ivaldi and Martimort, 2013). In the second case, a bidder offers a very low price in the bidding stage: once it wins the contract, it will offer a low-quality performance in line with the price offered. For the contracting authority, these negative outcomes highlight a wrong allocation, not leading to the selection of the most efficient bidder (Calzolari and Spagnolo, 2009; Dellarocas, Dini and Spagnolo, 2006). Through the adoption of a reputational filter, behaviour of this kind could be curbed and sanctioned in future tenders. In this way, the bidders should evaluate the costs of their opportunistic behaviour also in the long-term: offering low-quality performances, bidders know in advance they will decrease their ratings, decreasing also the probability to obtain future contracts.

The evaluation of past performances works only if the amount of “promised” future profits – i.e. the increase in the probability of winning future contracts if there is no opportunistic behaviours now - is higher than the immediate profits obtained by cheating and altering the competitiveness of the tender.<sup>25</sup> Otherwise, bidders do not have any incentives to comply, and the use of excessively aggressive offers would not undergo any significant correction.

The inclusion of further restrictions on access to the awarding procedures is of particular concern: it could decrease competition between potential bidders. The relationship between participation and reputation has been investigated by Butler et al. (2012).<sup>26</sup> They conducted an experimental study evaluating the quality, costs, and frequency of entry before and after the introduction of a reputational mechanism in the qualification stage. They noted that the

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<sup>25</sup> Kim, I.G., 1998, A model of selective tendering: does bidding competition deter opportunism by contractor?. *The Quarterly Review of Economics and Finance*, 38, 907–925. In: DONI, N., 2006. The Importance of Reputation in Awarding Public Contracts. *Annals of Public Cooperative Economics*, 77(4):401–429.

<sup>26</sup> In Spagnolo, G., 2012. Reputation, Competition and Entry in Procurement. *International Journal of Industrial Organization*. 30 (3), 291–296.

introduction of this policy reduced participation in tenders only when the mechanisms favours a single historical operator. Differently, if potential competitors have a similar reputation and are equally subsidized, these authors find no difference with the “no-reputation scenario”. As a result, the work shows that utilizing a performance rating does not led to a decrease in the level of competitiveness and to a lower number of participants. Participation depends on how these exclusion systems are designed and applied, without setting discriminatory or unobjective criteria that make the process excessively arbitrary and favourable only to some bidders (Butler et al., 2012; Spagnolo, 2012). Moreover, even if this type of reputational filter actually resulted in the skimming of potential participants, the overall result would not necessarily be negative. When direct negotiation is not allowed, weighting the past performance quality of suppliers may represent an effective alternative to mechanisms that focus only on the contents of the present tender. On the other hand, mechanisms that limit open competition in public procurement are often the cause of heated debate, due to the incentive they could create in favouring collusion between bidders. With fewer companies competing for the contract, reaching a collusive agreement to extract extra-profits becomes easier. However, a compromise between reputational and collusive mechanisms is possible. When the quality - in particular its non-contractable part - is particularly relevant for the public buyer, limited competition in the awarding stage may be desirable. In specific cases, not contrasting collusive agreements may even be beneficial for the contracting authority and the overall quality of the project (Calzolari and Spagnolo, 2009). It is difficult to include this concept in national regulations: in some cases, potential suppliers may cooperate by creating special associations in order to win the contract. Collusion may allow the supplier to obtain large profits but also, consequently, to offer superior performance. These considerations on the relationship between reputation and collusion are based on an unstable balance between the non-contractual parts and the level of openness towards suppliers that a system wants to adopt: on the one hand, a greater number of bidders and greater importance about the explicit parts of the contract have the advantage of limiting collusive agreements between the bidders; on the other hand, this may reduce quality and execution of the non-contractual aspects of the contract (Calzolari and Spagnolo, 2009).

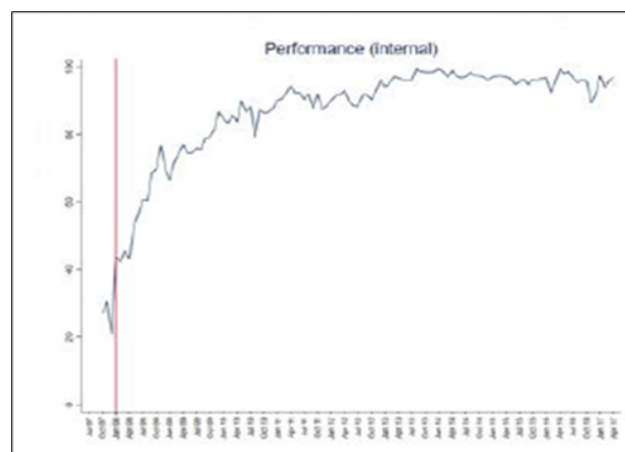
### *1.3.3 Suppliers' Selection Effects on Costs and Quality*

The use of a mechanism that links past with future performances may also trigger a virtuous circle. A bidder with a good reputational parameter increases its chance of success. The only way to improve this rating is by offering services that are qualitatively up to date. Clearly, this is true also for future contracts, that become increasingly likely to be obtained, and so on.



Maintaining a high and constant level of quality in the execution of the works, a bidder would see an increase in its rating, linked to its performance. To achieve this goal, bidders will be more inclined to self-regulate in the selection stage. They will be forced to invest in adapting themselves to the required standards. In this way, they would be more likely to win contracts and to build or consolidate their reputational index. Among the downsides, these behaviours may increase the costs for the bidders, translating in a higher price paid by the public buyer (Decarolis, Spagnolo, and Pacini 2016). These authors analysed the experience of ACEA, an Italian public multi-utility company that introduced a vendor rating mechanism with more than 100 parameters linked to the quality and past performance of suppliers. The results in terms of performance quality have been measured by parameters such as the number of blackouts (with a benefit of 6.6 million Euros) or the number of fatal accidents during works. They have been very positive, with a percentage of compliance with the parameters ranging from 25% to about 90% (see Figure 2). Additionally, the same authors noted how the bidders adopted the necessary improvements in proportion to the weight of the various parameters on the overall evaluation. This made it possible to further highlight the strong incentive offered by these measures. The study exploits a policy discontinuity: the use of past reputation in the actual supplier evaluation procedure was stopped, even if the evaluation parameters have been maintained to monitor the supplier's performance.<sup>27</sup> This allowed the comparison of the results before and after the termination of the policy. The results remained quite stable: quality and efficiency of public procurement have not decreased. This suggests that the introduction of reputational

Figure 2. The Compliance with the Qualification Parameters over Time



Source: Decarolis, F., Pacini, R., and Spagnolo, G., (2016).

<sup>27</sup> The study lasted more than 10 years but the actual use of the mechanism by the company lasted just over a year. This is because the management changed while the test was in progress and the company's legal offices were concerned about the legality of this instrument. The Italian legal system in 2011 had returned to a hybrid system (no longer scoring rules, which it had introduced only a year earlier) and allows the evaluation of offers (but no more of the bidders) in the selection and award phase (Decarolis, Spagnolo, and Pacini, 2016).

parameters has led to many investments for permanent improvements, which have persisted after the policy has been terminated. In other words, once the bidders have invested in improving their quality standards to comply with the parameters, it was convenient for them to maintain these improvements in order to recover the costs incurred over time.

The costs of these mechanisms are not to be underestimated. The introduction of a similar system in a public administration entails also the expenses incurred to create, prepare and manage the set of information and procedures necessary for the proper functioning of the evaluation process. For example, the PBs would have the burden of recording and inserting the evaluations of all the firms interacting with them; the responsibility of effectively managing such a large archive is not trivial (Doni, 2006). Other sources of costs include the estimation of the parameters to be used, their relative weight on the overall assessment and the methods of managing new entrants.<sup>28</sup> Additionally, these tools require specific technical skills to be acquired by the procurement office's personnel, and the obligation to manage such information with transparency and clarity. This latter need is a clear example of another risk linked to the use of past evaluations. It would imply a greater discretion left to who manages the assessments and the awarding of the contracts. However, not being able to properly control the actions and responsibilities of individual employee cannot be, alone, a valid reason not to use a reputational system; this is particularly relevant for contracts of a large value.

The first chapter has discussed how much discretion should be left to PBs. On the one hand, leaving greater discretion to the public contracting authority can lead to a distortion of the ordinary procurement processes. Additional discretion may involve both economic costs for the control and the prevention of opportunistic behaviour and learning costs for the reorganization of the processes. On the other hand, discretion, if thought and applied in the right way in the qualification stages, can make the whole procedure more reliable and efficient. Discretion would also increase the quality of the execution stage. The application of a reputational system is a useful way to include a subjective-discretionary variable in the evaluation process. It would certainly favour a less rigid and bureaucratic approach, making more fluid and flexible the procurement processes.<sup>29</sup> A reputational rating system would create a sort of *company pedigree* that can be used to select the most efficient supplier. Additionally, this system would not

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<sup>28</sup> There are some debates about the ratings of new entrants or those of bidders not having enough past evaluated performances. For instance, for Decarolis, Spagnolo, and Pacini (2016) the most appropriate system is to give those who do not have a reputational index an average value compared to those already in possession. It may allow them to start from an average position. Otherwise, obtaining a contract and building a reputational background from scratch would be very difficult.

<sup>29</sup> As observed above, the efficiency of the processes has been heavily affected by the presence of normative and procedural constraints. Although they are still necessary, higher flexibility may help to reduce and overcome potential allocative inefficiencies.

prevent the PB to jointly evaluate the technical, financial and legal characteristics of the suppliers together with their past behaviours, quality and performance. It would offer a dynamic analysis of the suppliers. It is not easy to create this system from scratch: there are external (related to the legal, political and social implications) and internal problems (as underlined there are still debates on costs and benefits) to be considered. But, it may be advantageous for the stakeholders and for the public welfare to overcome these problems. The introduction of such mechanisms may be useful to test how track record systems on past performance can improve the quality, efficiency and reliability of the public procurement processes. A reputational screening shows how the choice to leave more or less discretionary power may entail risks and benefits. Starting from these considerations, in the following chapters the main advantages and disadvantages of granting greater discretion to contracting authorities will be studied in the selection and in the awarding stage.

## **2 DISCRETION, COMPETENCE AND CORRUPTION IN PUBLIC PROCUREMENT**

### **2.1 Effects of Discretion on Public Procurement Process**

The decision about the most suitable awarding procedure is one of the key elements of the public procurement process. This choice indirectly determines the degree of freedom that the public buyer (PB) can exploit. In turn, more or less discretion for the PB means having certain advantages and bearing certain costs. This chapter aims to describe the main literature on the potential effects of greater or lower discretion for PBs.

We will discuss how discretion impacts the dynamics of the procurement process and its final performance: on the one hand, greater restrictions and stricter procedures reduce potential misuses and abuses by the PBs; on the other hand, they often involve excessive burdens for the PBs. These burdens are costs: the pure cost of such rigidity - regulatory systems and constant monitoring of the work of bureaucrats - and the opportunity costs in the form of efficiency losses that a greater freedom could have avoided.

The incidence of discretion will not be homogeneous across all public procurement. Indeed, there is not a unique solution: every procurement tender requires weighing and balancing the advantages offered by a different degree of discretion. In turn, discretion is linked to other relevant variables that have to be considered: they make the evaluation of the impact of discretion on the processes' performance even more complex.

In what follows, we will first focus on the effects of discretion on public procurement process; second, we will discuss the role of competence, one of the most relevant factors which interacts directly with discretion. Finally, we will present one of the major obstacles to the application of discretion, that is the risk of corruption. We use these analyses to try to understand the overall trade-off between discretion and rules.

### 2.1.1 *Price, Productivity and Ex-Post Renegotiations*

Many works on the relationship between discretionary power and public procurement performance exploit thresholds on the base price of a contract. When the contract value exceeds the threshold, the public buyer's discretion in choosing the awarding procedure is limited. Specific thresholds have been introduced by almost all the legal systems, both at the national and at the international level (in particular for EU countries, see Section 1.2).<sup>30</sup> Thresholds are very useful to interpret the attitudes of the various legislations towards the use of more or less discretionary procedures.

Generally, the higher the contract's value, the more procurement regulations mandate the use of auction procedures<sup>31</sup> and limit the use of other procedures. This may seem counterintuitive: more complex projects usually require more complex solutions and the need to leave a greater freedom of negotiation to the contracting authority. Limiting the use of discretionary procedures aims to reduce opportunistic/corruptive behaviours, both by the PBs and the bidders' sides. Indeed, higher-value projects are more attractive than smaller-value ones, given the increased size of the project. As a result, benefits of discretion can be cancelled out (Bajari and Tadelis, 2001; Decarolis, et al., 2020). The presence of the thresholds in real world procurement, and especially their change over time, has been exploited to study whether and how the degree of discretion affects the risk of corruption, the quality of the products/services, or the productivity of the winning bidders.

Focusing on the winning bids, various studies investigated whether the use of more discretionary procedures could have negative effects on winning rebates and final prices. Exploiting changes of the thresholds in Hungary, Szocs (2020) found an average 9% higher normalized price<sup>32</sup> for contracts below the new threshold – where discretionary procedures are allowed - compared to those above – where they are not. The same results, albeit with different magnitudes, also emerged from other authors. Decarolis et al. (2020) highlighted the differences in the winning rebates between more or less discretionary procedures. Higher discretion decreases the average discounts, with a difference in percentage terms compared to open

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<sup>30</sup> The amount of the thresholds have been described in the previous chapter, taking the Italian legal system as an example.

<sup>31</sup> Some exceptions may derogate from these constraints. For “particularly complex” contracts or for technical-legal difficulties, the use of negotiated procedures or competitive dialogue is allowed (even if their value would exceed the thresholds) (Clarich, 2017).

<sup>32</sup> The normalized price is given by the ratio between the winning bid and the original value of the contract.

auctions of 2.4%.<sup>33</sup> Instead, discretion does not significantly affect the final price. This is because the final price includes other source of costs such as renegotiation costs, cost overruns, bureaucratic, and management costs. As a result, there are no relevant differences in the results of the overall procurement process depending on the procedure used (Decarolis, et al., 2020). This discrepancy between the dynamics of winning discounts and the final price causes difficulties in the interpretation of the phenomenon. Any higher discounts over the reserve price could be interpreted both positively and negatively by the PB: on the one hand, it means a lower contractual price; on the other hand, it could mean higher ex-post costs to renegotiate and compensate for the excessively low price of the first offer (Baltrunaite et al., 2020).

Other studies have highlighted how the eventual increase in the winning discount may be statistically insignificant, raising concerns about a direct positive link between discretion and costs (Coviello, Guglielmo, and Spagnolo, 2018). Observing the public procurement behaviours of other European countries, the same dynamics arise. In France, Chever and Moore (2012) stressed that, although the relationship between more discretionary procedures and winning rebates is negative, no definitive conclusions can be drawn. Factors that indirectly affect the price-discretion relationship need not to be underestimated. Among others, the need for transparency and the greater responsibility of bureaucrats can affect the application of discretion. Ex-ante controls on the PB's integrity and competence may act as a filter to prevent potential abuse of discretion (Chever and Moore, 2012).

Various works study how a change in these thresholds can affect the overall public procurement process. The 2011 reform in Hungary previously discussed highlights the different behaviours of the contracting authority and of the bidders according to the thresholds' rise. Here, this change leads to a decrease in the productivity of the winning firm compared to the previous situation. The extent of this impact has been measured as an average decline in productivity of 12%. This suggests that the concession for broader use of discretion may lead to a decrease in the average productivity of the winning bidder. According to these results, the increase in discretionary power acts as a double-edged sword to the procurement process: on the one hand, it induces a decrease in the productivity of the selected bidders; on the other hand, the PB may cut the value of the contract to fall within the thresholds, saving on the price paid. However, this mechanism works because of the misuse of the PB's power. Although the second effect may seem an advantage in terms of public spending, the downward modification of the contract

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<sup>33</sup> This percentage should be understood as the difference on an average discount (for all procedures) of 18%. Furthermore, other interesting evidence emerged on the type of public procurement procedures. When a procedure that provides for discretionary criteria is used, we will obtain lower winning rebates; while the procedures associated with a smaller number of bidders are characterized by lower winning rebates than open auctions, but to a lesser extent than the first (Decarolis, et al., 2020).

value to take advantage of greater discretion can lead to designing a contract that does not meet the required needs at a technical and executive level.

Furthermore, these thresholds act as a watershed for contracts around it: the data reveal a wide difference between the winning firms for contracts just above and just below the threshold. The above-threshold ones are 32% more productive than the below-threshold ones (Szocs, 2020).<sup>34</sup> This impact can clearly be seen in the average productivity of the Italian procurement system: as a result of the rise in the thresholds value, the productivity of winning firms decreased by 10%, while it remained essentially the same for losing bidders. This might suggest that the selected bidders are less productive than before, on average (Baltrunaite et al., 2020). This difference may be explained by inefficiency or by opportunistic behaviour. Differently, other studies do not highlight any negative relationship between the use of discretionary procedures and the productivity of the winning bidders. Finally, some other results show how more productive and efficient suppliers would be more likely to be selected for future works (Coviello, Guglielmo, and Spagnolo, 2018).

Another relevant measure to evaluate the effect of discretion on public procurement performance is the number of renegotiations. Ex-post renegotiations of the initial contract become necessary when unanticipated problems or new elements emerge. As discussed in the first chapter, this happens more frequently when an auction mechanism is used. In these situations, there is no dialogue between bidders and PB. Generally, the higher the complexity of the contract, the more it is difficult to state in a binding contractual agreement all the specifications necessary for the project, without a negotiation stage. Frequently, auction mechanisms lead to the emergence of disputes and litigations that force the parties to renegotiate, increasing transaction costs and lengthening the execution times of the works (Gagnepain, Ivaldi, and Martimort, 2013). Differently, increasing the discretion in the selection process makes easier to find ex-ante an agreement, limiting renegotiations once the contract is signed. Indeed, the problem of ex-post renegotiation costs is a direct consequence of the incompleteness of the contracts. If the contract cannot be completely set up in detail, giving the public buyer more freedom can help fill gaps in evaluating non-contractible parts. This function can help to reduce the number and cost of renegotiations of contracts, given the information asymmetry in the selection stage (Bajari and Tadelis, 2008; Calzolari and Spagnolo, 2009; Coviello, Guglielmo, and Spagnolo, 2018).

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<sup>34</sup> In addition to the productivity data, The author states that differences have also emerged in other aspects. Contracts just below the threshold are more likely to be awarded to companies on average smaller in size (it often means less productive). Additionally, the probability of selecting local and/or national firms increases. It certainly limits free competition, harming the development of local bidders (Szocs, 2020).

The benefit of the reduction of time and costs does not apply only at the negotiation stage. More discretionary procedures like negotiations can also help to reduce the time needed to prepare and award the tender. Additionally, even the times required for the drawing up and the publication of the tender notice are shorter. This advantage emerges in particular because of the possibility of preparing less detailed calls for tenders, as the parties will discuss the contents in depth during the actual negotiation.

### *2.1.2 Discretion and Competition*

Usually, reduced competitiveness may be interpreted as a pitfall in public awarding procedures. However, a lower number of bidders offer the possibility of a more focused, shortened and less expensive process (Decarolis, 2014; Decarolis, et al., 2020), in particular where the PB has a large discretion. The degree of discretion may affect the level of competition, both directly and indirectly. Various studies have investigated whether there is a correlation between the degree of discretion PBs enjoy and the number of candidates and bidders.<sup>35</sup> We discussed in section 1.3 how the introduction of more subjective criteria may limit the number of candidates. Mechanisms that give greater weight to the past performance of bidders are a fitting example. Less-efficient bidders will be more likely to self-exclude themselves from the tender, to avoid the costs of preparing the offer.

Although decreased competitiveness has often been associated with an undesirable result for the PB in terms of price paid (Bulow and Klemplerer, 1996), it might also have positive implications. Reducing the number of participants decreases the resources used for bidding evaluation, saving costs for bid screening. By having the opportunity to assess the offers more accurately, the PB should also pay greater attention to non-contractible parts. As a result, costs are lowered and adverse selection issues - very frequent in public purchasing processes - are mitigated (Butler et al., 2012; Decarolis, et al., 2020).

We will now discuss how the number of bidders varies with procedures giving more or less discretion to the PB. The number of bidders – that is, firms that have submitted a valid offer consistent with the tender requirements - does not change substantially from open procedures to restricted ones with a negotiation phase (see Sections 1.2.4 and 1.3). What varies significantly is the number of initial candidates who apply for the tender. On French procurement data, Chever and Moore, 2012 have observed whether a different awarding procedure leads to

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<sup>35</sup> Candidates refer to these firms that are willing to access to the tender and submit a candidature to qualify. Bidders refer to the candidates that overcome the qualification stage and access the tender and they can submit an offer. This difference is particularly relevant in restricted procedures.



modifications in the number of participants. The focus was on the ratio between the number of bidders and the number of candidates and on how this change among the procedures. This ratio goes from 0.76 for auction procedures to 0.33 for negotiated ones.<sup>36</sup> In other words, about three bidders out of four overcome the initial screening in the first case. Differently, only one-third of the candidates have the requisites to access the real tender in the negotiated procedures (the second case). Negotiated procedures make more difficult for participants to access the next phase, because of the constraints at the discretion of the PB (or provided by law). Moreover, the study shows that preparing a candidature is relatively not so demanding, but preparing an offer represents a huge cost for private contractors (Chever and Moore, 2012).

These results highlight that the more discretionary a procedure is, the more likely only the best bidders will be able to satisfy the access requirements to the tender. The complexity of the preparation and discussion of the offer requires a relevant effort. So, other candidates will prefer to abandon it, decreasing the number of bidders. This may be advantageous for the PB, as it will have to select from a smaller pool of bidders. It would allow to accurately evaluate them, treating and discussing the elements of the offer in more detail. Additionally, more discretion on the selection criteria allows evaluating the parts that would have left out in a price-based auction (Decarolis, et al., 2020).

The same conclusions can be drawn by looking at the Italian public procurement market in the 2009-2013 period. Also in this case, there is evidence of a negative relationship between the number of bidders and the increase in discretionary powers of the PB. Here, if the central purpose is to enhance the number of participating firms, an auction mechanism should be preferred. By observing the behaviour above and below the threshold,<sup>37</sup> Baltrunaite et al. (2020) find that the participants in a negotiated procedure (8, on average) are 4,5 less than in competitive tendering (12,5).<sup>38</sup>

The correlation between discretion and the number of bidders is particularly relevant when considering the effect of the latter on the winning rebate, in particular when the price paid represents a decisive parameter for an efficient allocation (Bajari and Tadelis, 2008). Usually,

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<sup>36</sup> The value of the ratio for non-formalized auction procedures is 0.88. It represents the highest value among the options, which means less restrictions to entry and a higher number of bidders who enter the tender (Chever and Moore, 2012).

<sup>37</sup> Before 2011, the use of negotiated procedures was restricted for public works with a base price above 500,000 euros; the reform raised this threshold from 500,000 euros to 1,000,000 euros (Baltrunaite, et al., 2020).

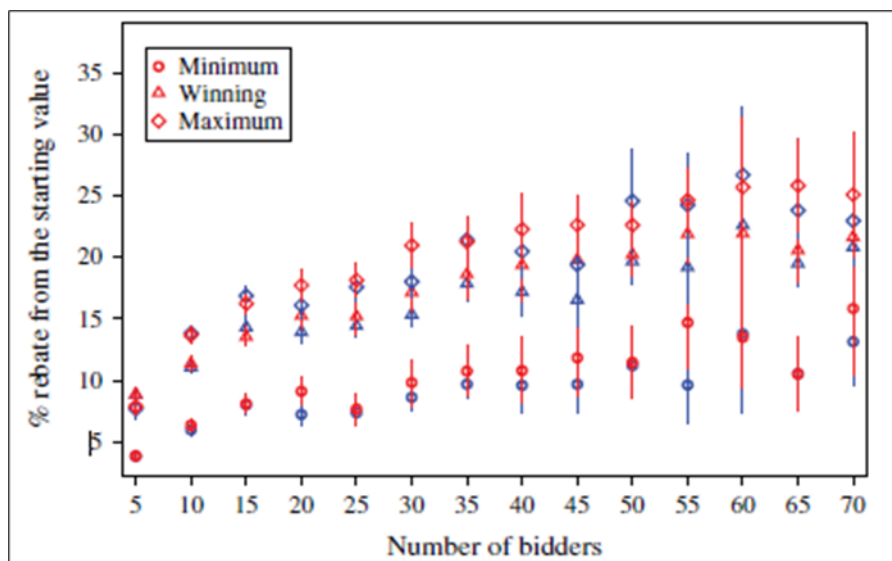
<sup>38</sup> The data should also be interpreted considering the minimum number of participants each legal system requires. As we saw in the first chapter, in Italy the negotiated procedures provide for the participation of at least five bidders, while the auction procedures require a minimum threshold of 10, according to the value of the contracts examined. Baltrunaite et al. (2020) pointed out that in the post-reform period, the average number of participants dropped from 42 to 29, highlighting the negative correlation between discretionary procedures and the number of bidders.

greater competitiveness may contribute to a decrease in the price paid by the public administration.

On data from the Italian Authority for the Surveillance of Public Procurement (AVCP) for all the public construction works tendered between 2000 and 2005 in 100,000 euros (2005 equivalents), Coviello, Guglielmo, and Spagnolo (2018) found that as participation in the tender increases, the price paid by the contracting authority decreases.<sup>39</sup> Figure 3 shows, on the horizontal axis, the number of bidders and on the vertical one the percentage of rebate from the starting value. The three symbols indicate the percentage of the minimum (circle), the maximum (rhombus) and the winning rebate (triangle).<sup>40</sup>

The negative correlation between the two variables in the figure is often used as one of the main critiques towards discretionary mechanisms. However, the limitations on the use of these procedures are stronger for high-value contracts, where more discretion of the bureaucrats could be useful. In contrast, there are fewer limitations on the use of discretionary procedures for below-threshold contracts, where a price-based tender may be more appropriate, because of the lower specificity of the projects.

Figure 3. The Relationship between the Number of Bidders and the Rebates



Source: Coviello, D., Guglielmo, A., and Spagnolo, C., (2018).

<sup>39</sup> It refers to the price at which the contract is awarded, inversely proportional to the winning rebate. Both of them have not to be confused with the final price of the contract. The latter includes other sources of costs (such as renegotiation costs or bureaucracy costs).

<sup>40</sup> The same dataset is used in Coviello and Mariniello (2014) to study the effects of an exogenous increase in publicity (i.e., potential competition): these latter authors found that the higher number of potential participants is indeed associated with larger discounts.

### 2.1.3 *Incumbency and Collusion*

In this section, we discuss the relationship between the discretion of PBs and the incumbent bidders. Various studies have argued that as discretion increases, the probability of repeatedly awarding contracts to the same bidder also increases. There are two possible interpretations of this effect: on the one hand, it might indicate the presence of opaqueness in the relationship between the PB and the private contractor; on the other hand, it might signal the creation of a long-term relationship, which will improve and streamline performance. The first interpretation is suggested by Baltrunaite, et al. (2020) who stated that this effect may lead to efficiency losses as regards the winning bidder. Indeed, they found that this bidder has a higher probability of being politically connected to the PB.<sup>41</sup> Differently, the second interpretation, that is a positive relationship in the form of a relational contract is supported by Coviello, Guglielmo, and Spagnolo (2018). They have analysed how the quality of the works offered by the incumbents has changed over time. The data show that this performance quality does not deteriorate, but rather incumbents improve over time aspects such as the delay in the delivery of works. Specifically, the authors demonstrate that there is a negative relationship between delays in past work and the probability of obtaining future ones for contracts below the threshold,<sup>42</sup> while this finding does not hold for those contracts above the threshold. This suggests that when more discretion is granted, i.e. below-threshold, the PB tends to prefer bidders who performed best in previous jobs (Coviello, Guglielmo, and Spagnolo, 2018).

Moving the focus from the seller-buyer relationship to the relations among the bidders, we analyse how awarding procedures affect the risk of collusion. Collusion requires that some bidders agree among themselves to win the contract on more favourable conditions than the ones under normal competition. Auctions based solely on price - for example, FPAs or Vickrey auctions - create fertile ground for this type of practice (see Section 1.2.1). The mechanism that leaves more room for collusive agreements is the ABAs one, since it provides for an almost randomized selection of the winning bid based on price, making it easier for bidders to manipulate it (Decarolis, Giorgiantonio and Giovanniello, 2011; Tadelis, 2012). Using price-based auctions, the risk of an agreement between bidders increases as it becomes easier to control the tender if the price is the only selection criterion. Differently, the risk of collusive agreements between bidders drastically decreases in more discretionary procedures. These

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<sup>41</sup> They point out that this is more likely when it deals with local bidders, usually with less efficient governance and management (Baltrunaite, et al., 2020).

<sup>42</sup> Art. 24 of Law 109/94 (“*Legge Merloni*”) introduced the 300,000 euros (converted from Italian liras by the authors) threshold giving objective necessary conditions to run restricted auctions. The data refer to the period 2000-2005, before the change in the threshold due to the EU directives (Coviello, Guglielmo, and Spagnolo, 2018).

procedures make more difficult to find an agreement between bidders to alter the result as commission ratings become less objective and controllable than price.

As a result, in the negotiated procedures this problem is really rare, even though there is a lower number of bidders than in other procedures. This may contribute to lower the price of the offers: as bidders would no longer cooperate to obtain a higher price, they would be forced to compete regularly (Chever and Moore, 2012).

On the other hand, auction procedures are preferred by various legal systems due to the greater transparency they can ensure. Lack of transparency is often seen as a major weakness of more discretionary procedures. Incorrect use of discretion may allow the PB to circumvent fairness and transparency constraints. Sometimes, this may happen for positive purposes, such as efficiency improvements, fluidity, and streamlining of the process. Otherwise, an abuse of discretionary power may occur for the personal advantages of public officials, through corruption or favouritism.<sup>43</sup> With the 2011 reform of the thresholds in Italy,<sup>44</sup> it was observed that the amount of information not released by the PB has increased.<sup>45</sup> This may suggest misuses of discretion by PBs. Their non-compliance with principles of transparency is one of them. It may represent a serious threat to the effectiveness of the discretion on the performances and to the reputation of the PB itself (Baltrunaite et al., 2020).

In this section, central to our work, we have observed how discretion can affect the public procurement process. Recalling other works, we have highlighted how the choice to use a more or less discretionary procedure can modify the costs that the PB must bear to manage the process. We showed that the impact of discretion offers ambiguous and complex answers. The real problem is not the direct negative relationship between discretion and public procurement performance: the choice to leave more freedom to the PB should also consider other elements that can interfere with the final result. We will look at one of these, namely the level of competence of the public administration. Its relevance highlights an important issue that could mislead the interpretation of data and results. This will offer us a clear example of how often the inefficiencies of the PB are not to be directly associated with the discretion. It is also crucial to consider to whom and how discretion has been given.

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<sup>43</sup> Bandiera, Prat, and Valletti (2009), exploiting a dataset on individual purchases of 21 generic goods by 208 Italian public bodies between 2000 and 2005, found that most of the waste of public administration (83%) results from inefficiencies. Only the remaining part (so-called “active waste”) is due to episodes of corruption and favouritism.

<sup>44</sup> Until 2011, the use of negotiated procedures was restricted for public works with a value above €500,000. The reform raised this threshold from this amount to €1 million, increasing the scope of discretion of procuring agencies (Baltrunaite, et al., 2020).

<sup>45</sup> The overall effect was a decrease of 4.2% compared to the average of the available information and compliance with the principles of transparency of the contracting authority. Differently, it was difficult to determine the positive or negative outcome of the tenders because the information about them was not reported (Baltrunaite et al., 2020).

## 2.2 The Role of Competence in Public Procurement

In the previous section, we have highlighted the main effects greater discretionary power may have on public procurement processes. These effects cannot be univocally interpreted. This is due to the different characteristics of each PB: although the adopted measure is the same, different procurement tenders may lead to different results. The impact of the discretion offered to the PB hides a multitude of aspects that should be weighed and considered.

Procurement regulation should consider whether to leave the PB with greater or smaller decision-making freedom: it has to decide how to design the processes with controls and rules and how to check and punish any abuses of the public buyer.

Choices on more or less freedom do not provide a universally valid answer. Every decision may have benefits in a specific context, while it may cause harmful effects if applied in inappropriate situations. In this section, we will observe how the literature addresses the competence of the PB, one of the key elements linked to the use of discretionary power.

The public apparatus is often mistakenly considered as a single and homogeneous entity, without underlining how public administration bodies differ internally. Various organizations are responsible for carrying out specific and different tasks; they have different needs and requirements, and they cannot be treated as an undifferentiated system. Furthermore, the public administration is a group of individuals with different strengths, weaknesses, skills, and competencies. Their combinations help to outline the quality and reliability of the various offices and bodies.

### 2.2.1 *Heterogeneity of the Public Administrations*

The different tasks, outcomes and results of public administrations depend on who manages and conducts the process (considering it as an entity; like procurement office, or as an individual responsible for bargaining and purchasing).

Each entity and/or organization differs according to many factors: the operative area and sector (education, health, infrastructure,...), the size and institutional type of the entity<sup>46</sup> (from the

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<sup>46</sup> Bandiera, Prat, and Valletti (2009), investigating an Italian dataset for procurement purchases of generic goods made by a sample of Italian PBs between 2000 and 2005, observed that on average a local administration pays 13% more than semi-autonomous entities, such as universities and healthcare companies. The percentage rises to 21% if the semi-autonomous entities are compared to regional ones and up to 40% to central ones.

local authorities to the central ones), the relative degree of delegation and decentralization, which can vary from country to country.<sup>47</sup>

In OECD countries, public procurement expenditure by local administrations or decentralized bodies is 63% of the total.<sup>48</sup> But there can be relevant differences across countries and also

Table 3. Winning Rebates by CA Type

CA Type	N	Mean	SD	p50	Min	Max
Central gov.	23	30.44	19.45	36.54	0.00	57.90
Region	55	27.93	12.96	27.52	2.25	59.55
Province	62	27.63	14.32	29.86	0.00	58.07
Municipality	99	24.59	17.45	21.73	0.00	57.94
Semi-auto. institution	63	22.88	13.30	22.73	0.00	54.28
Other institution	193	28.17	13.05	30.12	0.00	60.21
Public enterprise	139	24.15	16.71	25.91	0.00	75.68
Utility	206	15.84	14.49	14.37	0.00	56.41
Total	840	23.67	15.62	24.11	0.00	75.68

Source: Chiappinelli, O., (2019).

within the same country. Table 3, from Chiappinelli (2019), refers to public works contracts awarded in Italy between 2008 and 2015; data are obtained from TED (Tenders Electronic Daily) data.<sup>49</sup> These data highlight the difference in the percentage of winning rebates according to the central administration type. The table underlines how, on average, central entities are more likely to obtain a higher winning rebate (i.e. a lower price paid).

In this multiplicity of variables and characteristics of the individual entities, the competence of the PB is particularly relevant. It is often one of the most underrated aspects, but one of the most decisive in determining public administration efficiency. The PB should be able to assess the impact of its decisions concerning both the administration itself and the extra-economic consequences it could have on the community. It is influenced by how the public administration manages all stages of the procurement process and all the necessary skills (legal, technical, financial, strategic, and marketing). The lack of competencies represents one of the main problems relating to the public procurement world, contributing to enhance the fear for more

<sup>47</sup> In Italy, the procurement rules recognize the division between various entities (central, local, and semi-autonomous). It is possible to notice a trend towards the centralization of purchases already from the 90s onwards (given a general downsizing of public spending), which led to the establishment of Consip. Initially, it was a body created for the management of IT purchases, then it became one of the most important central purchasing bodies at the national level among the European ones. It carries out tasks such as the threshold prices to which the various administrations must comply and to which they can turn for the purchase and management of public contracts. In Russia, the purchasing and management system of public contracts (representing 10% of GDP) is highly decentralized. It is almost entirely managed by the single governmental entities that have full legal authority. Instead, the law system is under the responsibility of the central government (Best, Hjort, and Szakonyi, 2017). On the other hand, in South Korea the centralized system for public procurement (PPS) manages an important part of them (almost 33% in 2013), exploiting the advantages both in economic and social terms of this choice (Saussier and Tirole, 2015).

<sup>48</sup> OECD, 2017. In Chiappinelli, O., 2019. Decentralization and public procurement performance. *Economic Inquiry*, 58(2), 856-88.

<sup>49</sup> Regarding the size and area of competence of the various administrations, one of the possible mitigating circumstances to explain these differences is that local authorities may not have the financial resources to face these problems.

discretionary procedure (where the competence is even more a crucial factor). In France, only 39% of the PBs' personnel have the requirements for public procurement activity, 63% do not have juridical-legal backgrounds, and 61% of them have their first experience in procurement in a public administration<sup>50</sup> (Saussier and Tirole, 2015). The same trend can be easily observed in many other countries.<sup>51</sup>

The PB's role has strong relevance in the procurement process: in the awarding stage and in the selection of the best awarding procedure, he/she should identify the best contractor with whom to sign the contract, following what the regulations allow. However, the effectiveness of the PB's power is strictly linked to its competencies. Indeed, the bargaining ability and the ability to select the most efficient supplier is not to be considered an exogenous variable. It represents one of the key factors that may affect the achievement of the desired result, aimed at obtaining the greatest gain in terms of costs and efficiency.

The inefficient management of the public procurement process represents one of the main causes of waste of public resources, i.e. what Bandiera, Prat and Valletti (2009) called "passive waste". Unlike the active one - the public buyer voluntarily alters the correct execution of the procedures to obtain personal advantages as in the case of corruption -, the passive waste entails only disadvantages, both for the PB and the other agents (firms, consumers, etc.). In their empirical investigation in Italian procurement for generic goods made by a sample of Italian PBs between 2000 and 2005, Bandiera, Prat and Valletti (2009) shows that passive waste accounted for 83% of total waste. These inefficiencies arise mainly due to excessive bureaucracy or extremely stringent regulations. Besides, the lack of competencies makes the purchasing process even less efficient. Additionally, the mechanisms (such as linking the remuneration of PB to the performances or further sanctions) to contrast and correct the negative consequences of these inefficiencies are often difficult to implement,<sup>52</sup> enhancing the usefulness of a greater discretion of the public agent itself to limit costs.

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<sup>50</sup> See: UGAP (Union des Groupements d'Achats Publics), quoted in: (2-2)Saussier, S., Tirole, J., 2015. Strengthening the efficiency of public procurement. *Notes du conseil d'analyse économique*. 22 (3), 1-12.

<sup>51</sup> See Benchmarking Public Procurement 2017, World Bank.

<sup>52</sup> Bandiera, Pratt and Valletti (2009) state that it is very complicated to link remuneration with the performances of the public buyer and to give him more responsibilities for the potential damages. This because of, respectively, the onerousness of these mechanisms and the difference in terms of economic wealth between the institution and single public agent. Other studies have shown how offering greater remuneration incentives to low-skilled offices does not adequately help improve the efficiency of the procurement process and does not improve performance (Chiappinelli, 2019).

### 2.2.2 *The Public Buyer's Ability*

Buccioli, Cambioni, and Valbonesi (2020) studied the PB's competence in the procurement of standard medical devices in Italy using data referring to the period January-December 2013. They observed how a higher level of PB's competence and skills impact the overall process performance. The authors exploited the termination of the so-called reference prices,<sup>53</sup> a policy that reduced the discretion of PBs. This policy has led to an opposite effect in entities with different levels of competence. On average, it appears that reference prices had an overall modest effect. However, when considering PBs with different competence, the authors found that, on the one hand, the application of reference prices had benefits for the less competent offices (with a decrease in the average price paid by 18.12%), on the other hand, it led to an increase in the prices paid by highly competent public buyers (+ 8.48%). This casts doubt on the effectiveness of general policies applied in a non-discriminatory way. It would be preferable to reduce discretion only for the worst bureaucrats (Buccioli, Cambioni, and Valbonesi, 2020).<sup>54</sup> Additionally, their results show a positive correlation between the size of the institution (one of the factors listed above) and the advantage in terms of competencies. They used the costs for hospital personnel (healthcare and non-healthcare) as a parameter for the size of the hospital. Their results are explained by the higher costs related to non-healthcare personnel (i.e. larger administrative staff) and highlighted how delegating purchasing activities to a larger body can bring greater benefits. A large PB may exploit the increase in terms of skills, competencies, and bargaining power that a small PB cannot obtain. The same authors observed how local PBs (i.e. local health authorities) spend more for the same products than large hospitals.

About the healthcare sector, Grennan (2014) studied the purchasing process of a particular product (coronary stents) in different US public hospitals. He noted how the purchasing staff (and the overall company) knowledge and skills explain most of the price differentials paid by the buyer. The difference in bargaining ability accounts for 79% of this variability. It affects the prices incurred by the hospitals and it is not less relevant in determining the price, than other elements such as the presence of competitors, suppliers' costs, or the public company's

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<sup>53</sup> The introduction of reference prices imposes a cap on the unit price of each standard medical device procured by tender. The aim of this policy was to limit PB discretion in an attempt to reduce public procurement expenditure. Reference prices for these product categories were applied from 2012 to 2013. It allows to analyse how the PB's behaviour changes in this period and how reference prices affect the overall performances.

<sup>54</sup> The study was conducted by observing public administrations before and after the introduction of reference prices. They were introduced in Italy in 2012 and then abolished the following year with a sentence of the Administrative Court. These measures have offered a positive result as regards the reduction of price dispersion. Differently, they have not proved to be so effective in making the supply system more efficient as a whole, with a non-linear effect on the level of bureaucrats competence (Buccioli, Cambioni, and Valbonesi, 2020). This underlined the need for measures that enhance competence level in procurement procedures.



willingness to pay.<sup>55</sup> On the other hand, bargaining ability is a skill that concerns both the single manager and the hospital as a whole. It can be often influenced by external factors, linked to the context and the organization itself. As a result, it is difficult to establish how much its improvement benefits the individual operator and how much the organization as a whole. With regard to single managers, Janke, Propper and Sadun (2019) studied the incidence of CEOs in the English healthcare sector. In this context, the organizational inertia and the constant turnover limit their intervention. As a result, the impact of high-level managers on the overall performance is quite limited. This enhances the need for learning and improving the skills of all the bureaucrats and not just the high-level ones.

### *2.2.3 Competence and Discretion*

Looking at the data, the importance of public sector expertise is often underestimated. This may damage the public sector from several points of view: first, on a reputational level, by losing credibility due to inefficient choices and procedures; second, regarding the cost-effectiveness of the procedures, with waste both in terms of time and in terms of economic resources. In particular, reducing such waste would allow greater savings and consequent greater spending opportunities. This claim is strongly supported by U.S. data, and statistical evidence on the matter is highlighted by the study of Decarolis et al. (2018). They assume a scenario where the general proficiency level rises to the 90<sup>th</sup> percentile of the current distribution. This increase in generalized competencies would reduce the execution times of the contract (saving of almost 40 days, corresponding to 23% less) and the monetary costs. The saving for the United States could reach 2.6 billion dollars yearly, more than 120,000 dollars per contract, on average.<sup>56</sup> Additionally, the effects of a greater competence of the public buyer may also reduce the number of renegotiations, a symptom of the need to correct previous erroneous agreements. We note an improvement in the renegotiation of costs (40% less) and time (71% less) (Decarolis et al., 2018). These effects help to further decrease the waste related to the high costs of renegotiation, very frequent in the context of public procurement (Gagnepain, Ivaldi, and Martimort, 2013).

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<sup>55</sup> On the other hand, the same author underlines how the blame for a possible poor bargaining capacity is often not to be attributed directly to the overall entity. Indeed, in this analysis we have to consider also that each entity/body presents differences in terms of size, economic and human resources. It may be due to the scarce availability of resources which does not allow the company to be able to invest in the improvement of this aspect, leading to opting for a non-optimal solution in order to guarantee resources for other activities.

<sup>56</sup> These effects refer only to the "direct" effect of the improvement in the level of competence. Without considering the possible beneficial effects resulting from an optimization of the measures related to public procurement, such as the selection of the award procedure and the type of contract used.

The positive relationship between the level of PB's competence and the price paid in the public procurement purchases is supported also by Bandiera, Pratt, and Valletti (2009). They argue that if the prices paid by the 10th percentile of the price distribution of the products would have paid by the whole sample, the overall savings could be between 1.6 and 2.1 billion euros ( with a benefit in percentage terms of about 21% of current expenses).

The relevance of competence in public procurement performance arise also in a more decentralized procurement system. The analysis conducted on Russian public procurement confirms the trend even in a context where the internal differences and heterogeneity within the public administration exacerbate the PBs' inefficiencies (see note 47). Almost half of the price variability for the purchase of the goods and services in the period 2011-2015 are explained by the bureaucrats and public procurement processes inefficiency. Their improvement would lead to a potential saving in absolute terms of about 13 billion dollars per year. These additional costs for ineffective PBs come from two main sources: first, ineffective bureaucrats impose useless costs for suppliers to fulfil the contract (such as wasteful product specifications); second, they usually require higher participation costs – as an example, through higher deposits or bribes to enter the tender -, leading to a lower level of competition and higher prices for the same level of quality (Best, Hjort, and Szakonyi, 2017).

Comparing more and less competent PBs, the same authors underlined that "policies that are not optimal when the effectiveness of the public administration is high can become the second-best when the effectiveness is low"<sup>57</sup> (Best, Hjort, and Szakonyi, 2017). This suggests how every solution should be tailored to the effectiveness of the public body and adopted considering the different institutional and cultural context. Differently, implementing the most efficient solution in inefficient contexts does not lead always to the best possible outcome.

The relationship between competence and discretion may also be interpreted negatively. From a study by Baltrunaite et al. (2020), we observe how a higher degree of discretion is often left to PBs with a low level of competence. As we have seen in this section, less competent public buyers may lead to less efficient procurement choices. As a result, giving more discretion to them may cause allocative inefficiencies, not exploiting the positive effects the discretion may have.

The work by Baltrunaite et al. (2020) confirms that the discretion represents a power that should be weighted and applied coherently. Discretionary policies should be adapted to the type of

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<sup>57</sup> Russian bid preference policy saved the government 17.5% of annual procurement expenses when it was implemented by the least effective quartile of procurers, but only 0.7% when it was implemented by the most effective quartile of procurers (Best, Hjort and Szakonyi, 2017).

environment, competence, and bureaucracy, case by case.<sup>58</sup> Measures implemented indiscriminately regardless of the level of efficiency and competence of the various public buyers are a clear source of waste.

Unfortunately, the level of competence is not always observable. Most of the studies address the argument considering the purchase of standard goods and services, usually characterized by simple and uniform procedures. Their procurement process is less complex by nature and the accumulated experience can mitigate negative effects. More complex contracts usually require greater discretion for the exceptional nature and value they could generate. Thus, the importance of professionalization of bureaucrats and the public system as a whole is heightened. The link between the level of competence of public buyers and the degree of complexity of the contract has to be analysed from several points of view. Intuitively, this relationship should be positive, since more complex contracts should require greater skills and discretionary power for the contracting authority. Unfortunately, this relationship is often misunderstood. This is because the most complex contracts are more likely to be assigned to the most efficient and competent public authorities. As a result, they have to deal with a greater risk of mistakes, delays and renegotiations. Differently, the less competent and/or efficient PBs usually have to manage standard procurements. Simpler purchasing processes may reduce delays and costs of the project, leading to misleading conclusions about the bureaucrats' competencies (Decarolis et al., 2018).

The relationship between competence and discretion is often overlooked by the public administration itself. These are often focused on fighting ex-post the negative effects of lack in competence, proposing further stiffening at the regulatory level. A valid alternative may be to invest resources to encourage the creation, sharing, and learning of skills (individual and organizational ones). As a result, a skilled public workforce would allow greater trust in the public administration and a qualitative leap in terms of efficiency and credibility.

Encouraging the presence of agents with certified competence and efficiency requirements would increase performance in the public procurement area. The professionalization of these figures and the investment to favour learning and the sharing of skills and cooperation between less and more efficient organizations would certainly contribute to softening these rigid procedures. A progressive loosening of stringent regulations may favour the positive effects that more discretion has on public procurement performance.

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<sup>58</sup> Empirical evidence suggests that in practice there is no universally perfect solution for reaping the benefits of competence in the public purchasing process. The savings in procurement due to the introduction of a preference criterion for local offers applied by the least effective quartile (-17.5%) is higher than that obtained if the most effective quartile applies it (-0.7%) (Best, Hjort and Szakonyi, 2017).

## 2.3 The Relationship between Discretion and Corruption

In the previous sections, we discussed how the public buyer discretion affects the public procurement performances and how this relation is influenced by many other factors. The competence of the public administration is one of them. The influence of the level of competence on discretion highlights how each solution must be adapted to the context in which it is to be adopted. This means that each measure should be implemented considering the context and the actors involved.

### 2.3.1 *The Corruption in Public Procurement Processes*

The relationship between PB's discretion and corruption has always been one of the key issues in the public procurement approach. Here, corruption means the awarding of a specific contract to a bidder, in exchange for something. Such an exchange can involve both economic bribes or other kinds of non-monetary payments, which benefit the corrupted bureaucrat. To give a complete definition, corruption is "the offering, giving, receiving, or soliciting, directly or indirectly, of any thing of value to influence the action of a public official in the procurement process or in contract execution" (World Bank, 2004).<sup>59</sup> This issue falls into the macro category of public administration inefficiencies, but it should be treated as a separate topic given its relevance.

Corruption has always been considered one of the major problems of the public procurement system. It is particularly relevant, as civil servants manage public resources and work for the collective well-being, trying to obtain the best possible result on behalf of other people.

Furthermore, the risk of corruption is stronger in the public rather than in the private sector because, in the public sector, who has to pay for a service is not the same as who has to use it. This represents a captivating opportunity for those who have to make procurement decisions. Differently, in the private sector, the person most interested in choosing the best possible supplier - for quality and costs - is the decision-maker himself.

Corruption is the main reason why open competitive procedures are the preferred awarding mechanisms in many procurement regulations. Open auctions make it easier to comply with the principles of transparency and open competition, identifying the supplier through objective

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<sup>59</sup> World Bank, 2004. In: Dimitri, Piga, and Spagnolo, 2006. Handbook of Procurement. Cambridge: Cambridge University Press.

selection mechanisms and criteria (Tadelis, 2012). However, competitive auctions are not free from the risk of corruption.

In competitive auctions, the corruptive mechanisms can be summarized in three main categories (Dimitri, Piga, and Spagnolo, 2006; Lengwiler and Wolfstetter, 2009): i) bid rigging occurs when the auctioneer reveals information about the opponents' offers, allowing the favoured one to adapt its bid accordingly; ii) bid orchestration occurs when the auctioneer coordinates the various offers, in order to obtain the aimed result; iii) for the selection criteria that include subjective parameters rather than just the price, the most common practice is the distortion of the quality ranking. In the last case, the corrupting bidder can bribe the rating commission members, who would assign a higher score to the former.

These options show how the possibilities of altering the correct functioning of the tender are varied. So, bidders can adapt a corrupt behaviour to the different weaknesses of each procedure. Decarolis et al. (2020), in his empirical analysis on over 200,000 procurement auctions in Italy during 2000-2016, finds that auctions using discretionary criteria are 6% more likely to be assigned to corrupt bidders than first-price auctions.

The risk of corruption has to be assessed by looking at available information and running measurements. These measurements can be divided into four types of approach to the problem. a) direct indicators relating to the perception of corruption and quality in institutions; b) indirect (subjective) indicators relating to the consideration of institutions by citizens; c) indirect (but objective) indicators such as the levels of effectiveness of the expenditure (see e.g. missing expenditure); d) the number of recorded crimes involving corruption or similar activities. The latter is the most reliable approach. A good indicator should consist of both objective and subjective parameters.<sup>60</sup> Objective parameters may consider reports of crimes attributable to public administrations or the presence of politically-connected firms among the candidates, or firms subject to investigation. Instead, subjective parameters may take into account the consideration of "end users". They represent a useful way to assess the reliability of public administrations. Collecting data on the perception of the public bureaucrats' integrity is an example of a subjective parameter (Mocetti and Orlando, 2019). The comparison of subjective parameters across countries is difficult, because a similar event can be perceived differently depending on specific values. Different mentalities and cultures may lead to more or less sensitivity to episodes of favouritism and corruption. This heterogeneity makes it difficult to use it as an objective yardstick.

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<sup>60</sup> These approaches bring with them also important problems: the indirect ones could be influenced by other variables that alter a correct interpretation; the direct ones could offer misleading results due to the methods or subjects called to collect the data (Mocetti and Orlando, 2019).

### *2.3.2 Which Link between Competition and Corruption*

Various studies have investigated the relationship between discretion and competition with often ambiguous results. Like any relationship, also the discretion-corruption one is affected by other factors, such as the competence of the public administration, the institutional context, or the level of competition. The latter is discussed in this section.

Starting from the checks of the prerequisites to access the phase of submission of offers, various studies have highlighted how the limitation of competition leads to an increase in contracts awarded to politically connected companies (Auriol, Straub, and Flochel, 2016; Baltrunaite et al., 2020).

The main driver of these results is the restriction on the use of competitive mechanisms, rather than a general impact of discretion on the selection procedure. Indeed, the presence of discretion in the qualification stage allows to select more easily the favoured bidders. Differently, if we consider the discretion applied in the subsequent phase of selection and evaluation of the offers, the effect is much lower (Decarolis, et al., 2020). As noted in the previous chapter, solutions that offer less restriction on participation lead to a greater number of bidders. The more the procedures have stringent entry requirements, the lower the number of participants.

The restriction on free competition is generally perceived negatively, because the greater the number of competitors, the higher the winning rebate and the lower the price paid by the public administration. These results are in line with the idea that open procedures increase competitiveness in the procurement process (Baltrunaite et al., 2020).

As a result, the problem should focus on the relationship between the risk of corruption and the limitation of competition, rather than discretion itself. Decarolis et al. (2020) study how this relationship works. On the one hand, corrupt PBs are more likely to select a discretionary auction mechanism (by criteria or by barriers to entry), with a difference of +1.74% with respect to non-corrupted ones; on the other hand, the bodies investigated for corruption select procedures with a high level of discretion less commonly, with a probability of -1.14% compared to not investigated ones. These results suggest that it would be easier for a corrupt bureaucrat to favour a contractor among a small audience of bidders.

However, it should not be taken for granted that less competition leads to a reduction in the risk of corruption mechanisms, in particular when the product/service awarded is not homogeneous and it can be offered at different quality levels. Celentani and Ganuza (2002) created a model to study the link between corruption and the optimal procurement mechanisms. The authors noted that an increased competition has an ambiguous effect on the procurement

market. Differently, if we consider the market for procurement agents, we note a positive relationship between competition and corruption:<sup>61</sup> if increased competition implies a higher ability to verify delivered quality, corruption will unambiguously be higher. In the market for PBs, as competition increases, the expected gain from corruption would increase, and consequently, corruption itself would increase (Celentani and Ganuza, 2002).

### *2.3.3 The Thresholds in Contract Value and the Risk of Corruption*

The thresholds on contract value – that restricts the use of discretionary mechanisms for contracts above that level – can be used to study the risk of corruption. Usually, greater discretion is associated with an increase in the presence of corruption mechanisms. The analysis relating to the thresholds highlights another possible consequence.

Indeed, PBs may prefer a more discretionary procedure. A corrupted PBs may deliberately cut the base price of the contract, to remain below the threshold and exploit greater freedom in the selection of the favoured bidders. This would often lead to sub-optimal solutions not only because of the corruption risk, but also due to the misalignment between the real value of the project and the risk of issuing lower value tenders. As a result, it would lead to a higher probability of renegotiation, and a further loss of efficiency and quality in the execution of the project itself. According to Decarolis (2020), the effectiveness of mechanisms that put additional constraints on discretion must be weighted with the huge cost resulting from the implementation of these (Decarolis, 2020).

Despite this, various studies investigate the PBs' behaviour for contracts around the threshold values, and the effect of a reduction or restriction of these thresholds. Szocs (2020) exploited the 2011 reform in Hungary which raised these thresholds, allowing more discretionary procedures. In the passage from the old threshold value to the new one, an important mass of contracts awarded just below the threshold has emerged. As suggested earlier, this behaviour may be a strategic choice of the PB.

Furthermore, in the same paper, it emerged that, if at least one of the bidders is politically connected to the government, the most discretionary procedures are preferred. These results suggest that the political connection affects the increased use of discretional procedures.

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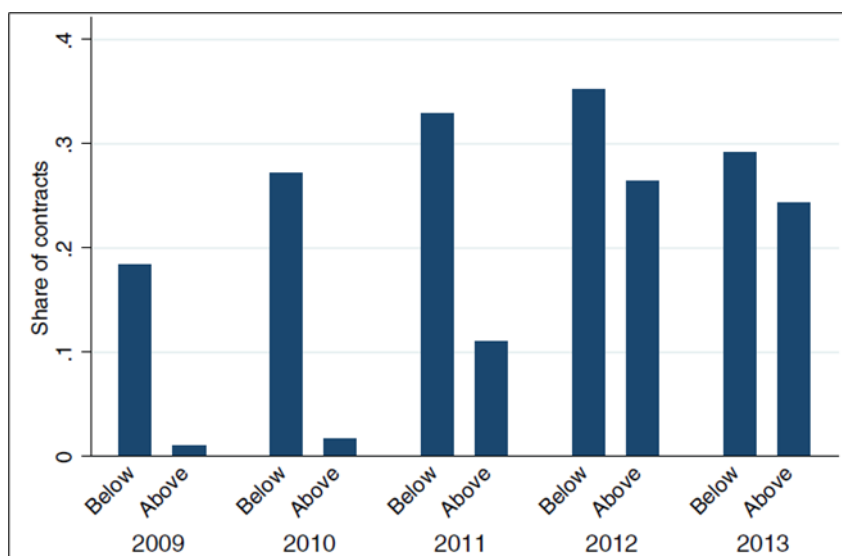
<sup>61</sup> Considering the case where agents know the quality level offered, which they exploit to lie about it in exchange for bribes and benefits. In this scenario, the data support the positive relationship between the number of bidders and the gains deriving from corrupt behaviours (Celentani and Ganuza, 2002).

Another element that could underline the positive relationship between discretion and corruption refers to the change in productivity:<sup>62</sup> lower productivity may be a signal of a less efficient or corrupted procurement process. Szocs (2020) found that the change in the amount of the threshold decreases the average productivity of contractors by approximately 1.6%.

Baltrunaite et al., (2020) on a dataset of Italian tenders for all public works contracts awarded by Italian municipalities in the period 2009-2013, observe that greater discretion is correlated to lower productivity; and an increase in the number of politically connected firms. In the same investigation, authors found that, on average, winning bids record an increase of 2.16% compared to the situation where the thresholds were set lower.

Additionally, these authors highlight a strong increase in the use of discretionary procedures. This trend applies to both below-threshold and above-threshold contracts, where there are extensive restrictions on the use of negotiated procedures. Figure 4 represents the distribution of contracts awarded through negotiated procedures below and above-threshold (500,000 euros) in the period 2009-2013. Negotiated procedures became substantially more frequent starting from 2011 (when the reform of the thresholds applied).

Figure 4. Negotiated Procedures Below and Above-Threshold



Source: Baltrunaite, A., et al., (2020).

<sup>62</sup> Szocs notes a decrease in the average productivity of 12%. Furthermore, there is an anomalous distribution of low productivity offers in highly discretionary mechanisms. Starting from these assumptions, he has stated that “buyers of contracts in which the winning firm would have been less productive even if the open auction has been used more often choose a high degree of discretion” (Szocs, 2020).



#### *2.3.4 Corruption and Competence*

The heterogeneity in the perception of corruption can be noticed in the different PBs' behaviour. Greater discretion needs the presence of other values affecting the overall assessment of the performance, such as the competence and integrity of the various public bureaucrats (Baltrunaite et al., 2020). In this section, we are investigating the general relationship between discretion and corruption. But other variables may indirectly affect it. In many cases, the risk of corruption in the procurement systems is only a consequence.

Sometimes, everything arises from the inefficiencies in the bureaucrats' selection. It leads to entrust the procurement processes to less efficient and competent bodies and bureaucrats. In turn, they will be more likely to accept illegal agreements and to abuse their power.

A solution could be the implementation of self-regulation mechanisms in order to quickly detect any corrupt public officials. Mocetti and Orlando (2019) show how such anti-corruption measures work only in public administrations where corruption is already rare. This would lead to a widening of the gap between less corrupt and more corrupt offices since in the latter ones these mechanisms would not ensure an effective deterrent.

The same authors investigate the relationship between the public and private sectors. Although public employees have higher levels of education than private ones, they noted that this gap disappears when corruption levels are higher than average. In these environments, less qualified personnel perform tasks usually entrusted to more qualified personnel. As a result, the relationship between corruption and the quality of public processes is at least partially explained by deficiencies in the skills and behaviour of public bureaucrats. These results reinforce our belief that the higher level of corruption is primarily due to lower competence.

The use of stricter rules to manage relations between the PB and private contractors is a double-edged sword: on the one hand, it allows to reduce ineffective spending for inefficient or corrupt agents; on the other hand, however, the cost associated with bureaucracy and the control of these rules increases. Therefore, stricter rules can bring important advantages in fighting corruption but they can also lead to a reduction in the level of performance when bureaucrats are "honest" and efficient. The negative impact on efficient PBs of a generalized tightening of the rules has emerged also in the United States procurement system. Given the high degree of alignment between bureaucrats and the public administration (82%), the tightening of the rules

led to a decline in the performance quality<sup>63</sup> (Carril, 2021). This survey is in line with the incidence of active inefficiencies on the total public waste, even in EU countries.<sup>64</sup>

We have observed how the incidence of the risk of corruption is highly variable. We have seen only the main effects arising from the relationship between discretion and corruption (leaving it out other relevant aspects, such as the relationship between corruption and subcontracting<sup>65</sup>). To conclude, we observe that the positive relationship between discretion and corruption is only a consequence of PBs' behaviour and competence. As discretion increases, the competence of PBs should increase as well. Choosing stricter procedures can only be considered a short-term remedy, an attempt to "bury the dust under the carpet".

A policy suggestion is to simultaneously give more responsibilities to PBs and to increase the transparency rules they have to comply with (Chever and Moore, 2012). Other effective policies may be: the introduction of systems of "professionalization" for PBs, focusing on their training; imposing constraints on the procurement agent market, controlling prerequisites relating to the competence and transparency of these entities; increasing the responsibilities in the procurement process.

Furthermore, it is worth noting how this evidence concerns the world of public procurement in normal conditions. In the next chapter, emergency procurement will be introduced. In these situations, urgency and emergency will affect how the processes are carried out. This leads to postponement and derogation on many aspects that limit the corruption risk under standard conditions.

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<sup>63</sup> Carril (2020) estimates that compliance with compliance costs impacted on an average of \$ 12,800 per contract. This accounts for 12.8% of the total amount of the awarded contract (considering the threshold of \$ 100,000 as a minimum amount to use the auction procedure).

<sup>64</sup> For instance, in Italy we note how passive waste accounts for 83% of total waste. Only the remaining part can be associated with the active waste, where the public bureaucrat exploits his position to his advantage (Bandiera, Pratt and Valletti, 2009).

<sup>65</sup> As in the relationship between discretion and competence, subcontracting also plays an important role with regard to corruption. Here it has been deliberately omitted so as not to risk not talking about it exhaustively. Regarding the positive correlation between this and the risk of corruption, there is a constant and ongoing debate with many prominent authors who have focused on this relationship (Branzoli and Decarolis, 2015; Moretti and Valbonesi, 2015; Miller, 2014; Decarolis, 2014).

## **3 EMERGENCY PROCUREMENT AND THE EFFECTS OF COVID-19 ON PURCHASING PROCESSES**

### **3.1 The Emergency Procurement**

In the previous chapters, we have described the main dynamics of the public procurement process under standard conditions. An equally broad branch of public procurement refers to situations when these conditions are no longer valid. When this happens, normal procedures must leave room for alternatives that allow to face different, extraordinary, needs and requirements. Emergency public procurement concerns purchasing in exceptional and/or unusual conditions and/or urgent conditions. In these cases, the normal procedures are replaced by other ones, with the aim of speeding up and streamlining the entire process. This is necessary to quickly deal with unforeseen situations and solutions.

In the previous chapters, we explored the difficult task of the various jurisdictions in designing which options leave available to the contracting authority. On the one hand, the fear of opportunistic behaviour by both private agents and public officials requires greater control to prevent such risks. This is achieved by tightening the rules governing the public procurement process. It means increasing controls and reducing the options available to the contracting authority. On the other hand, the need to make public procurement more efficient and flexible pushes in the opposite direction: when opportunistic behaviours are not a problem, greater discretion can reduce steps and controls in the procurement process, making the bureaucracy less pervasive.

In the “usual” procurement, the PB’s decision on the value of the contract, the type of awarding procedure and suppliers’ qualification, etc. could be done accordingly to the regulation setting. In emergency procurement, different needs and requirements arise: PBs must give up some of

the advantages of the ordinary procedures to respond promptly and effectively to the emergency.

An emergency is intended as an *"urgent situation in which there is clear evidence that an event or a series of events has occurred which imminently threatens human lives or livelihoods, and where the event or a series of events produces disruption in the life of a community on an exceptional scale"* (Emergency Procurement Procedures, United Nations).

Taking up the categories of emergency in the United Procurement Manual of the UN,<sup>66</sup> such situations can arise as a consequence of certain events: sudden calamities (earthquakes, floods, ...); emergency for human reasons, such as refugee migration; natural causes such as drought, or diseases that make certain populations vulnerable; shocks of an economic or political nature; other types of emergencies in which the various countries need supra-national interventions to support an effective response. Note that this is only one of the possible classification of these cases. However, all emergencies have an immediate threat to the health, safety, or even life of parts of the world population. From this general categorization, each country has derived precise rules to evaluate whether and when emergency procedures are applicable.

### 3.1.1 *Regulatory Framework*

Comparing the procurement regulations of different countries is outside the scope of this thesis. In this section, we will focus on the Italian procurement regulation and we study how the system was designed to adapt the public procurement process in situations of extreme urgency or emergency periods.

As regards the standard public procurement procedures, some derogations are provided for certain situations also in ordinary procurement.

As an example, the negotiated procedures can be divided according to the degree of publicity: there is the possibility of proceeding with a negotiated tender even without the prior publication of the tender notice.<sup>67</sup> This provision applies when, for reasons of extreme urgency arising from unforeseeable events by the PB, the terms for the use of other procedures cannot be met. These applications must always be properly justified to limit potential abuses.

As described in the first chapter, the Italian legal system has established thresholds concerning the application of the procedures according to the value of contracts. These thresholds have the purpose of setting limits on the use of discretionary procedures such as restricted auctions, negotiations, or competitive dialogue. Under standard conditions, the European Union has

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<sup>66</sup> Reference is made to the latest update of the document, on June 30<sup>th</sup>, 2020.

<sup>67</sup> Art. 63, co.2, lett. c), *Codice degli Appalti*.

recently revised upward these values. The new thresholds have been incorporated into Article 35 of *Codice degli Appalti* (the Italian procurement code) and they aim to allow for the PB to have more discretion in choosing the procurement mechanisms. Besides, other changes were introduced with the aim of streamlining and making the procedure more efficient even under standard conditions. The new rules provide that contracts with a value between 40,000 and 200,000 euros can be awarded using a negotiated procedure with the prior consultation of at least three potential suppliers.<sup>68</sup> Additionally, one of the most interesting provisions also in terms of emergency procurement concerns the award of contracts with a value lower than 40,000 euros. For these contracts, the Italian law provides for the possibility of using the direct awarding procedure<sup>69</sup> (without the prior consultation of two or more operators).

The direct awarding procedure - not mentioned up to now - is a solution granted by the Italian procurement code for specific contracts. It offers the PB the possibility of assigning the contract without resorting to a competitive and structured process like a tender. Under specific conditions, a direct awarding procedure is allowed even in periods of "normality", i.e. under no emergency. The requirements for using this procedure are not limited to the maximum threshold value (40,000 euros) but the PB must also justify the choice with respect to the principles of economy and competition. According to the guidelines of ANAC,<sup>70</sup> compliance with these constraints is possible through a simple comparison of the cost estimates of at least two different economic operators.<sup>71</sup> These changes could speed up the entire process under normal conditions, at the cost of increasing the risk of opportunistic behaviours. Further modifications have also been supported through the so-called "*Sblocca Cantieri*" decree<sup>72</sup> aimed at speeding up and streamlining urban regeneration procedures and, in particular, post-earthquakes reconstruction.<sup>73</sup>

Although these changes refer to the management of ordinary procedures, they underline a recent trend of the Italian legal system (and of the EU directives) to respond more quickly and effectively to the different needs of the public administration under different conditions.

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<sup>68</sup> The latest amendment became applicable from January 1<sup>st</sup> 2020, through the EU regulations no. 1828 and 1829. The negotiated procedure is allowed for service and supply contracts managed by central government authorities (from € 144,000 to € 139,000), non-central (set at € 214,000) and for works contracts (€ 5,350,000).

<sup>69</sup> This provision is valid also for the awarding of services and supplies with a value between 40,000 and the threshold set by the European Union (ordinarily set at 221,000 euros).

<sup>70</sup> ANAC (*Associazione Nazionale Anti Corruzione*), the Italian Anti-Corruption Authority

<sup>71</sup> Guidelines n.4/2016. ANAC did not limit the possibility of resorting to the direct award procedure but emphasized the need for an assessment of the congruity of its use.

<sup>72</sup> The decree *Sblocca Cantieri* (DL 18/04/2019, n. 32) containing "*Urgent provisions for the relaunch of the public contracts sector, for the acceleration of infrastructural interventions, urban regeneration and reconstruction following seismic events*", was converted into law with Law 14/06/2019, n. 55, published in the *Gazzetta Ufficiale* of 17/06/2019, n. 140 and in force from 18/06/2019.

<sup>73</sup> This decree contains provisions related to major earthquakes which hit the country in recent years (Molise, 2019; Abruzzo, 2009; Central Italy, 2012 and 2016).

Focusing, on emergency situations, we observe that the use of discretionary mechanisms is not just an opportunity to increase the efficiency of the public procurement, but it becomes almost an “obligatory choice”. In emergency procurement situations, most of the constraints relating to the contract value are replaced with more discretionary assessments that focus primarily on the need for a specific product/service. In those cases, exploiting the derogation of the rules is not only allowed but almost obligatory for the contracting authority. Here, the urgency of the situation combined with the increasing pressure of stringent deadlines leads to soften the rigidity of the public administration. Softening the rule is not without risk: PB can consider an emergency as a simple pretext to postpone compliance with the principles of competition and transparency of processes.

In the Italian regulatory framework, the *Codice degli Appalti* has special rules and derogations that may apply in emergency contexts aimed at balancing the needs and risks due to the exceptional nature of the situation.

First, a specific article defines what are the situations of extreme urgency and/or civil protection and which immediate actions can be taken. The contracting authority may arrange, *"simultaneously with the drafting of the report, in which the reasons for the state of urgency, the causes that provoked it and the work necessary to remove it are indicated, immediate execution of the works within the limit of 200,000 euros or what is necessary to remove the state of prejudice to public (and private) safety"* (Article 163, co. 1, *Codice degli Appalti*). These contracts can also be awarded without prior price comparison, given the need to supply the product/service in a tight time frame. The documents relating to the price and the methods used will then be forwarded to the anti-corruption authority which will be responsible for carrying out checks on the actual adequacy of the price paid. Furthermore, to the extent strictly necessary, the direct assignment may exceptionally be authorized even above the limits referred to in comma 1 (i.e. 200,000 euros), for a limited time (Article 163, co. 8, *Codice Degli Appalti*).<sup>74</sup>

Other tools that do not directly concern the emergency periods but can be useful as a preventive tool for planning and organizing such contexts are the so-called *accordi quadro*. These framework agreements are a type of contract used in public procurement. In particular, these agreements involve the reaching of a non-complete agreement.

Only a general agreement will be stipulated, while other details of the contract will be discussed only when their execution becomes necessary.<sup>75</sup> For these reasons, this tool is particularly

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<sup>74</sup> However, this provision may not apply to contracts for an amount equal to or greater than the European Union threshold one.

<sup>75</sup> As an example that we will discuss in the next sections, Consip was commissioned to the urgent acquisition of personal protective equipment and electro-medical equipment, devices and related services necessary to face the

useful in dealing with unpredictable events and sudden emergencies. In emergency procurement, it can prove to be an excellent solution to face the difficulties encountered in conducting normal negotiations. In emergency procurement, the price paid may increase significantly because of the urgent needs of the PB: relying on a preventive agreement helps to reduce the risks of potential opportunistic behaviour by private agents and firms.

### *3.1.2 Emergency Procurement and the Risk of Corruption*

In Section 2.3, we analysed the relationship between discretion and the risk of corruption, also observing other variables that can influence this relationship. This relation is generally positive: lowering restrictions – i.e. granting greater discretion - usually can increase corrupt practices. This problem worsens considerably in emergency procurement. Here, opportunities to derogate from the rules offer a fertile ground for opportunistic behaviour, both by private contractors and by public buyers.

Corruptive practices usually manifest themselves in two recurring categories. First, the violation of rules and regulations relating to public procurement; this can occur with similar intensity both in standard and emergency conditions. Second, the misuse of legitimate exceptions, which is a special risk of emergency and urgent situations, where exceptions to the rules increase considerably.

The former category includes corrupt practices in the suppliers' selection stage. The timing of suppliers' selection in the emergency phase is shortened to allow a faster response to emerging needs. In this way, however, corrupt bureaucrats can take advantage of the possibility of inviting only certain bidders, or of skipping directly to the awarding phase.<sup>76</sup>

The latter category, following the division made by Schultz and Soreide (2008), can be classified into three further types:

- Misuse of discretionary power: the PB has wide discretion in these phases. It could proceed with the purchase of the product/service without comparing offers from multiple operators or comparing the qualities and prices available on the market. In this way, the opportunity for the PB to justify it with the urgent conditions can offer an inviting stimulus to the risk of corruption.

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COVID-19 health emergency also in derogation of some specific provisions of the Legislative Decree n. 50/2016. Therefore Consip proceeded to translate, within a negotiated procedure without publication of a notice for reasons of extreme urgency, a framework agreement.

<sup>76</sup> The contracting authority can notify in advance only the company it wants to favour and the others at a later time, so that they are not able to prepare and submit an offer. Furthermore, framework agreements for the emergency allow skipping the normal selection procedure, thus favouring incumbent firms that already have relations with the public administration (Schultz and Soreide, 2008).

- Misusing lax requirement for written justifications: the need to justify purchases by the public administration in emergency conditions does not ensure full protection of compliance with the regularity of procedures. First, the expectation regarding such justifications is relatively secondary, compared to the need to complete the purchase. Second, ex-post checks are very difficult to conduct since the information available is very limited given the speed of the procedure and the difficulty to assess the goodness of the decision taken in certain urgent conditions.
- Exaggerated emergency: important exceptions to normal procedures are allowed only in an emergency. As a result, corrupt suppliers and bureaucrats will support the prorogation of these periods as much as possible, so that they can continue to exploit them. In these cases, it becomes crucial to constantly update and evaluate if and when the conditions and dangers that gave rise to the emergency ceased.

These are some examples of how corruption can infiltrate emergency procurement processes, taking advantage of the lower attention to the process itself.<sup>77</sup> As already pointed out, the contracting authority must not lose sight of the overall effectiveness (i.e. the quality and actual usefulness for which the contract is awarded) and the price to obtain it. Although an emergency might put these aspects in the background, they should not be neglected.

The competence of PBs plays also a fundamental role to contain corruption in emergency procurement. It is useful to differentiate if the emergency concerns only specific parts of the country or it assumes national and/or international dimensions: the competence of bureaucrats usually grows as they move from local to central authorities. This difference could also be explained by the different availability of economic and technical resources available only to central authorities (Chiappinelli, 2019).

For Italy, a differentiation of events and areas of competence has been arranged by law.<sup>78</sup> This differentiation refers to natural and/or artificial events (related to human activity). It distinguishes events which can be managed by local authorities, because of their limited extent and those which require a joint intervention by several entities, coordinating the management of the crisis. Additionally, there are specific provisions for emergency situations in which immediate action is required. For these, a centralization of the effort to the central authority is

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<sup>77</sup> The main challenge is to balance the need to safeguard the safety and life of people (usually the main reason for a state of emergency) with the need not to leave room for opportunistic behaviour even in these situations. Furthermore, the PB must keep the quality-price ratio of the product/service as high as possible, even if the time to evaluate these parameters and select the best ones is drastically reduced.

<sup>78</sup> D.L. 59/2012 intervened on art. 2 of Law 225/1992.



allowed through the use of extraordinary measures.<sup>79</sup> Since a non-homogeneous response within the same territory could cause serious efficiency losses, centralizing the organization might be desirable. In this way, exploiting the larger skills and resources of central governments, the centralization of public procurement processes could also make it possible to exploit the advantages deriving from economies of scale, according to the size of the contract to be awarded. Finally, different level of competence between local and central entities can also support the centralization of purchases in an emergency; differently, each local contracting authority should be formed and trained to face emergency situations, increasing the costs of the entire process (Dimitri, Piga, and Spagnolo, 2006).

Additionally, it is not always possible to compare different emergency situations: each one has particular causes, characteristics, and effects,<sup>80</sup> and a linear interpretation of the phenomenon could not be possible. While sharing the same main consequence (a potential risk to the lives of citizens), each case should consider the different variables that have influenced it and the different subjects involved.

However, corrupt practices in emergency procurement contexts can be fought and limited. Measures to counter the high risk of corruption should intervene when such practices are carried out, developing an effective control system. Precautions should also be taken before corruption occurs, to prevent the emergence of this phenomenon (Storsjo, et al., 2016). Prevention measures in emergency procurement consist of preparing some countermeasures before the emergency occurs, to readily respond and to limit its negative effects.

A valid option discussed above is the use of framework agreements. They allow to consolidate relationships with some suppliers, establishing preventive agreements between the parties, activating them if the need requires it. In this way, it would be possible to significantly shorten the time and pressure associated with the supplier selection during emergency times. Furthermore, this would allow reducing the price paid.

Regardless of whether the PB is corrupt, dealing in an emergency phase constitutes a risk for the contracting authority. To face urgent requests, the PB is often forced to accept higher prices than those obtainable with negotiation under standard conditions. Indeed, in the latter case, the PB can evaluate and choose between offers from multiple bidders. In the former one, this is not always possible: private firms increase their bargaining power, taking advantage of the short

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<sup>79</sup> The possibility of resorting to exceptional means to cope with the emergency is a power that lasts for a limited period (established by the various legal systems). In this way, opportunistic behaviours or abuses of this power could be limited.

<sup>80</sup> The two most common categories concern natural disasters (such as earthquakes, floods, ...) and health emergencies. Although these two areas share some similar aspects, they are characterized by different causes and areas of intervention.

timeframes in which the public administration must act. Furthermore, firms can exploit the fact that, in emergency, the contracting authorities usually have greater funds availability to adequately face the situation. As a result, even in the absence of corruption, the evaluation of prices and the comparison between them may not be carried out optimally (Schultz and Soreide, 2008).

For this reason, it is useful to create a dataset with all the prices paid under previous emergency cases and under standard situations. The dataset can be used to evaluate how much these prices differ in the different periods, and to detect wastes in the procurement process. Wastes arise for two main reasons: the presence of corruption and the inefficiencies in the public procurement processes. The latter reason is the preponderant one. This is related, for example, to the lack of PBs' competence and the overall bureaucracy inefficiency<sup>81</sup> (Bandiera, Prat, and Valletti, 2009). During a crisis of relevant intensity and dimension, a centralized response may be desirable. This requires an organizational effort that must leave any personal interests in the background to give a solid answer to the problem. This also requires an important contribution from the authority responsible for coordinating all the parties involved. Any heterogeneous and disconnected responses would not have the desired effect and can waste organizational and economic resources.

In addition to the organizational effort, measures should be implemented to monitor whether this effort is offering positive results. Otherwise, procurement systems should evaluate whether and how to correct and improve them in progress. In emergency situations, it is difficult to predict the evolution of the problem. Since emergencies are rare and exceptional events, specific intervention protocols are not in place. The capacity of the public administration does not lie only in the organization and planning of emergency procurement processes. It refers also to the control of these processes and the ability to identify and correct any pitfalls. For this reason, the phases and methods of monitoring become crucial in the management of emergency procurement. Here, the institution of groups and controls<sup>82</sup> could act as a deterrent to corrupt practices to achieve the efficiency goals.

To encourage the search for the best combination of quality and price, an interesting alternative could be delegating the decision to the individuals or firms directly affected by the emergency.

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<sup>81</sup> The so-called “passive waste” accounts for 83% of the total waste. Although active waste remains of a strong impact (i.e. episodes of corruption and/or favouritism), the main problem for the public administration is to solve the “non-voluntary” inefficiencies (Bandiera, Prat, and Valletti, 2009). These inefficiencies exacerbate the problems in emergency procurement processes where the external pressure on decisions becomes heavier and processes already inefficient under normal conditions can reveal all their weaknesses.

<sup>82</sup> Schultz and Soreide (2008) stressed that the role played by the media and NGOs can also contribute to the identification and correction of such practices. Indeed, this type of means often reaches public opinion more easily, which is often even more effective in terms of reputational effects than a legal process or other sanctions.

The public administration could reimburse them through economic transfers. However, this can be a double-edged sword: on the one hand, it can avoid significant waste for products and services that are not needed by the end-user; on the other hand, the same amount of economic resources could have a lower impact if entrusted to many different small parties. Indeed, a single and coordinated response could be able to obtain lower prices by leveraging quantity.

Finally, the last option to tackle the danger of inefficiencies and corruption in emergency procurement processes remains perhaps the most effective, namely sanctions: establishing and fixing adequate sanctions for these behaviours can act as an important deterrent in the emergency period (Schultz and Soreide, 2008).

In this section, we have discussed emergency public procurement, knowing that every emergency situation occurs for different causes and in different contexts and the comparison would offer misleading interpretations. We have tried to overview the main exceptions granted by Italian law (and of the European Union, indirectly) in the field of tender contracts and those specifically designed for emergency and/or urgent situations. Additionally, we have investigated how corruption phenomena can find even more space in the emergency procurement processes and what countermeasures can mitigate this risk.

### **3.2 Effects of COVID-19 Emergency at a Regulatory and Procedural Level**

In this section, we analyse a real case. We provide evidence about how an emergency condition can influence public procurement both from a regulatory and a procedural point of view. In this regard, we will refer to one of the greatest global emergencies in recent years: the COVID-19 pandemic. On January 30<sup>th</sup>, 2020, the General Director of the World Health Organization (WHO) declared that the spread of the SARS-CoV-2 virus constitutes a Public Health Emergency of International Concern (PHEIC), as enshrined in the International Health Regulations (IHR, 2005). On March 11<sup>th</sup>, the WHO declared it as a pandemic. This declaration came as, at the time, the speed and scale of the contagion were increasing and because, despite frequent warnings, some countries were not approaching this threat with the adequate level of political commitment needed to control it. The spread of the virus has created a health emergency at a global level which, although thwarted, still represents a serious threat to people's health and life, which has involved practically all countries. It has caused major repercussions to the health system, directly affected by the emergency, and even to the economic system, indirectly affected by the measures taken to provide an effective health response.

### 3.2.1 *Regulatory and Procedural Exceptions*

The COVID-19 pandemic has hit the public procurement processes of many countries. These processes had to promptly adapt to the urgent need to counter the spread of the virus and the economic and social shock it causes. In this section, we will analyse how Italy (and the EU) has dealt with the emergency focusing on public procurement regulation and procedures.

The health emergency saw a strong intervention from the European Union. First, the EU has offered important economic aids to deal with the emergency, used to mitigate the health and the socio-economic negative effects of the pandemic. Furthermore, the European Commission highlighted the options available to contracting authorities in EU countries, supporting the provisions of Directive 2014/24/EU, for the purchase of essential supplies and services.<sup>83</sup> The European Commission itself has also provided complementary clarifications about the options and possibilities available to PBs for all public purchases related to the COVID-19 crisis. Through an official communication (2020/C 108 I/01), the Commission allows for a reduction in the time required for the award of open or restricted procedures to meet the most stringent needs. Additionally, the Commission stressed the possibility of resorting to a negotiated procedure without prior publication of the tender notice<sup>84</sup> and direct assignment to a selected operator (as long as it is the only one able to meet the contractual terms within the specified times and methods). The European Union has underlined the wider range of options to encourage individual countries to take all necessary countermeasures.

In Italy, the state of emergency was declared by the *Presidenza del Consiglio dei Ministri* on January 31<sup>st</sup>, 2020. Thanks to this, the implementation of the necessary interventions to the situation by the Department of Civil Protection was arranged in derogation from any current provision and only in compliance with the general principles of the legal system. This initial step was followed by various decrees to offer additional flexibility than the one already available under “ordinary” emergency situations (i.e. all the exceptions already provided by the *Codice degli Appalti* and described in the previous chapters).

As discussed in the previous sections, the general trend of the Italian legal system in recent years has been towards a lightening and a speeding up of public procurement procedures. These adjustments were mainly aimed at encouraging interventions of public utility for the modernization of the country. Some examples are the digitization and the sustainability of

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<sup>83</sup> On April 1<sup>st</sup>, 2020, in the communication published in the Official Journal of the European Union, the European Commission stated that the situation of a health crisis requires rapid supply solutions for goods and services related to emergency management.

<sup>84</sup> For Italy: art.63, Codice degli Appalti.

public administration measures that incentivize investments, often hampered by lengthy and complex procedures.

The COVID-19 pandemic has accelerated this trend, due to the very stringent conditions and timelines faced by the public authorities. One of the first and most important measures adopted to address the crisis was the so-called *Cura Italia* decree.<sup>85</sup> The decree introduces some exceptions to the general rules set in the Codice degli Appalti (L.D. 50/2016). The decree aimed at reducing the timing of the administrative action and the complexity of the process for the award of a contract. This would not allow to promptly fulfil the needs dictated by the emergency. Until December 31<sup>st</sup>, 2020, contracts can be awarded through a negotiated procedure without prior publication of a tender notice. This was already allowed only when - for reasons of extreme urgency deriving from unforeseeable events - the deadlines for ordinary procedures could not be respected.<sup>86</sup> Some other relevant exceptions concern Article 95 and Article 97 of Legislative Decree 50/2016: as for the former article, the decree makes possible to use as awarding criterion the lowest price even outside the limits ordinarily allowed; as for the latter one, the automatic exclusion mechanism of offers can now be used even beyond the original thresholds.<sup>87</sup> Additionally, a new figure (*Commissario Straordinario*) is appointed for the implementation and coordination of the measures for the containment and contrast of the COVID-19 emergency. This figure has the main task of implementing and supervising any intervention useful to deal with a health emergency. It has to organize and manage the purchase of each product/supply needed for containing and countering the emergency. In the next section, we will analyse the role played by this figure in the procurement of goods/services during the first months of the emergency.

Another relevant modification applied by the *Cura Italia* decree regards the controls on the procedures applied for COVID-19 needs. It removes the documents relating to the purchase of goods during the emergency from the control of the *Corte dei Conti*, limiting the "accounting and administrative responsibility" to only cases in which the official's fraud has been ascertained.<sup>88</sup>

At the Italian regulatory level, perhaps the most significant change during this period concerns the so-called *D.l. Semplificazioni*.<sup>89</sup> This decree intervened significantly in public procurement procedures to deal with the emergency period. First, the decree derogated from art. 36 co. 2

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<sup>85</sup> L.D. n. 18, 17 marzo 2020.

<sup>86</sup> Art. 63, co.2, lett. c) , *Codice degli Appalti*.

<sup>87</sup> This derogation can only be applied if there are at least 5 offers.

<sup>88</sup> This rule is subject to evaluation as regards its compliance with the Constitution.

<sup>89</sup> D.L. 76/2020. Initially, the name refers to the D.L. n. 135/2018, whose conversion law (no. 12/2019) was approved in the Gazzetta Ufficiale in 2019. The new decree concerns the approval of a maxi amendment, introduced to deal with the COVID-19 emergency.

letter a), *Codice degli Appalti*<sup>90</sup>: it provided that direct assignment for service and supply contracts is allowed up to 150,000 euros<sup>91</sup> (in any case, within the limits of the thresholds according to Article 35, until 31 July 2021<sup>92</sup>). Note that the decree allows to use this procedure, but it does not mandate it,<sup>93</sup> leaving wide margins of discretion to the contracting authority in entrusting the ordinary procedures. About contracts with a value equal to or greater than 150,000 euros (within the limits of the EU thresholds), the decree makes possible to use the negotiated procedure without notice according to Article 63, after consulting at least 5 economic operators<sup>94</sup> and in compliance with other requirements in the selection of suppliers.<sup>95</sup> This temporary derogation regime aims to incentivize public investments and to cope with the negative economic effects resulting from the containment and emergency measures of COVID-19.

Further constraints have been introduced to support a speeding up of the supplier selection and identification processes: for direct assignments, the PB must select the winning firm within two months from the initiation of the procedure; for the negotiated procedure, the term increases to four months. The supplier selection and awarding procedure for contracts above the threshold must take place within six months of the start of the procedure, underlining the will of the legislator to encourage a strong reduction in the awarding times.

As regards above-threshold works, the new temporary regulation provides for the applicability of the restricted procedure or, in the cases provided for by law, of the competitive procedure with negotiation following the articles n.61 and n.62 of the *Codice degli Appalti* (Lgs.D. 50/2016).<sup>96</sup> This derogation refers to procedures started before 31 December 2021.

Art.2, co.3, L.D. “*Semplificazioni*” expands the use of the negotiated procedure without prior publication of a tender notice for the activities of execution of works, services, and supplies as

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<sup>90</sup> Article 36, co. 2, lett. a), *Codice degli Appalti* allowed the use of the direct award procedure for contracts with a value of less than 40,000 euros.

<sup>91</sup> For engineering and architecture contracts, the limit drops to 75,000 euros

<sup>92</sup> With an amendment, the provisions referred to in articles 1, 2, 3, 5, 6 and 8 of the D.L. *Semplificazioni* have been extended to 31 December 2021.

<sup>93</sup> There is no change to Article 36, co. 1, *Codice degli Appalti*.

<sup>94</sup> For higher amounts, the negotiated procedure without public tender can be used, after consulting an increasing number of economic operators depending on the value of supplies, services and works. The consultation of at least 5 companies for works between 150,000 and 350,000 euros of value, 10 economic operators for works from 350,000 to 1 million euros, 15 up to 5 million.

<sup>95</sup> In compliance with a criterion of rotation of the invitations, which also considers a different geographical location of the invited bidders, identified on the basis of market surveys or through lists of economic operators.

<sup>96</sup> Articles 61 and 62 refer to the ordinary sectors, while the special sectors follow the articles 123 and 124 of the *Codice degli Appalti*. The contracting authorities must proceed through the negotiated procedure - art. 63 Procurement code for the ordinary sectors and art. 125 for the special ones - for the awarding of the execution of works, services, and supplies as well as engineering and architecture services of works for an amount equal to or greater than the EU thresholds. For the competitive procedure with negotiation, only invited operators can submit an offer following the evaluation of the information provided. This rule has raised some criticisms as it could exempt from motivating these decisions. It could open up the possibility of opportunistic behaviors by public officials (ANCE, 2020).

well as engineering and architectural services. This procedure is now permitted for an amount equal to or greater than the EU thresholds when the terms, even if shortened, provided for by ordinary procedures cannot be respected. Additionally, when the exceptional use of the negotiated procedure is required, the following comma 4 specifies that this is possible in derogation from any provision of the law. The only exceptions concern compliance with criminal law and the provisions of the *Codice Antimafia* laws and prevention measures (Lgs.D. 159/2011).<sup>97</sup>

Another significant change concerns the management of legal disputes arising from the emergency procedures. These disputes and litigations risk blocking the procurement process. For this reason, when it comes to pandemic-related purchases, these disputes need to be resolved faster than under ordinary procedures since supplies of greater urgency may depend on them. To settle these disputes, the L.D. 76/2020 provides for the mandatory establishment of a *Collegio Consultivo Tecnico*<sup>98</sup> (CCT) for above-threshold contracts. It is a contract-specific committee that has the task of checking the regularity of the proceedings as well as the right to suspend them (Article 6, L.D. 76/2020). It must be composed of three or five members with specific requirements and chosen by mutual agreement between the parties. The Italian anti-corruption authority - ANAC - complained about the creation of CCTs. In particular, ANAC highlighted two potentially critical issues: first, it is not clear how this committee should relate to the existing mechanisms for the protection and resolution of disputes; second, since it is an onerous tool and its establishment must take place for each of the contracts above the threshold, it represents a huge cost for the public administration (Report ANAC, August 4<sup>th</sup>, 2020).<sup>99</sup>

The introduction of all these derogations has opened a debate about their application. It has been argued that, under the new rules, an excessive discretion is left to the contracting authority and at the redundancy of some provisions since some cases would already be provided for in the *Codice degli Appalti* for emergency conditions. Through a comment on the decree, ANAC stressed that a greater enhancement of the institutions already provided for by the code would have been desirable. Instead, the addition of further provisions risks burdening and complicating the interpretation of potentially contradictory rules, obtaining the opposite effect.<sup>100</sup> An example of the repetition, in the new decrees, of a provision already existing in

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<sup>97</sup> The constraints of the European Union are maintained, including those deriving from directives 2014/24/EU and 2014/25/EU, the principles referred to in articles 30, 34 and 42 of the *Codice degli Appalti* and the provisions on subcontracting.

<sup>98</sup> The previous provisions of the D.L. 32/2019 (“*Sblocca Cantieri*”) provided only the faculty and not the obligation to establish a CCT. This provision repeals the previous one until December 31st, 2021.

<sup>99</sup> Art.6, co.6 e 7, L.D. 76/2020.

<sup>100</sup> This difficulty is evident in the relationship between the EU rules that must be adhered to and the opposing discretion in certain areas left to the Member States.

the code (Lgs.D. 50/2016) is about the use of the negotiated procedure without prior publication of the tender notice. This is already provided for in art. 63, *Codice degli Appalti*.<sup>101</sup> The same applies to the procedures of extreme urgency or civil protection, which are already governed by art. 163 of the *Codice degli Appalti*. In addition to this, the reduction of the deadlines for the requests to participate in the tender was already contemplated in the code.<sup>102</sup>

Another controversial aspect concerns the effects of these measures on the efficiency and effectiveness of public procurement processes. One of the main risks associated with emergency procurement is the exploitation of less stringent constraints in contracts that do not fall within the purpose for which the exceptions are designed (see Section 3.1). The definition of "COVID-19 emergency works" (Comma 4, L.D. 76/2020) is considered excessively vague and therefore susceptible to "include any infrastructural intervention".<sup>103</sup> According to ANCE,<sup>104</sup> Comma 4 would allow to apply these procedures to all interventions (including those below the threshold) relating to school, university, etc. Furthermore, the lowering of the publicity requirements for these tenders risks compromising the principle of supplier rotation and "cancelling the possibility for a group of companies to submit an offer in a temporary partnership". As a result, the simplification of the processes would focus on the deregulation of the procedures, leading to a reduction in competition. Instead, the amendments should have intervened in the qualification processes at the beginning of the tender. According to ANCE, most of the interruptions in the public tenders are in that qualification phase (70%, following the analysis of the association).

Finally, a further point of contention concerns the awarding criteria. Under the original provisions, the lowest price criterion is allowed for: services and supplies with standardized characteristics or whose conditions are defined by the market; for services and supplies with a value up to 40,000 euros.<sup>105</sup> Lett. b) of art. 2, L.D. 76/2020 provides that the PB can decide (for the negotiated procedure) whether to apply the criterion of the most economically advantageous offer. Considering also Article 2, comma 1 of Lgs.D. 50/2016, it increases the possibility of

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<sup>101</sup> As also claimed by ANAC in the aforementioned comment, the derogation from art. 63 would not have been necessary in relation to the COVID-19 emergency. This article is already clear enough to allow contracting authorities to resort to the negotiated procedure in all cases where reasons of extreme urgency arise (ANAC, August 4<sup>th</sup>, 2020).

<sup>102</sup> For open procedures: art. 60, comma 3; for restricted procedures: art. 61; for the award of contracts below the threshold: art. 36, comma 9, *Codice degli Appalti*.

<sup>103</sup> "D.L. Semplificazioni (D.L. 76/2020). Commentary on the measures of the decree ", July 17<sup>th</sup>, 2020. According to these estimates, these lacks risk excessively deregulating the process, leading to non-transparent assignment of about 94 billion euros, which corresponds to 4 years of investments in public works.

<sup>104</sup> *A.N.C.E., Associazione Nazionale Costruttori Edili* (Italian association of builders)

<sup>105</sup> This also applies to contracts above this threshold up to the EU threshold characterized by high repetitiveness.



using this criterion also with the direct award procedure. It could create many problems with the transparency and efficiency of the process, incentivizing corrupt practices.<sup>106</sup>

These criticisms highlight the difficulty for the legislator to find a compromise even in conditions of emergency procurement. The need to speed up and lighten public procurement processes must consider the risk that faster procedures entail in terms of disputes and the risk of corruption. Furthermore, these measures have also an impact on the competition between suppliers, a key element on which to build an efficient process (see Section 2.2). The decision of which procedure to use is made even more complicated by the pressure given by the time within which certain decisions must be made, in order to ensure a prompt and effective response to the emergency.

This section represents a quick summary of the main regulatory interventions taken by the Italian government to deal with the COVID-19 emergency, up to January 2021. Although their analysis from a legal point of view is outside the scope of this thesis, their description is important to understand the differences between emergency procedures, under the new rules, and ordinary procedures, presented in the previous chapters.<sup>107</sup>

### *3.2.2 The main effects of COVID-19 Emergency on Public Procurement*

The COVID-19 emergency has affected almost all the dynamics and aspects of our society. The most affected sector is the healthcare sector, where the main direct effects of the emergency occurred. Being a health emergency, this sector was the first to face its consequences. Important measures were taken to contain and counter the rampant spread of the virus. Especially in the first months, people cannot leave their house except for proven needs. These measures have helped in reducing the health-care consequences of the emergency, but they had a significant impact in other sectors. The resulting economic crisis has had effects on people's lives. These effects will be even worse if we are not able to foresee the long-term consequences of the pandemic, and the public procurement sector is no exception to that.

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<sup>106</sup> The use of direct assignment procedures is strongly discouraged under standard conditions. Various studies have highlighted the increase in the average price paid by contracting authorities. For example, the OECD estimated that competitive tenders by the Mexican Institute of Social Security resulted in a price 11.2% to 11.9% lower than the price achieved through direct awards or tenders restricted to few suppliers (OECD, 2018). Although the emergency requires greater use of this type of procedure, OECD invites you to limit its use even in emergency procurement conditions (OECD, 2020).

<sup>107</sup> The discussion of another important decree approved during the emergency phase was deliberately omitted: the *Decreto "Rilancio"*. The L.D. 34/2020 (May, 19<sup>th</sup>, 2020) introduced some changes to the ordinary procedures, including the advance of the price paid by the contracting authority which can go from 20% to 30% of the total award price, compatibly with the available resources.

Our analysis aims at assessing how the procurement processes' performances have been affected by the emergency. To gain a better understanding, we use a report provided by ANAC which collects the data about the procurement contracts (identified by a CIG or smart-CIG<sup>108</sup>) in the period March-April 2020, the period immediately after the beginning of the emergency.<sup>109</sup> At a regulatory level, the ANAC report was published after the approval of the “*Cura Italia*” decree,<sup>110</sup> but before the approval of the Legislative Decree 76/2020.

The ANAC report shows how the main indicators (i.e. price, quality of the supplies, delivery time, compliance with the technical and legal requirements) about public procurement process reacted to the new procedures. The report studies various aspects in consideration of the incidence of these on the total number of contracts and in relation to the overall expenditure.

The total expenditure in this period amounts to almost € 5.8 billion: 94.1% deriving from procedures for an amount equal to or greater than € 40,000 (CIG); 5.9% from procedures for contracts of a value less than € 40,000 or subject only to the traceability obligations (smart-CIG). These percentages are reversed if we look at the number of tenders: 94.1% from procedures subject only to traceability obligations and 5.9% from procurement procedures for an amount equal to or greater than 40,000 euros.

One focus of our work is the analysis of the adopted procedures in the COVID-19 emergency context. Referring to data provided by the ANAC Report (2020), we observe that the procedures that require a certain degree of publicity<sup>111</sup> (usually the most used in standard conditions, strongly encouraged by the various legal systems) account for only 4.4% of the total number of awarded contracts in the period considered. Their incidence increases slightly relating to the total expenditure, with a percentage settling at 5.2%. It clearly emerges that almost all the tenders have been awarded through procedures using a lower degree of publicity: 61.9% through a negotiated procedure without prior publication of the tender notice, while 23,5% through direct assignment to a supplier. The weight of these two procedures alone is even greater when considered the overall value of the contracts awarded: 92.9% of the total expenditure in these phases was allocated through them.

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<sup>108</sup> CIG (*Codice Identificativo di Gara*) is an alphanumeric code generated by the SIMOG computer system (a tool useful to monitor the tenders) of ANAC. This code allows to identify a given contract signed with the public administration following a contract or assignment. It is a code that must be indicated in the documents relating to a given tender.

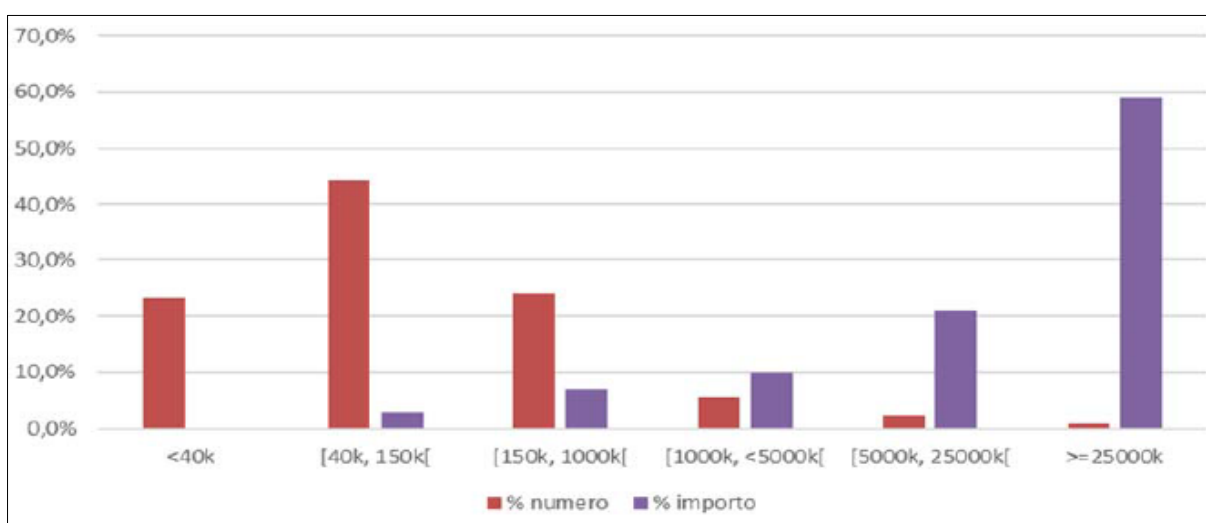
<sup>109</sup> The data reported by ANAC refer to the period from March to April 2020. This period includes the outbreak of the emergency and the immediately following phase. As this is the first response phase, this suggests that the values and data available should also be weighed considering the plausible initial confusion and the need to organize a response in a situation where the causes and potential consequences were still little known.

<sup>110</sup> L.D. 18/2020 of March 17<sup>th</sup>, 2020. The analysis refers to a period in which this decree was approved, failing to fully grasp the differences between the ex-ante and ex-post situation. The same thing applies to the effects of the measures adopted after the publication of this report.

<sup>111</sup> This includes open and restricted procedures, negotiated procedures with prior publication of the tender notice and the so-called “dynamic purchasing system”.

Considering only the procedures that do not require the publication of the notice (direct award procedure and negotiated procedure without prior publication of the notice), they were used in 85% of the total number of contracts. Additionally, we note that contracts under 150,000 euros account for most of the total (67.3%) but they only represent 3.2% of the total expenditure. This inverse relationship between the incidence in the quantity and in the total value of the contracts is supported if the sample is split at the threshold of 5,000,000 euros: although contracts below the threshold account for 96.7% of the total number of awarded contracts, and those above the threshold for the remaining 3.3%, the latter account for about 80% of the total expenditure (Fig. 5<sup>112</sup>).

Figure 5. Distribution of the Procedures by Contract Value



Source: ANAC Report, 13/08/2020

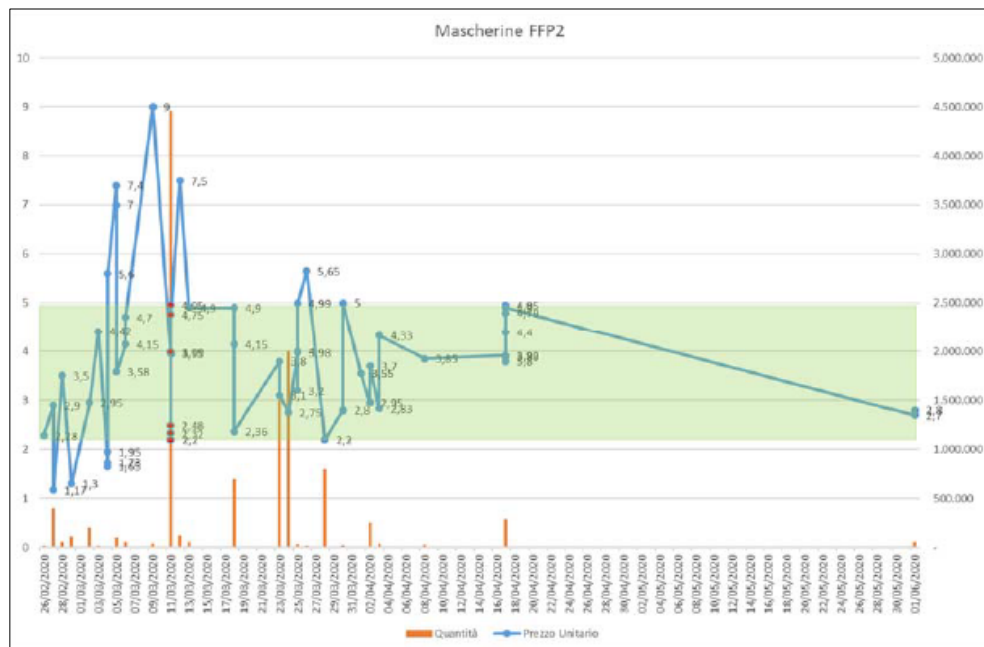
Direct assignment related to pre-existing framework agreements is used in 9.8% of the contracts examined (even if the value on the overall expenditure accounts for only 2% of the total). This evidence underlines the wide peculiarities of the emergency procurement processes. In these situations, PBs are more likely to select procedures that do not involve high publicity requirements. This may occur for opposite reasons: on the one hand, the need for faster purchases using less complex methods; on the other hand, the lack of publicity, i.e. lower transparency, can be exploited to favour corrupt practices (see Section 2.3).

The most important element to assess the effect of the emergency on the procurement process is the price paid, as it can be an useful indicator to assess the efficiency of public procurement.

<sup>112</sup> Figure 1. “Indagine conoscitiva sugli affidamenti in regime emergenziale di forniture e servizi sanitari connessi al trattamento ed al contenimento dell’epidemia da COVID 19 – Report di seconda fase, 13/08/2020.” Another interesting aspect is the average amount of contracts awarded through a direct award procedure (€ 724,000) and those assigned through a negotiated procedure without prior notice (€ 1,141,000), significantly increasing the average amounts for which these procedures are usually awarded.

In particular, we discuss prices paid in the health-care procurement. Unlike other emergencies (such as earthquakes or floods), the COVID-19 one had a strong impact on the supply side. The obligation to limit social contacts and the closure of many activities were and still are the main measures adopted in almost all countries. The closure of the activities stopped many production activities which, although not essential, played important roles in the supply chains. Additionally, the increasing demand for certain goods has led to a rapid depletion of stocks. In the procurement of healthcare devices, this shock radically altered the market with respect to its pre-pandemic business situation. There are several reasons why prices increased. First, standard economic forces due to high demand and low supply. Second, speculation and opportunistic behaviours. Finally, in a public procurement framework, greater suppliers' bargaining power and fewer controls in the selection phase. The supply of personal protective equipment (PPE) represents a clear example of what just described: the strong demand, the limited availability, and the supply crisis led to a sharp rise in prices in the early stages. In the ANAC Report (2020) it is possible to observe these effects on the prices related to the purchase by Consip S.p.A. of FFP2 masks (Fig. 6<sup>113</sup>). Although the reference price range is between two and five euros, important peaks are evident in the first phase (until a maximum of nine euros). This suggests that, in emergency situations, the variability of supply and demand considerably conditions the market and the public administration, as well. After an initial

Figure 6. Price of FFP2 Masks



Source: ANAC Report, 13/08/2020

<sup>113</sup> Figure 2. “Indagine conoscitiva sugli affidamenti in regime emergenziale di forniture e servizi sanitari connessi al trattamento ed al contenimento dell’epidemia da COVID-19 – Report di seconda fase, 13/08/2020.”

increase, the price has stabilized thanks to the important quantities purchased and the reduction of the emergency peak demand. Furthermore, it should be noted that these values refer to the most important central purchasing body in Italy. These results are even worse if the purchasing process is delegated to entities with fewer resources in terms of competencies and bargaining power, leading to higher prices for the same quantities. This characteristic can also be found in the comparison between the prices paid by centralized buyers and the prices paid by local authorities (in health emergencies, some purchases have been delegated to the regional level).<sup>114</sup> Another important indicator is the quality of supply in emergency procurement. This evaluation includes compliance with the timing and technical requirements set out in the tender notice about the products/services. ANAC analysed the feedback received from 163 contracting authorities to evaluate the performance delivered by the various suppliers during the initial emergency period. Contrary to what expected, the general results are quite positive with regard to the procedures implemented to deal with the health emergency.<sup>115</sup>

Differently, focusing on specific product categories the results are more variable. Always as regards the supply of FFP2 masks (the most critical case), it showed delays in about 25% of cases. Such delays may also be partly justified by reasons beyond the supplier's control.<sup>116</sup> The negative outcome is also confirmed with regard to compliance with the quality and quantities applied for. Additionally, there were also problems with the regularity of the process, with 5% of the contracts in which the suppliers did not have the requirements to participate in the tender. While these assessments are very useful, they should nevertheless be read considering that these responses come from public contractors and not from objective measures. Given the short time span considered, they could offer more insights once analysed in the long-term, understanding if some behaviours are chronic or are linked to this specific emergency situation.

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<sup>114</sup> This issue will be discussed in the next section. To give an example, as regards the unit prices of FFP2 masks, we note how the average price varies between € 2.20 (PCM-Civil Protection) and € 7.50 for *Regione Lazio*. The issue relating to the aggregation and centralization of emergency purchases has already been mentioned previously and will be further explored in relation to the COVID-19 emergency, thanks to the data available.

<sup>115</sup> *Deliberazione del Consiglio dei Ministri del 31/01/2020; decreto del CDPC del 27/02/2020; OCDPC n. 630/2020 e n. 639/2020; D.L. 02/03/2020 n. 9; D.L. 17/03/2020 n. 18; European Commission C/108/I/I).*

<sup>116</sup> Such as customs blocks, logistics compromised by the restrictions of the emergency period, reduced production capacity, shortage of raw materials and other critical issues related to the current global crisis.

### 3.3 COVID-19 Procurement and the Need for Competence

In this section, we will focus on the management of emergency procurement processes.

Thanks to the kind cooperation of the Procurement Office (University of Padua), we will highlight the main countermeasures adopted to deal with the COVID-19 crisis in terms of procurement procedures, and the critical issues that have emerged. The discussion took place with Dr. Infante, Dr. Paluan and Dr. Pieressa (Procurement Office, Unipd). Referring to the experience of this contracting authority running centralized public procurement for the University of Padua, we now first frame what discussed in the previous sections: starting from information on real procurement activity offered in the interview, we present our considerations on examples of the COVID-19 emergency procurement. A list of questions posed in the interview is in Appendix to this thesis.

Finally, we will focus on competence, a very important factor that influences the application of discretion in standard and emergency public procurement processes. Competence will be analysed from the perspective of the centralization vs. decentralization decision in emergency procurement.

#### 3.3.1 *The Management of COVID-19 Procurement in the University of Padua*

Italian universities are public bodies and they are part of the public administration. However, they enjoy a certain degree of regulatory, management, and budgetary autonomy. While representing a *unicum* among public entities, universities are also subject to public awarding procedures, through which they can award contracts for the supply of goods and services of public utility.

Within the various universities, the individual departments usually enjoy relative autonomy with regard to budget and expenditure. Despite this, all universities have an internal office that deals with making purchases on behalf of the central administration and to meet the need for aggregation of specific interdepartmental procedures.

The University of Padua delegates these tasks to a specific area, the *Area Patrimonio, Approvvigionamento e Logistica (APAL)*. This area is divided internally into four offices: the Procurement Office, the Tender Office, the Goods and Services Management Office and the Assets and Logistics Office.

Most of the tenders held by the University's central administration offices are managed through e-procurement. E-procurement consists of the purchasing of goods and services through an electronic platform. It does not represent a different type of procurement but it is a different mean to manage the processes. The University of Padua has set up its own Electronic Market, called "MEUnipd", using the MEPA<sup>117</sup> ("Mercato Elettronico Pubblica Amministrazione" / Public Administration Electronic Market) platform already available for public administrations. MEUnipd reflects the specificities of the University in the procurement of goods and services for amounts lower than the EU threshold. Registration on the portal and the qualification for at least one category is an indispensable prerequisite for the economic operator to obtain and/or maintain its authorization to access the electronic market.

The management of this platform is entrusted to a specific sector of the purchasing area, the Procurement Office. This office is divided into two sectors: the one dedicated to purchasing planning (*Area Programmazione / Planning Office*) and the one dedicated to e-procurement. Thanks to the thoughtful discussions with the managers of these two sectors, we have extrapolated important insights to complement what has already been highlighted in the previous chapters.

The University of Padua is a unique body consisting of 32 Departments that have a budget and spending autonomy with respect to the central administration and that can select the awarding procedures autonomously. Below the 214,000 euros threshold, the main awarding procedures used by the university are: the direct assignment with a request for an estimate for contracts up to € 75,000; the negotiated procedure with a minimum of five invited suppliers for contracts worth between € 75,000 and 214,000 euros. Above the threshold, the open procedure is the most used one (as required by European Union directives).

The high-value contracts are managed by the central administration. It also manages the procurement of those goods/services of common utility<sup>118</sup> and coordinates the needs of the departments to exploit the advantages of potential aggregate procedures for goods/services required by multiple departments.<sup>119</sup> This leads to considerable advantages due to the greater bargaining power, stronger protection in case of non-fulfilment, and greater consideration of suppliers, allowing for better procurement conditions. Besides, the individual Departments usually do not have the larger number of skilled personnel dedicated to public purchases, as the

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<sup>117</sup> In accordance with art. 36, paragraph 6, of the Codice degli Appalti which establishes that "*in order to carry out the procedures referred to in this article, the contracting authorities can proceed through an electronic market that allows telematic purchases based on a system that implements procedures for choosing the contractor entirely managed electronically.*"

<sup>118</sup> For example cleaning services, portorage, audio-video systems, catering, etc..

<sup>119</sup> A recent example is the procurement contract for helium (necessary in the laboratories of several departments), managed by the central administration's Purchasing Office.

central administration has. In this way, the Departments can delegate these complex activities to more competent bodies, focusing on their main mission.

Indeed, in recent years there has been in the university a trend towards a progressive centralization of purchasing processes. The central offices coordinate needs to reduce the number of procedures and to avoid duplications. On the other side, some departments struggle to delegate certain procedures, given that they are able to make the purchase more quickly, without waiting for a centralized call for tenders. This can create unnecessary overlaps between departments' purchasing, that only a central coordination between the parties can help to avoid. In addition to ordinary contracts, in the COVID-19 emergency, the University has had to deal with new needs and operating methods. The new needs refer to purchases in the health-care sector for the prevention and contrast of the emergency and for the implementation of new teaching methods, which required significant adaptations. Those required significant adaptations in the procurement process. In the interview, it emerged that there is often an excessive focus on fixed administrative procedures, rather than adapting them to the market situation in which they are carried out. In particular, during the emergency, the need to procure a good/service represents the priority. The procedures should favour this goal, rather than slowing down the dynamics of the process. Despite the risks of corruption and opportunistic behaviours, focusing on the effectiveness of the procedures rather than the on the procedure itself allows contracting authorities to overcome obstacles in the tender phase and to conclude the purchasing in a reasonable period of time.

Additionally, an excessive focus on the compliance with an administrative procedure moves away the focus from what needs to be evaluated in emergency situations: the market. In this sense, the impact on the procedures may be considered as the final link in a chain: the main effect is on the markets, which force the regulatory system to create alternatives to the ordinary procedures to face this variability. Indeed, emergency procurement affected the procedures, but as a consequence of the variability of the market conditions.

After the outbreak of the pandemic, most public and private businesses had to react as quickly as possible to the resulting travel restrictions. The main response was to encourage agile working, teleworking and e-learning for educational institutions. This has led to an exponential increase in the demand for devices to adapt to the new conditions. The PC market is a striking example. The demand for PCs has burned companies' inventories in a short time, and the production has slowed down for the COVID-19 restrictions.

The University of Padua had to face this problem, especially in the second phase of the emergency. It had to procure 1,700 computers, necessary for the *Concorso Nazionale di*



*Medicina* on September 22<sup>nd</sup>, 2020.<sup>120</sup> Here, the problem was not the presence of constraints in the awarding procedure, but the constraints imposed by the product availability in the market and the constrain belonging to the use of pc in the Concorso. All the recent decrees gave wide derogations on the procedure's rules. Unfortunately, this flexibility would not solve the supply-side problem deriving from the non-availability of the product. Before choosing the best procedures, the PB should worry about finding the needed product and the channel that makes it available. This research led to directly contacting the few suppliers able to satisfy these requests to test and evaluate the feasibility of the operation. In this situation, given the potential effects of a missed purchase,<sup>121</sup> it was necessary to directly contact the suppliers to compare prices and delivery times. This had to be done while the product was already in production, since waiting for commercialization meant risking not to find availability given the always high demand. Therefore, this procedure was the only possible way to obtain the product in the desired time.

For high-value contracts,<sup>122</sup> the ordinary law provides for the use of the open European procedure. However, the emergency conditions and the strong need to avoid the failure of the supply led to the implementation of unconventional procedures, always remaining within the statutory limits. In this framework, there is an obligation for the PB to justify any decision. In particular, the main concern for the PB was the compliance with the principles of the *Codice degli Appalti*. In the case of procurement of 1,700 computers, the principle of transparency was met by giving publicity to all the steps of the procedures; additionally, the technical report was written, to explain that this choice was the only possible one. Furthermore, even if minimal, the competition was protected by comparing the estimates of three suppliers, the only ones able to satisfy the requests within the desired times.

Although covered by legal protection, this is an example of how urgent conditions provide for atypical and unconventional solutions.<sup>123</sup> Even in discretionary procedures, remarkably different from canonical ones, what mainly matters is the approach with which the contracting authority acts and the purposes it wants to pursue. For a public service body, these purposes must always be linked to the public service, before any personal interests. In emergency situations, these requirements and the clear transparent motivation of the decisions represent

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<sup>120</sup> This situation was aggravated by the difficult planning and organization activities, with the provisions of the Ministry (MIUR) received at the beginning of August.

<sup>121</sup> Considering the disputes and litigations that a cancellation of the event could have provoked.

<sup>122</sup> The total value of the contract for the supply of about 1,700 laptops was around 1,000,000 euros.

<sup>123</sup> Always bearing in mind the obligation to provide an adequate and valid reason for the choice made and the existence of such conditions.

crucial factors even for the reputation of the contracting authority.<sup>124</sup> Indeed, the relationship with suppliers and all the stakeholders is another point of pressure for the public buyer which, if not properly managed, can lead to disputes and litigations.<sup>125</sup>

We now introduce another example of PB's discretion in a procurement process undertaken by the University of Padua, concerning new teaching methods. E-learning has forced many institutions to offer online and in a short time a service that was previously offered face to face. The University had to guarantee the dual teaching service, providing the technical infrastructure by the beginning of the lessons in October. For this reason, it carried out three assignment procedures for the modernization of the audio-video systems of approximately 400 classrooms. Five suppliers (including an innovative start-up) were selected using a negotiated procedure with a limited number of economic operators.<sup>126</sup>

Here, the discretion was applied to the suppliers' selection. The contracting authority selected them on the basis of technical feasibility and size requirements and not only on objective criteria such as price. Although the price is still relevant, in emergency situations the assessment of feasibility is decisive. In normal tenders, the choice of an unreliable contractor leads to delays and possible disputes that can be remedied. Differently, in these situations, mistakes in the selection of the contractor could stop the execution of the work, with reduced opportunities to remedy before a stringent deadline. This evaluation is even more important because errors in the selection phase are difficult to detect in the short time frame this procurement process has been run.

An example of this issue was the procurement of protective masks. The lack of availability, the immediate need, and the presence of opportunistic suppliers led to purchases of devices with false or unsuitable certificates. For these healthcare products, errors on the certifications lead to serious, potentially life-threatening consequences. These problems have exacerbated the danger of obtaining certain goods at prices that are anomalously lower than the average ones but with serious shortcomings in their technical characteristics. In these situations, the urgent need for masks has led many firms to convert production to meet the demand for these goods.

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<sup>124</sup> Another example that emerged from the interview concerns the hospital of Padua which exploited pre-existing agreements with some suppliers, extending them for 6 months. Once the critical phase of the emergency has been overcome, it has called a tender through an open procedure to assign and extend the supply. This option was allowed thanks to the report of the entity which explained the reasons for the choice and the urgent need to proceed with the purchase. This choice represents an example of an atypical use of discretion but which represented the only possible alternative to satisfy the request in the necessary time.

<sup>125</sup> From the interview, it emerged that, in these particular situations, suppliers are much more pressing regarding compliance with principles such as the rotation between firms and about the reasons with which suppliers are invited.

<sup>126</sup> Always ensuring compliance with the minimum number of suppliers to be invited.

Sometimes, this has led PBs to purchase non-certified products, given the low prices and the strong external pressure.

A crucial aspect in the evaluation and selection of the supplier is the level of competence and skills of the PB. In the previous chapter, we already explored this issue in relation to the degree of discretion granted to the contracting authority, and its impact on the procurement process. Through data and analyses, Section 2.2 shows how the effects of discretion are only a consequence of the level of competence through which such discretion is employed.

In an ordinary tender, the PB's lack of specific skills can be partially hidden by the strict adherence to procedures and the possibility of remedying potential errors. Differently, competence plays a relevant role in an emergency procurement tender. Here, the PB resorts to procedures that require greater skills to adapt to emergency needs. Furthermore, in situations of urgency, any mistake can mean serious losses both from an economic and also from a human point of view.

The managers of the University of Padua's procurement office stated that one of their office's key characteristic is the presence of competent employees. A strength of this office is its multidisciplinary approach, which can address the problems by combining employees' skills and knowledge. They stressed that, within the same office, there are figures who have economic, legal, and engineering background. The combination of several skills makes the purchasing process as efficient and effective as possible from an economic point of view. From a legal perspective, competent figures make it easier to manage administrative procedures. Furthermore, at the technical-engineering level, engineers allow to prepare more effective calls for tenders and to verify much faster the possession of the requirements by the bidders, significantly reducing the number of disputes. Finally, in addition to the specificity of the skills in the various sectors to which they belong, the relevant aspect is that all the managers of the Procurement Office (Unipd) we interviewed had past experience in the procurement sector, both at a private and at a public level.

The COVID-19 pandemic has clearly shown the shortcomings of public administration lacking competence and skills. This has reinforced the need for a professionalization of civil servants in procurement offices. An example brought by the interviewees was the comparison with the Dutch case, in which there are schools and universities dedicated to training figures in charge of public procurement, offering a wide range of skills to obtain improvements in the medium-long-term on performance.<sup>127</sup> Although these qualities should be the fundament of each purchasing body, they represent the main cause of public procurement inefficiencies. As

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<sup>127</sup> As an example, the *Centre for Public Procurement (UUCePP)* in Utrecht.

documented in papers about institutions in other EU countries, we observe how most of the employees in procurement offices do not have the skills or experience to fill certain roles (Chever and Moore, 2012).<sup>128</sup> This represents a serious issue for the efficiency of the public procurement processes and involves many other countries.

### 3.3.2 *Centralization and the Need for Competence*

The interview on Procurement Office of the University of Padua gives an opportunity i) to analyse the importance of competence in emergency procurement and ii) to study how procurement outcomes could be affected by the degree of centralization and the level of competence vary. Indeed, the competence of PBs usually grows as they move from local to central authorities. Different outcomes could also be explained by the different availability of economic and technical resources available to central authorities (Chiappinelli, 2019).

To overcome the lack of competent figures at the local level, the only alternative in the short term is represented by the centralization of purchases. In emergency settings, the centralization of purchasing processes is a trend common in almost all countries. In Italy, centralization has been implemented both through entities that already existed under standard conditions and/or through entities created in an extraordinary way to deal with this situation.

The most important central purchasing body at the national level is *Consip S.p.A.*. It ordinarily manages procedures at the national level, aggregating the purchasing of other bodies. It employs more than 400 employees. Consip was not the most important centralized body to which procurement procedures were delegated. Other important entities have carried out much of the procurement in the early stages of the emergency. Among these, the most important are the *Settore degli Organi Centrali* (Central Bodies' Sector), which includes the procedures implemented by the *Commissario Straordinario* (Special Commissioner) for the emergency, and the *Dipartimento di Protezione Civile* (Civil Defence).

The ANAC report for the period March-April 2020 noted how the expenditure was distributed among the various entities at a central level (Fig. 7<sup>129</sup>). The first evidence that emerges is the percentage of centralized expenditure on the total: 78.4%.<sup>130</sup> Almost half of the expenditure

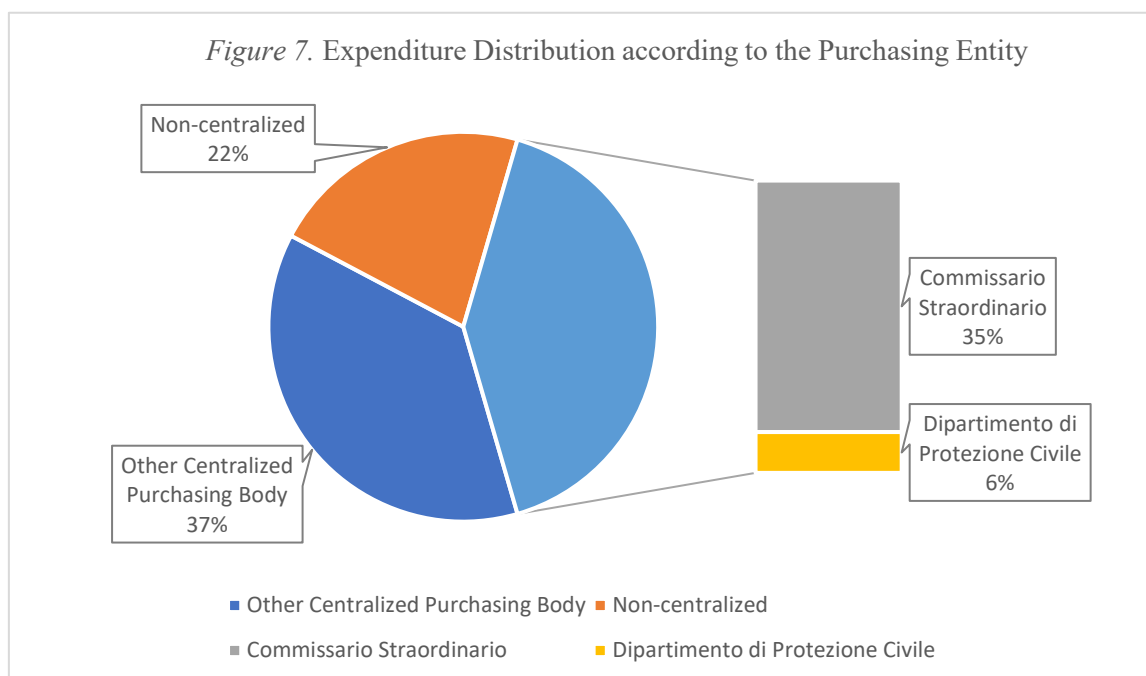
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<sup>128</sup> In France, 61% of public procurement employees does not have past experience in this field (Saussier and Tirole, 2015).

<sup>129</sup> Data: ANAC Report, 13/08/2020.

<sup>130</sup> The expenditure deriving from centralization instruments officially accounts for 37.3% of the expenditure for the emergency, 2.16 billion in absolute terms. However, this calculation does not include the expenses incurred by the *Commissario Straordinario* and the Civil Protection Department which impact for 41.1% of the total, as they are not considered as aggregation tools, but as separate procurement contracts. If combined, the total reaches 78.4% (4.5 billion) (ANAC report, 13/08/2020).

incurred in the period for the implementation of measures and the procurement of goods and services to combat the emergency was supported by the *Settore degli Organi Centrali*<sup>131</sup> and the Civil Protection Department (41.3%).



Although the trend in the emergency tenders moves towards the centralization of purchases, we note that there are many central purchasing bodies. Additionally, further special figures have been appointed *ad hoc* (such as the *Commissario Straordinario* for the COVID-19 emergency) and purchasing power has also been given to the Civil Defence Department. This fragmentation between central entities was preferred to other solutions, such as a more massive reliance on entities already active and competent in the procurement sector.

The greater use of *Consip S.p.A.*, for example, could have incentivized greater coordination between purchases, avoiding problems of duplication of human resources and associated costs. Furthermore, since this institution is ordinarily in charge of these tasks, the experience and skills accumulated could have favoured an even more efficient process.

Thanks to the data provided by the Italian anti-corruption authority, ANAC, we can see how the aggregate expenditure was carried out by all these entities during the emergency (Tab. 4<sup>132</sup>). In this analysis it is useful to distinguish procurement through *accordi quadro* (framework agreements) or conventions from other procurement contracts.

<sup>131</sup> Almost all the expenses incurred by the first sector are attributable to the Extraordinary Commissioner.

<sup>132</sup> Figure 3. “Indagine conoscitiva sugli affidamenti in regime emergenziale di forniture e servizi sanitari connessi al trattamento ed al contenimento dell’epidemia da COVID 19 – Report di seconda fase, 13/08/2020”.

Table 4. Expenditure Distribution of Centralized Purchases

Tipologia stazione appaltante	Accordi Quadro/convenzioni		altre procedure esclusi accordi quadro/convenzioni (CIG+smartCIG)		totale procedure	
	importo	% importo	importo	% importo	importo	% importo
Centrale Committenza	425.732.794	22,9%	3.863.620	2,9%	429.596.414	21,5%
Centrale Committenza - Settore Sanità	435.795.999	23,4%	67.993.772	50,7%	503.789.771	25,2%
Consip Spa	657.500.447	35,3%	2.378.400	1,8%	659.878.847	33,1%
Soggetto aggregatore	342.899.878	18,4%	59.905.703	44,6%	402.805.582	20,2%
<b>Totale</b>	<b>1.861.929.118</b>	<b>100,0%</b>	<b>134.141.495</b>	<b>100,0%</b>	<b>1.996.070.613</b>	<b>100,0%</b>

Source: ANAC Report, 13/08/2020

From these data, it is clear that the contribution of the main central purchasing body (Consip S.p.A.) is relatively low. In particular, if Consip plays a relevant role in procurement through framework agreements or conventions, its contribution drops drastically in the management of all other types of contracts (1.8%). Overall, one-third of the purchases was managed by Consip S.p.A. (in particular for non-health-care procurement). A greater presence of Consip could have been expected, given its number of employees and the concentration of skills in the public procurement field.

Furthermore, framework agreements in the emergency phase - when contractual forces change significantly and prices with them - do not represent the most important type of contract used, despite their importance. Excluding smart-CIG from the total calculation, most of the procedures are tender contracts (60.4%),<sup>133</sup> for a total absolute value of 3.3 billion euros in two months.

Another important aspect that distinguishes the debate between centralized or decentralized procedures is the analysis of the State-Regions relationship. Since this is an emergency that has strongly affected the health sector, the regions were able to decide the procurement of some goods and services whether to proceed independently or rely on the government.

The use of central purchasing bodies and other aggregators can be analysed by splitting the sample on a regional basis. The choices operated by the Regions has not been homogeneous: some have delegated almost all of their, others only a small part. In particular, 7 of them have resorted to central purchasing bodies and regional aggregators for less than 1% of the

<sup>133</sup> Among these, 37.6% derives from the use of demand aggregation tools (29.8% from *accordi quadro* and 7.8% from conventions).

expenditure, and 8 for more than 50%. The former may not have taken advantage of the economies of scale at the state level deriving from the greater quantities purchased and the more bargaining power over the few available suppliers.

To give a concrete example of the effect of this heterogeneity, ANAC denounces a strong variability in the prices paid by different PBs for personal protective equipment, i.e. FFP2 masks. The price of this medical device ranges from 2.20 euros per item (price paid by the Civil Protection Department and *Consip S.p.A.*) to 7.50 euros paid by the Lazio Region, highlighting the potential savings that can be obtained through more homogeneous management for the supply of certain goods.<sup>134</sup>

This analysis shows that the greater skills are usually concentrated at a central level and, especially in situations where quick answers to problems are required, reliance on more competent bodies can bring benefits for the performance of public procurement. Centralization is often seen as a cause of complexity and lengthening of time due to the bureaucratic and administrative process that usually pervades these processes. This emergency provided an opportunity to demonstrate the opposite, with 78% of the expenditure occurring centrally (ANAC Report, 13/08/2020).

The relationship between centralization and performance is positive in particular in presence of competence and skills. Differently, central delegation does not necessarily make the procurement process more efficient. Although most of the public expenditure for the emergency in the period March-April 2020 was centralized, the use of different central purchasing bodies with different skills still made the overall management more fragmented.<sup>135</sup> The (relatively) low incidence of *Consip S.p.A.* is of particular concern. Instead, a large part of the expenditure has been delegated to ad hoc figures or entities that do not have the public procurement procedures as core business (such as the Civil Protection Department).

This last section has showed how most of the criticalities that emerged in public procurement - both in standard and in emergency conditions - strongly depend on the competence of people managing the purchasing process. We assessed the potentiality and criticalities of the extraordinary procedures used to deal with the COVID-19 pandemic, one of the most disastrous

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<sup>134</sup> This heterogeneity can also be found when comparing the expenditure per citizen of the various regions. Starting from an average expenditure value of 42.6 euros per capita, the regions that spend the most amount to around 75 euros (with an exception represented by Tuscany, which reaches 101.2 euros per capita), while the most virtuous regions spend between 5 and 10 euros (mainly in Southern Italy). These values must also consider the different intensities and the effects with which the emergency initially struck, involving in a more important way the regions of Northern Italy.

<sup>135</sup> An example of inefficiencies in the procurement and distribution phase is represented by the case of syringes for administering vaccines. In at least two regions (Tuscany and Lombardy) the type of syringes purchased through the *Commissario Straordinario* was found to be wrong in obtaining the six doses of vaccine, which can be extracted from each vial. This resulted in the average doses per vial being lowered to 5.5 causing delays in administration.

emergencies in recent years. And, as a final focus, we have studied and discussed how the competence and discretion of the PBs play a crucial role in the efficiency of the emergency procurement and in the effectiveness of the results.



## 4 CONCLUSIONS

This work can be divided into two main parts: the relationship between discretion, competence, and rules in standard public procurement processes; and the analysis of COVID-19 procurement and how the purchasing process changed according to the pandemic emergency.

We described the main awarding procedures usually available to the public buyer and their main effects on procurement outcomes. Awarding procedures are divided into auctions and negotiations. The former allow greater competition among bidders (in particular, open procedures) and lead to obtain a lower average price. The latter offers the PB the possibility to negotiate with suppliers on multiple aspects, face shorter awarding times and reduce the costs of any ex-post renegotiations.

We studied the effects of a selection mechanism that assessed the past performance of bidders, in addition to the technical-legal aspects of the offers. Qualification systems based on reputational mechanism turns out to be very effective for the contracting authority and for the market in general: on the one hand, this tool reduces the overall costs for the PB (the additional cost in the selection stage is more than compensated with the reduction in legal disputes and ex-post renegotiation costs); on the other hand, this tool produces incentives for firms to invest in adapting to the required quality standards and to offer superior quality services.

The reputational mechanism is an example of discretion given to the contracting authority. In discussing the literature on the effects of the PB's greater discretion on procurement outcomes, we then refer to the level of competence of the PB. As an empirical result from different contributions on public procurement data, it emerged that a higher level of competence leads to higher levels of efficiency and effectiveness in public procurement processes, especially when a greater degree of discretion is granted to the PB. On the other hand, tightening the rules leads to an increase in the performance of CAs with a lower level of competence.

In the short term, tightening the rules could be the most effective remedy to get better procurement outcomes from a not competent PB, along with a strong investment to increase the PB's skills for the management of future procurement.

The incidence of competence is also part of the relationship between discretion and the risk of corruption in public procurement. Here, the literature highlights how the emergence of corrupt practices is more likely in environments where the PB's competence is lower: increasing PBs' competence offers important results both in improving the efficiency and effectiveness of public

procurement and in creating an important obstacle to the agents' opportunistic and corrupted behaviour.

In the last chapter, we focused on the analysis of public procurement in emergency situations. While in standard conditions the degree of discretion left to the PB represents a choice, in emergency procurement it often becomes a forced solution to face new and unpredictable circumstances.

Here, we have highlighted how the risk of corruption can increase because of the urgent conditions in which the PB operates and because of the stringent timing that hinders the effectiveness of normal control systems. Taking a cue from the COVID-19 emergency, we also discussed the main effects of the pandemic on the public procurement processes. We have noticed a sharp rise in prices and an increase in delivery times, mainly caused by the shock that the market has suffered in both the supply and the demand. This has pushed towards a centralization of purchases in Italy: on ANAC data, we observed that the centralization did not involve only the central purchasing bodies already responsible for the purchase of goods and services for the public administration; often the Italian central government has delegated purchasing activities also to other bodies - not involved in public procurement processes ordinarily - and to specifically appointed new figures.

In our assessment, this fragmentation could have led to incur in additional costs due to the duplication of human resources and procurement procedures. Greater delegation to the already existing purchasing bodies – for example to Consip S.p.A., which was specifically created to manage public procurement of goods, services and furniture - could have helped in containing costs. Consip has managers with a high level of competence and bargaining ability in running procurement procedures. Moreover, with delegation to Consip, larger economies of scale in purchasing could have been exploited.

Where purchases have not been centralized, the fragmentation has led to differences between Regions in terms of prices and procedures, in particular for health procurement. This outcome highlights how centralization would have allowed greater price/quality homogeneity (i.e. lower average prices and higher average quality) and coordination in the response to the emergency.

Note that our study considers the first phase of COVID-19 emergency response (March-April 2020), in which coordination effects referring to the unexpected setting to face could be relevant. An overall assessment of the procurement management under the COVID-19 emergency period in Italy also requires an analysis of the consequences in the medium-long term: this is clearly not possible now. The medium-long term analysis will need reliable data to

assess the goodness of the PBs' choices in a period in which rules allow for larger discretion in managing the procurement process. In particular, it would be interesting to study the efficiency of procurement run by a large contracting authority already present and operative (as Consip at national level, or other at regional level) as compared to new ones (as the team conducted by the Commissario Straordinario or the Civil Defence Department). This analysis could produce interesting evidence on the relevance of PB's competence in managing emergency procurement.

To conclude, we can observe how the trade-off between discretion and rules should not be discussed without adequately considering the importance of PB's competence. Indeed, both in standard and in emergency conditions, most of the PB's inefficiencies belong to a lack of required skills and experience in managing the complex public procurement process.



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Codice degli Appalti

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L.D. 76/2020, July 16<sup>th</sup>, 2020



## *Appendix*

Interview with Dr. Infante, Dr. Paluan and Dr. Pieressa (Procurement Office, University of Padua)

### QUESTIONS:

- *How does the University's e-procurement system work?*
- *Is the e-procurement system just a different way of making purchases or does it provide for some particularities at the regulatory level?*
- *Are all purchases managed through e-procurement or through other methods?*
- *What are the main requirements that suppliers must comply with in their relationship with a non-private entity?*
- *How are purchases managed? Centralizing or delegating to individual departmental offices? Are there any thresholds beyond which purchases are centralized?*
- *What is the relationship with the departments and how can their autonomy be reconciled with the need to exploit the potential advantages deriving from centralization?*
- *If and how does the level of competence affect the public procurement process?*
- *Does anything change with respect to contracts for works, supplies or services? Does anything change compared to the ordinary regulation?*
- *What are the main criteria used in the selection of the supplier? If and how do they change according to the contract value?*
- *What were the main regulatory and procedural changes as a result of the emergency situation? Were they applied on a recurring basis or only partially?*
- *Have any pre-established agreements (framework agreements) or conventions been exploited for these urgent conditions?*

- *What are the main considerations on the effects of the exceptions on timing, purchase prices and participation in tenders?*
- *Which aspects introduced by the derogations would it be desirable to be maintained even in standard conditions?*
- *What are the main problems and criticisms emerged in the management of emergency procurement?*
- *How the relationship with suppliers is changed?*