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Comparative Analysis of the European Centralised Public Procurement

ABSTRACT: *When analysing centralised public procurement models and solutions from the public administration point of view, attention needs to be paid to the specific features of public procurement as well as the institutional characteristics of the major central procurement organisations. In this paper, central procurement organisations in 11 European countries were compared based on interviews according to their activities, market positions and institutional characteristics. We shall address the issue of efficiency and stability of organisational structures by comparing the practice of the Central and Eastern European (CEE) and non-CEE European Countries. This comparison analyses the differences of the countries' centralised public procurement structures and reveals the diversity of analytic criteria, underlining that the legal regulatory background to public procurement is not necessarily predominant in determining specific features and characteristics. The stability and market-oriented characteristics of a centralised public procurement system have an impact on the innovativeness of central purchasing bodies (CPBs) and on the development of their service provider nature, which should be taken into account by the CEE countries with a less-developed public procurement culture.*

KEYWORDS: centralised procurement, innovative public procurement, central purchasing body, comparative analysis

JEL CLASSIFICATION: H4, O31

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INTRODUCTION

The role of public procurement is to ensure that public money is spent efficiently, while supporting goals important for society as a whole and economic development. It is well known that huge amounts of public money are spent by public procurement organisations, but the results of the literature also clearly show the importance of innovation (Edler and Uyarra, 2013; Uyarra and Flanagan, 2010; Rolfstam, 2013), environmental protection (Rainville, 2017; Cheng et al, 2018) or even the development of SMEs (Flynn, 2018/a; Ancarani et al, 2019; Hoekman and Taş, 2020). This paper examines a less-studied area, the organisational and economic background of public procurement, highlighting the issue of centralisation.

Public procurement-related researches have not paid much attention to the analysis of structures that form the basis of a centralised public procurement system. The stability and market-oriented characteristics of a centralised public procurement system have an impact on the innovativeness of central purchasing bodies (CPBs) and on the development of their service provider nature, which should be taken into account by countries with a less-developed public procurement culture. Economic literature has not paid much attention to the analysis of structures that form the basis of a centralised public procurement system, nor to those aspects which influence their stability and flexibility. International literature deals with the great extent of the structural study of procurement and public procurement practices (Patrucco et al., 2017, 2019; Aboelazm and Afandy, 2019; Flynn, 2018/b; Placek et al., 2018; Kakwezi and Nyeko, 2019). However, literature fails to develop such frameworks which help analyse and structure knowledge about the organisational forms. Analyses of the impact of centralisation are also appearing, where a positive linkage is found between the levels of centralisation, digitalisation and procurement performance in Italy and the USA (Patrucco, 2020). Preda (2019) makes comparisons within the European Union (EU), including one Central and Eastern European (CEE) country. These findings can

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also provide a basis for the evaluation and further consideration of individual European countries' frameworks. The significance of comparing CEE and non-CEE countries is that there are differences in development between the Member States regarding structural and efficiency issues. However, in the long run, learning about the differences can also provide an opportunity to learn about more complex benefits and societal impacts.

In this study, eight non-CEE European countries were chosen to be compared with three CEE countries. In addition to the identification and overall comparison of the central procurement organisations, the investigation focused, in particular, on legal forms, the nature of use, the structure of financing, and the products and services to be procured. We shall highlight the examples that are distinctive at the European level or largely different from those of the majority. A similar analysis of the issue of implementation of the European directives (2014/23/EU, 2014/24/EU, 2014/25/EU; hereinafter, directives) has not yet been carried out, given that the legal environment expressly emphasises and supports the activities of central purchasing organisations in CEE and non-CEE countries.

The aim of the paper is to compare the public procurement practices in European countries using a 'four-element theoretical framework' for describing centralised procurement solutions. The theoretical contribution of the paper is to make a comparison using the model setup, which shows that there are significant differences between the practices of different countries in terms of efficiency and stability. These differences are mainly geographical and are due to economic and political governance characteristics. A further significance of the results is that they highlight the need for further research on the ability of different national models to achieve the benefits of centralised public procurement identified in the literature.

This paper will be organised as follows. After a brief literature review and explanation of the research method, we highlight four factors that are important for the design and functioning of structures. We shall discuss the CEE and non-CEE countries' centralised public procurement characteristics in different settings. In the final section, we conclude the most important findings of our research.

LITERATURE REVIEW

The problem of centralisation in organisations is relevant in the literature. It is also reflected in both the corporate procurement– and public procurement–related researches. Recently, the pandemic situation in Europe has triggered studies (e.g. Vogler et al. 2022b; McEvoy, Ferri, 2020), while the issue of centralisation has also been addressed in several African countries (Nzimakwe, Biyela, 2021; Aboelazm and Afandy, 2019) and in the USA (Preda, 2019; Yukins et al., 2020).

Literature calls attention to a large number of advantages. According to Eriksson and Westelberg (2011), joint public procurement has an expressed positive impact on performance. Erridge (2000) reported on lower costs that can be achieved in the wake of professional training cooperation, that is, he expressly classified this mode of cooperation as a practical example of joint procurement. Kim et al. (2012) identified cooperating and opportunistic interorganisational forms of behaviour. Vogler et al. (2022a) studied pharmaceutical procurement and identified lower prices, improved bargaining power, improved governance and enhanced transparency among other advantages; so, they concluded that centralised pharmaceutical procurement (CPP) can be an effective policy tool if implemented wisely. The analysis of cooperation from the viewpoint of dependence is quite frequent. Ranjay and Sytch (2007) interpreted the so-called 'joint dependence' in procurement relationships. Several studies have addressed the reasons for and motivation of cooperation (Wang et al., 2005, 2006; Essig, 2000; O'Brien, 1995).

Centralisation does not necessarily mean an organisational framework, but can also be a temporary cooperation, which also results in economies of scale. Good examples are joint procurement initiatives. O'Brien (1995) expressly identified the objectives of cost reduction and service development as leading to joint procurement agreements in the sector of public service providers. According to Wang et al. (2005), there is motivation for procurers so long as the costs of coordination are sufficiently low. The study of Wang et al. (2006) analyses the conditions which lead to the choice of a joint procurement strategy. Teabok et al. (2006) studied the triad of joint procurement–production–supply, where joint procurement clearly presupposes an economical solution. However, some results suggest that some ecologic advantages can be obtained more locally (Mélon, 2020)

The decision to go in for centralisation and its success in corporate procurement depends on a number of factors. Rosemeijer (2000) emphasised the relative homogeneity of demand and regarded the level of development and maturity of procurement as factors that have a direct impact on the mode of implementing centralisation. There are a number of interim solutions in between the individual levels of centralised procurement from the transfer of information through joint planning to the establishment of

a common procurement organisation which can be very diverse with respect to the content of their cooperation. Literature on procurement regularly describes a global approach and emphasises on synergies and the efforts required for implementing a common objective. For example, Trautmann et al. (2009) investigated private companies and proposed that integration approaches should vary depending on the three contingencies of category characteristics, supply environment characteristics and interdependence of the purchasing units. Smart and Dudas (2007) reported that pooling the requirement needs proper strategies and actions. Yet, public procurement literature on centralisation is relatively scarce and the number of studies is low even when research on joint procurement is considered (Patrucco et al. 2019). The majority of existing materials analyses joint procurement, realised through the party's own initiative and by their commitment. If, however, this is not the case, but it is a matter of centralisation determined by law, the implementation of the common objective by the central procurement organisation and the users is not necessarily identifiable and there is less emphasis on synergies and the global approach.

The literature on centralised procurement points to a number of benefits and implementation issues. The relatively small number of studies and the heterogeneous research focus make it difficult to draw a picture of the characteristics of the different forms of centralisation that have been implemented. There is very little comparative analysis in the literature. Yet, SIGMA (2010) is perhaps the only one to publish a comparative analysis where it has identified the characteristic features for some EU Member States. The study's analytical framework for centralised public procurement examines several policy and procedural issues including four focuses having economic consequences: financing model, range of goods and services, legal framework and its nature of use.

Literature review reveals that the centralisation of procurement is addressed in a small number of studies, which differ significantly in their research focus (geography, research question, etc.). However, because of these very different focuses, the results are difficult to generalise or to compare. Our study aims to address this research gap by comparing the institutional arrangements for centralising procurement in European countries and highlighting the differences from economic aspects.

CONCEPTUAL FRAMEWORK AND RESEARCH METHODS

A 'four-element theoretical model' was used as the research framework for the study. These elements are the following:

- A) Legal form: What type of legal entity is the CPB, and which organisation owns or controls it?
 - B) Nature of use: What are the characteristics of its use, and how contracting authorities can decide whether or not to join to the public procurement framework agreements, contracts of the CPB?
 - C) Financing: How is the budget of CPB financed?
 - D) Range of goods, services: What kind of products or services are centralised? How stable is this procurement scope of the CPB?
- These four factors are also reflected in the previously cited literature and are therefore suitable for identifying and comparing the main characteristics of each system. By examining the above four-element model, we seek to answer the following research questions:

RQ1: Is it possible to identify differences between the countries' central public procurement model studied based on the four-element framework?

RQ2: If differences can be identified, are they outlined for CEE and non-CEE countries?

The four aspects allow to compare the nature, flexibility and adaptability of the centralised public procurement service provider. Flexibility can be linked to the non-mandatory use of a central purchasing body, the use-based financing and the legal form of the central procurement organisation, and the diversified product range allows the institution more leeway.

To study the characteristics of centralised purchasing systems in practice, the Tenders Electronic Daily (TED) analysis and case study method was chosen. Our research was focused on examining the centralised public procurement systems of 11 European countries. In selecting the countries, care was taken to include small and large, old and new EU countries, and countries from the north, south, east and west. We focused on the largest central procurement organisations, whose activities have the greatest impact on the public procurement market of the given country.

First, the research examined public procurement data available on TED (www.ted.europa.eu). In examining the TED data, we concluded that TED is of limited use for examining the activity of central purchasing organisations in each country, as in many cases, the data on the long-term procurement methods (framework agreements, dynamic purchasing systems) used by central purchasing

organisations (see Table 1) are not stable and the contract size is very imprecise and difficult to assess depending on national rules. Even the European Commission's own methodology, the Single Market Scoreboard (SMS, 2019), does not take these data into account. Therefore, the pan-European TED database is currently not suitable for deeper data analysis for central purchasing organisations. However, it has been useful to examine the data to find the link between the so-called 'call for tender notices' (contract notice) and the 'result notices' (contract award notice) in a single database, which allows us to analyse the activities of central purchasing organisations in the Member States under study. Since it is mainly the framework agreements and dynamic purchasing systems that show the innovativeness of a CPB, it was possible to extract the relevant data after data cleaning and creation of a database.

Second, we used the case study method to analyse the Member States' central public procurement models. In the course of the research, we solicited the opinions of national experts and analysed and compared them. Using the expert panel method, we looked for experts who have been involved in public procurement for more than 10 years and whose CVs show that they have been involved in centralised public procurement, whether on the contracting authority, bidder or research side. In selecting the experts, it was important that the experts understood and were familiar with the four-element framework. Part of the training of the experts was presentation of the framework and the precise identification of the criteria for comparison in the given country. The experts were a mix of lawyers and non-lawyers. The communication was in English, and the terminology (e.g. CPB) was uniformly labelled for experts to ensure the same vocabulary. Following training, they prepared their national studies on the basis of a standard template, which was refined in several cases for the purpose of comparison. In writing the study, it was also necessary to provide legal provisions to support the descriptions to ensure verifiability. Before finalisation, the sources and references of the papers were checked and a comparison of the final studies could be started. The comparison was enabled by questions of identical structure. The analysis focused not so much on the legal background, although it presumed that the everyday activities of central procurement organisations are determined by nearly identical procedural rules and obligations as all the 11 countries are EU Member States.

The most important central procurement organisations concerned included the following (each CPB meets the definition of a central purchasing body as defined in Article 37 of Directive 2014/24/EU):

1. Austria – Bundesbeschaffungs GmbH (BBG, 2001)
2. The UK – Commercial Crown Services (CCS, 1991), National Health Service (NHS, 2006 as a successor)
3. France – Direction des Achats de l'Etat (DAE, 2016), Union des Groupements d'achats Publics (UGAP, 1985)
4. Germany – Beschaffungsamt beim Bundesministerium des Innern or Bundesbeschaffungsamt (BBA, 1995)
5. Sweden – SKL Kommentus Inköpscentral (SKL KI, 2011), SIC (SIC, 2011)
6. Finland – HANSEL Ltd. (HANSEL, 2003) KL-kuntahankinnat (KL, 2008)
7. Portugal – Entidade de Serviços Partilhados da Administração Pública (ESPA, 2012), Serviços Partilhados do Ministério da Saúde (SPMS, 2010)
8. Italy – Concessionaria Servizi Informativi Pubblici (Consip, 1997)
9. Hungary – Közbeszerzési és Ellátási Főigazgatóság, (KEF, 2004); Digitális Kormányzati Ügynökség (DKÜ, 2018), Nemzeti Kommunikációs Hivatal (NKO, 2015)
10. Romania – Oficiul Național pentru Achiziții Centralizate (ONAC, 2012)
11. Poland – Centrum Obsługi Administracji Rzadowej (COAR, 2010)

Assistance in selection of the procurement organisations was provided by national experts, as in several cases (Finland, Sweden, Germany, Romania, etc.), there are a number of central procurement agencies supplying individual regions characteristically upon municipal initiative. In this case, we tried to focus on major organisations covering the entire country. The above data also includes the date of establishment of the given organisation, which can be useful information during the analysis. We do not have precise data specifically on the size of the centralised procurement market. According to interviews, for example, in Austria, contracting authorities have spent around €1.2 billion in recent years through the central procurement organisation (BBG). In France, the procurement value of the most important central purchasing body UGAP's public procurement procedures has been around €2.4 billion in recent years, representing 10% of French gross domestic product (GDP). In Germany, the main central purchasing body, BBA, procured around €1 billion, while in Italy, Consip, procured around €18 billion.

In the course of the research, we divided the countries into two groups. The countries that procured in accordance with European public procurement rules were included in a group, while the three post-communist countries were examined in a separate group. The former comprise the non-CEE (1–8) block and the latter form the CEE block (9–11). The object of the study is to show to what

extent the centralised models belonging to the CEE block are similar to their non-CEE counterparts, whether some development direction can be detected in the CEE block and whether the trend that strengthens centralisation can be detected, similar to the practice of non-CEE countries.

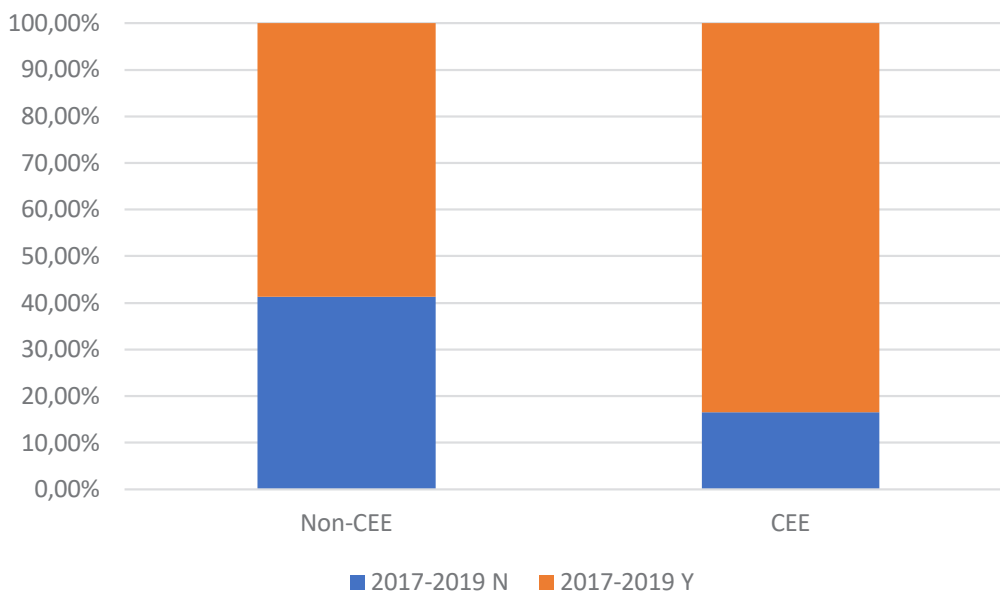
RESEARCH RESULTS

Every year, over 250,000 public authorities spend around 14% of GDP on the purchase of services, works and supplies in the EU, which takes about €2 trillion per year (EU, 2022).

If we look only at the activity of CPBs, the available TED database shows that CPBs in each Member State are very active in providing services to contracting authorities. They supply them with goods and services, typically using long-term procurement models, that is, framework agreements and dynamic purchasing systems. The two long-term models have the potential to enable large volumes and a wide variety of products to be procured by large purchasing organisations, with strong IT support, to supply themselves or their institutions. While the scope of a framework agreement is more fixed, the DPS acts as a pre-qualification system where new applicants can register at any time. Central purchasing organisations typically choose between the two models and also conduct specific public procurement procedures, depending on the type of services they provide and the extent to which they wish to serve their markets and contracting authorities in a flexible manner and at economies of scale.

Looking at the data from European countries, it can be seen that the value and number of procedures are increasing. However, if only the CEE countries are separated, the proportions change.

Fig. 1: Contract value of non-long-run procurement models and long-run procurement models of CEE and non-CEE countries (2017–2019)

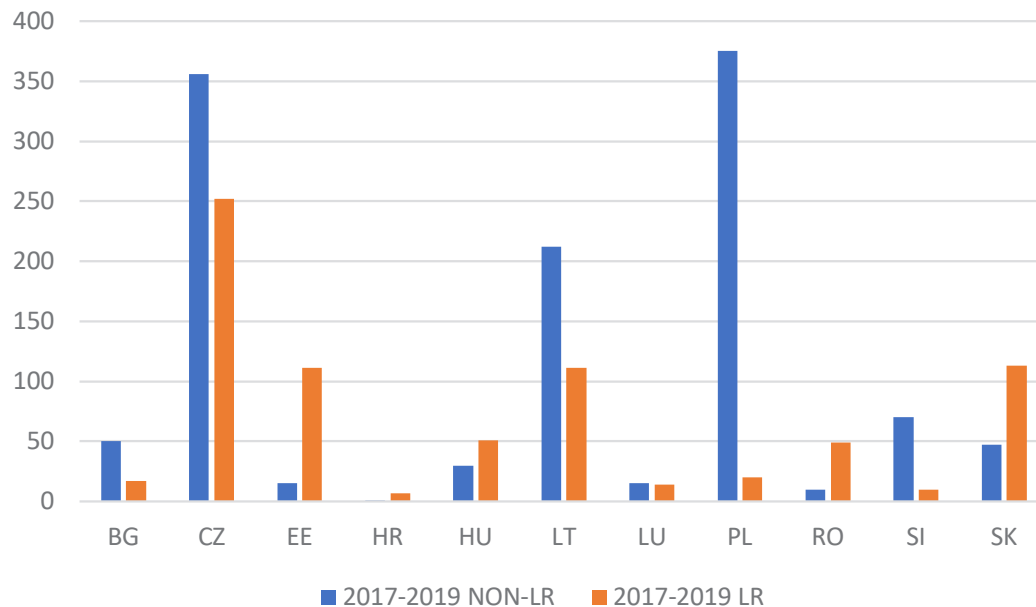


In terms of value, when comparing the amount of public money spent by central purchasing organisations using the long-term procurement model with the amount spent using the non-long-term procurement model, it can be seen that overall, CEE countries achieved a higher value than non-CEE countries between 2017 and 2019. However, the value of framework agreements, in particular, is hypothetical that should not be taken as a basis because it does not actually mean that this money will be spent by the contracting authority.

At the same time, the difference in the number of long-term procurement models and simple public procurement procedures in CEE countries between 2017 and 2019 shows that, with the exception of Romania, Slovakia, Hungary and Estonia, fewer long-term

procurement procedures are launched by CPBs in the other CEE countries. This is also an indicator of their maturity, as they try to cover needs through specific procedures.

Fig. 2: Number of non-long run procurement models and long-run procurement models of CEE countries (2017–2019)



Examining the available public procurement data and getting to know the trends is becoming more and more important. Many researches try to find a way to efficiency, to formulate proposals using data mining methods. However, real societal benefits and gains cannot be achieved by examining public procurement data alone. It is worthwhile to combine the knowledge of the institutional systems and examination of the organisational framework with the public procurement culture and practice of the given country. In international research, researchers in the EU typically do not examine CEE countries in a separate group, but are much less able to identify features that can help improve public procurement in Member States with less-developed public procurement cultures and histories. The organisational frameworks of procurement processes jointly carried out by organisations across borders or by separate organisations are at the centre of numerous procurement and public procurement research projects. As the main objective of both the corporate and public procurement activities is similar: supplying the organisation with inputs, so it may be interesting to consider the published results together.

Overall, the only official European public procurement database does not add any value to the hypotheses. Research should, therefore, be based on individual national studies. The next step in the research process is to present the results of the four-element model based on SIGMA (2010), first for non-CEE and then for CEE countries.

Main characteristics of central procurement organisations of non-CEE countries

This section first presents the structures of the non-CEE countries, highlighting the most important similarities and differences among the four model elements (legal form, nature of use, financing, range of goods and services).

Table 1 presents a general comparison of the individual countries based on their most important central procurement organisations. The criteria of the general comparison were compiled following the template sent to the national experts involving the same four factors on which our research is based.

We have indicated above that the four criteria – legal form, nature of use, financing and determination of the range of products and services to be procured – are subjects that unambiguously appear in literature and characteristically determine the activities of

Tab. 1: Main characteristics of eight non-CEE countries' most important CPBs

Legal form	Authority, agency GB – CCS, NHS FR – DAE, UGAP DE – BBA IT – CONSIP PT – ESPAP SE – SIC	Company in state of municipal ownership AU – BBG FI – HANSEL, KL PT – SPMS SE – SKL KI
Nature of use	Mandatory AU – BBG FI – HANSEL IT – CONSIP DE – BBA	Optional GB – CCS, NHS FI – KL FR – DAE, UGAP PT – ESPAP SE – SKL KI, SIC
Financing	Fee GB – CCS, NHS FI – HANSEL, KL FR – UGAP IT – CONSIP PT – ESPAP SL – SKL KI, SIC	Free of charge AU – BBG DE – BBA
Range of goods and services	Permanent AU – BBG GB – CCS, NHS FI – HANSEL FR – DAE DE – BBA PT – ESPAP, SPMS	Variable FI – KL, HANSEL FL – UGAP SE – SKL KI, SIC

the central procurement organisations. Below, we examine the individual central procurement organisations in the eight non-CEE countries with respect to these criteria. Presenting the general solutions, we shall also briefly discuss specific features, which make a solution characteristic from a certain point of view or differ from the model applied by the majority.

Legal form

The form of ownership has little impact on the activities of the procurement organisations, whether they are authorities or agencies or companies in state or municipal ownership. Their success depends much more on their financing, legal background and the efficiency expectations. It is typical that extreme control characterises only a few countries (Italy); this, however, is not aimed at the central procurement organisation, but it is generally a part of the struggle against corruption in the given country. Many of the countries studied are ones where CPBs can act as independent market players in the form of a company, which motivates them (Austria, Finland, Portugal). In the case of the authority, agency group, this status does not mean complete dependence in all cases either. In the case of the NHS, for example, there is detailed legislation on the independence of the CPB. Typically, CPBs operate as authority or agency, while organisations in Finland, Austria and Portugal function specifically as companies.

Nature of use

The individual central procurement organisations typically administer framework agreement procedures, the use of which is partially mandatory, justified by criteria of economies of scale.

In Austria, the tasks of BBG include the compilation of needs to obtain better prices and terms and conditions from suppliers, as well as the standardisation of public procurement to reduce the costs of processing and legal risks. BBG's clients may draw down certain products and services via an electronic platform based on framework agreements concluded by BBG.

It is a general rule in the UK that there are no legal requirements of mandatory force for the contracting authorities concerning applying any given procurement route, any given framework agreement or any given financial model. Policy regulators, however, may render certain routes of procurements, certain framework agreements or financing models mandatory or may only prefer them in the case of certain types of contracts.

The famous NHS comprises central procurement organisations; the procurement regulations pertaining to them set a number of objectives for the procurers, including meeting the needs of patients and improving the quality and efficiency of services. In the case of healthcare procurement, the interests of the patients are paramount in the course of procurement.

In Finland, the goal of the major central procurement agencies is to position themselves as the ‘champions’ of developing national public procurement practice and to be innovative in public procurement, sustainable public procurement and the use of electronic instruments. Hansel Ltd., the largest central procurement organisation, reduces tendering-related risks by providing expertise with regard to public procurement legislation and monitoring the tendering process of the company. The company uses internal guidelines and a system of quality assurance for tendering. During the tendering phase, the financial, technical and professional capabilities of all the suppliers under a given framework solution are studied and evaluated to see whether they are truly able to supply the products or services to be procured. Contracted suppliers are monitored throughout the period of the contract. In cooperation with a risk management expert, Hansel regularly carries out major risk identification projects, the results of which are presented in detail in their report on corporate responsibility.

In France, the government’s objective in setting up the DAE service was to increase savings year by year through global procurement and efficient strategies. To achieve this objective, the decree setting up DAE created coordinators in every ministry and every region to develop cooperation and economies of scale. In addition to DAE, UGAP is the only central procurement agency in the country, inviting bids for a very wide range of services. Its legal standing renders it to be a special company: its objective is not to make profit, but exclusively to optimise public procurements. Thus, the price enforced vis-à-vis state authorities includes internal costs, but not a commercial margin. In the case of other contracts, UGAP itself manages implementation of the contract in cooperation with the suppliers. In the cases of more complicated procurements, UGAP makes personalised bids to public procurers. In such cases, the state authority contacts UGAP and determines its needs. UGAP then makes its bid in relation to the suppliers already selected, and the state authority confirms this. In the case of services of this kind, UGAP concludes exceedingly broad, open framework agreements, where the final selection is based not on price competition, but on the ability of the individual bidders to satisfy the accurate need. In such cases, UGAP’s role is first to assist state agencies to determine their needs, then to select the appropriate economic agent from among the preselected candidates based on the framework agreement.

In Germany, the procurement of certain products and services via BBA is mandatory for all federal ministries and agencies.

The situation is the same in Italy regarding Consip. Consip’s role is of outstanding importance as in Italy, the procurement capabilities of the contracting authorities are evaluated, thus establishing expertise in public procurement, where the role of the largest procurement agency stands out.

In Portugal, ESPAP monitors the use of the individual framework agreement by the contracting authorities, which is decisive as it helps to better understand the needs and to achieve as high savings as possible. Through the rational use of joint state resources and providing shared services, ESPAP indirectly contributes to improving efficiency, which is the very objective of its establishment. The healthcare sector has by far the largest budget for procuring goods and services, hence it set up a separate central procuring organisation, called SPMS, to manage these procurements.

In Sweden, the objective of the central procurement agencies is to gather information on the procurement practices and needs of their customers to be able to offer them framework agreements of the needed version. Yet, contracting authorities are not required to report anything to the central procurement organisations. In practice, the information used to plan the operation of the central procurement agencies is based on formal and informal negotiations with the customers. The national central procurement organisations can rely on the information that was given to them and what they can obtain from the suppliers under the framework agreements. In other words, their activities are based on maintaining contact and cooperation.

Financing

The financing models show a rather mixed picture. In Austria, the contracting authorities at provincial and local levels and the other agencies making use of BBG services pay 0.2%–2% – 1% on average – of the drawdown value of the framework agreements (the value of the final contract). The services are free of charge for the federal agencies. The exact percentage depends on the savings achieved in

the course of procurement relative to what the federal, provincial or local agency achieves when it carries out the procurement itself. The base subsidy by the Federal Ministry of Finance covers the part of the costs of BBG's operation not financed by the percentages (fees) due to it on the contracts it concluded.

In the UK, whether a contracting authority has to pay for access depends on the terms and conditions of the numerous framework agreements of CCS. CCS may carry out public procurement on behalf of the contracting authorities or public service providers also. Generally, CCS charges a service fee for such services to the contracting authorities or public utilities. The level of the service fee changes according to the type of the contracting authority/public utility, the type of the public procurement contract and the services provided by CCS.

In Finland, all the central procurement agencies finance their costs of operation from the service fees collected from the selected suppliers. This fee-based system encourages central procurement agencies to set up desirable framework agreements and to sell them. The service fee is a percentage of the sales realised by the supplier through the framework agreements. This percentage varies between 0.7% and 1.5% for various types of framework agreements.

In France, the objective of UGAP is not to make a profit, but exclusively to optimise public procurement. Thus, the price charged to state authorities includes internal costs, but no commercial margin.

In Germany, the customers of BBA are not required to pay for the services. Numerous smaller German central procurement organisations provide their services free of charge, that is, the operation of the procuring organisations is directly financed from state funds.

In Italy, the service fee charged by Consip may be at the most 1.5% of the procurement value net of value-added tax (VAT) payable by the contracting authorities. In Italy, the budget of Consip is covered by the repayments of special projects paid by agencies of public administration, which concluded concrete agreements with the company. As they wanted to reduce the weight of public expenditure spent on Consip activities, they introduced a repayment mechanism, on the basis of which the economic agents having won framework contracts and framework agreements pay.

In Portugal, ESPAP charges a relatively limited fee for its services to all contracting authorities every time they make use of a framework agreement.

In Sweden, SKL Kommentus and SIC cover their operation from the service fees collected from the selected supplier. Kommentus is financed by service fees, ranging between 0.4% and 2.0%.

Range of products

Albeit the range of products to be centrally procured in the individual countries changes continuously, depending on demand, yet, in the majority of cases, the procurement of characteristic product groups can be identified.

In Austria, the products and services procured by BBG are the following: IT and telecommunications, mobility (vehicles), energy, real estate management, services, food, office stationery and furniture, medical and laboratory devices. They frequently offer additional services, such as the 'e-Reisen' (e-travel), which is an online booking instrument enabling BBG customers to organise planning of their trips, including booking flights, hotels and car rentals.

In Finland, the following products and services are centrally procured: printing services, electricity, fuel and other petroleum products, office furniture and equipment, IT equipment and accessories, software and licences, data and mobile network services, cars and related services, travel services, vocational health care.

In Germany, every federal ministry and agency procures certain products and services through BBA, where the typical subjects of contracts are services, IT, telecommunications, vehicles and accessories.

To be able to specify the volume and specification of procurements, in Italy, Consip and the agencies summarising public procurement collect data from the contracting authorities. In addition, Consip may study the goods and service needs of the central state agencies. These include the goods and services procured for the healthcare sector, armed security services, facility management, office cleaning, security service, maintenance of buildings and plants. In 2016, 13 initiatives were launched in the healthcare sector and in various sectors (postal service, ITC equipment, insurance services, elevator maintenance, postal and transport services, furniture, printing of voting slips) by way of the dynamic procurement system in public administration.

In Portugal, the products procured by ESPAP include computer equipment (both procurement and rental); natural gas supply in a free market system; maintenance of heating, ventilation and air-conditioning systems; electricity supply under a free market system;

paper and other office supplies; maintenance of elevators; infrastructure for ICT technologies; furniture; hygienic and cleaning products; procurement of software licences and related services; supervision and security. Products procured by SPMS include vaccines, contraceptives, medications, medical and laboratory materials, different kinds of medical instruments and special services.

In France, the procurement scope of DAE and UGAP is extremely broad, adapting to needs, similar to CCS in the UK, while the NHS is responsible for healthcare procurement.

In Sweden, SIC manages roughly 1200 framework agreements in almost 40 areas, including IT products and services, office furniture and equipment, travel services and accommodation, services, hotels and conferences, security, transportation and vehicles, mixed services (management consulting, temporary employment services, translation and interpretation services, etc.). The management of SKL (Kommentus’ parent company) continuously gets recommendations from municipalities, county councils, regional institutions and companies concerning the goods and services, which can be suitable for nationwide aggregated procurement, on the basis of which they draw up their annual public procurement plan.

Main characteristics of central procurement organisations in CEE countries

This section first presents the structures of the CEE countries, following the four model elements (legal form, nature of use, financing, and range of goods, services).

Table 2 shows a general comparison of the CEE countries based on their most important central procurement organisations.

Tab. 2: Main characteristics of three CEE countries’ most important CPBs

Legal form	Authority, agency PL – COAR RO – ONAC HU – KEF, DKÜ, NKOH	Company in state of municipal ownership
Nature of use	Mandatory PL COAR RO – ONAC HU – KEF, DKÜ, NKOH	Optional
Financing	Fee HU – KEF, DKÜ, NKOH	Free of charge PL – COAR RO - ONAC
Range of goods and services	Permanent PL – COAR RO – ONAC HU – KEF, DKÜ, NKOH	Variable

Legal form

In terms of organisational system, CPBs do not operate in a corporate form, but without exception within an agency or specifically in an official form. In the Polish, Romanian and Hungarian examples, the model of the independent profit-oriented firm does not appear. This is reinforced by the fact that the regulatory environment is also very detailed, with ministries typically exerting a strong influence on individual CPBs. The definition of their activities is accordingly much more regulated, allowing less flexibility to these organisations.

Nature of use

Use of the services is mandatory for all three countries. Typically, framework agreement procedures are carried out. The dynamic procurement system took place in only one case in the case of KEF. It is very interesting that the Romanian, Polish and Hungarian

models do not allow centralised public procurement to be subject to competition. This does not mean that the mandatory nature is mandatory for all contracting authorities, but it means that for certain groups of contracting authorities, this is the model to follow, and that the framework agreement of the central purchasing body must be used for certain procurement objects, which is also defined by legislation. Overall, legal form and mandatory nature are strongly correlated in the CEE countries.

Financing

The financing is typically free of charge; only in the case of Hungarian CPBs the service is provided for a fee. This is important because the service fee must be paid without having the option of not using the service. Service fees are very high at 1%–2%, but in the case of DKÜ, the definition is banded for very-high-value projects. Overall, the mandatory nature and the obligation to pay do not adequately motivate market participants to innovate and retain markets. In the other cases (Romania, Poland), the service is free. In itself, the free service is not a problem, but to develop the service, individual organisations have to ask the government for funding, which hinders their development. The CPB, which is partly or entirely self-sufficient, is more compelled to develop services by seeking out what procurement contracts for items the market needs.

Range of goods, services

In the Polish example, there is a central organisation that gradually expands and provides its services to public bodies. The model is still rudimentary, typically with few framework agreements.

In the Romanian example, ONAC's service typically involves the provision of health procurement, which is covered by the procurement of the Ministry of Health. A process of development is currently underway in centralised public procurement, and a new organisation is being set up, the activities of which overlap with ONAC.

In the Hungarian model, the role of KEF as a long-standing central purchasing organisation was partly taken over by DKÜ. The DKÜ is for IT. NKOH, in turn, is responsible for procuring a specific package of services, government communication services.

The three models are constantly evolving. Although the focus is on a constant range of products, in the case of Poland, the organisation that supplies some of the contracting authorities is gradually developing its activities. In the Romanian example, two organisations focus on a given product range, while in the Hungarian example, more and more central purchasing organisations are being established, practically taking away the right to procure certain procurement items from each other.

In the research process, after examining the four-element model for CEE and non-CEE countries, the next step is to answer the two research questions.

DISCUSSION

In the case of these 11 countries, a fully identical directive background determines public procurement regulation and accordingly, the central procurement organisations may administer identical types of procedures. A characteristic solution continues to be conducting framework agreements, which are limited and fail to provide the kind of flexibility that the contracting authorities served by the central procurement organisations would like to have.

The role of the central procurement organisation is on the increase in Europe, reinforced also by the Public Procurement Directives, which give a greater degree of freedom to the central procurement organisations. Having studied the activities of the highly important central procurement organisations of 11 European countries, we analysed four criteria in depth.

Both in the case of companies and public procurements, one of the most important objectives of centralisation is the search for more efficient solutions. More efficient solutions may appear in the efficiency of the process (the number of procedures administered in parallel declines), but this also raises the question of how the costs of the central organisation can be financed. Another area of improving efficiency is the synergy that can be achieved in the procured products.

With respect to efficiency and economies of scale, it can be established that the more advanced models focus on cooperation and on obtaining accurate knowledge of market needs, that is, in the course of centralisation, they are not satisfied with requiring the mandatory use of centralised public procurement. The characteristic subjects of procurement are greatly varied, typically the health-

care sector receives attention beside logistical services, IT products and other products and services that are indispensable from the viewpoint of running a government.

In most cases, financing is proportionate to the use of the framework agreements, charging 1%–2%; yet, it can be established that the financing of those organisations, which also undertake additional activities, can be regarded as resolved. The state participates in financing in several cases, specifying additional objectives for the central procurement organisations. Quality services or typically in the case of the health-care central public procurement organisations, the criteria of the patients override the criteria of efficiency. Similarly, market needs frequently override the criteria of economies of scale, that is, use of certain framework agreements is not made mandatory, or exemptions are provided from using the contracts of the central procurement organisations to acknowledge at the state level that a contracting authority may have needs not covered by standard framework agreements.

Opening the use of the framework agreements not only to central state actors indicates that a central procurement organisation may become a genuine service centre, even though this makes procurement hard to plan; it reduces administration for a wide range of contracting authorities and permits them to focus on genuine procurement issues and not on the complicated conduct of the procedure.

Eleven European countries under study continuously renew the activities of their central procurement organisations. Yet, the majority do not directly monitor them; instead, their expectations must be complied with by the central procurement organisations. In terms of organisational framework, these organisations exhibit more flexible, more market-like behaviour, which is exemplary for the contracting authorities. It is not fortuitous that mandatory centralisation and the free use of framework agreements give rise to so much debate, because there is a genuine risk that the organisation becomes too comfortable, if it is mandatory to make use of its services. In the absence of this, however, these organisations cannot be called to account for economies of scale, or to put it more accurately, there is a greater pressure on these organisations to provide true services to the contracting authorities, making their activities more attractive, offering the right subjects of procurement and successfully financing themselves.

This is the interaction between the financing, subject matter of procurement and efficiency criteria studied by us, for which every European country invented its own models. At the same time, synergies are utilised only at nation-state level, and they do not make use of the services of the central procurement organisations of other countries.

Regarding non-CEE countries during the preparation of the interviews, the examination of the stable operation of each organisation was raised. In our view, the system of public procurement institutions is practically stable in the studied countries. The division of labour and the scope of activities of the individual actors change slightly, but the stability of the organisational background can be perceived. This is reflected in the fact that the rules have changed little in relation to the four aspects examined, mainly the system of conditions for which products can be procured independently of the central organisations. This example shows well that it does not make organisations unstable, but, on the contrary, encourages them to provide the right services and introduce innovative solutions.

The centralised models of the CEE countries can be considered clearly underdeveloped. The interviewees reported a clear lack of development and constant change. It is interesting that both the obligation and the definition of objects in the legal sense dominate; the organisational nature of the state dominates, while the centralised public procurement is constantly looking for its place in the system. All these support Karjalainen's (2011) important focus on the cost side and Patrucco's (2017) service-centric approach. There is a perceptible difference in the approach between the CEE and non-CEE countries. The CEE countries are not yet able to break out of a regulation-oriented, less-stable, less-mandatory, less-innovative model. Continuing to create new organisations or re-regulate existing ones does not necessarily mean moving forwards. The CEE examples are typically not used as a basis.

The comparison reveals that there are significant differences in the functioning of centralised public procurement organisations in CEE and non-CEE countries (RQ1), which are well described by the four elements of our research model. The answer to question RQ1, whether it is possible to identify differences between the countries under study on the basis of the four-element model, is that yes, such differences can be identified. We then turn to the answer to question RQ2.

To the question whether differences between CEE and non-CEE countries can be outlined, we can also answer yes. The trends in the two groups also differ (RQ2). Non-CEE countries are more service oriented and innovative, focusing more on new products and services. Their funding is rather market dependent, but as they meet government procurement needs, it is not risky to maintain a large pool of experts. This is also a key to their success, while in the case of CEE countries, the quasi 'government office' status and secure funding also make them comfortable. Continuous organisational change, even if there is room for improvement, makes it impossible to operate in a stable way. This is not always the case in the CEE region, but the trend in the countries studied shows it. A fixed scope of procurement does not necessarily in itself promote stability, since it is worth defining a flexible scope precisely

to allow the CPB to respond flexibly to the needs of contracting authorities, as was necessary in the times of coronavirus disease (COVID). In neither the CEE nor the non-CEE case was the provision of logistics by CPBs typical, but the provision of market research and procurement services appeared in the CEE countries, while in the non-CEE case, we found examples of CPBs acting as quasi ‘authorities’ (DKÜ, NKOH) and dealing with procurement authorisations, procurement plan reviews and the possibility to take procedures away from contracting authorities and to carry them out themselves. The direction of operation as a public authority is even further removed from the service-oriented, innovation-driven CEE countries, which are increasingly combining framework agreements with DPS. The trend is, therefore, towards a kind of lower-level centralisation in the CEE countries, with a strong IT support by a skilled professional staff as the key to future development, for which the highly developed CPBs in non-CEE countries can provide good examples.

CONCLUSIONS

Our research looked at the public procurement systems in non-CEE and CEE countries. It concludes that there are significant differences between countries and between the practices of each group. The differences are both structural and efficiency related. The service-oriented approach, the connection to needs, the non-binding nature or the legal form of an independent market participant CPB is far from the CEE approach. The solutions of the CEE countries are inflexible, not service oriented, and cultural differences and a short history of public procurement do not yet allow the adoption of innovative models. The implementation of a profit-oriented Finnish or Italian example or building a think tank organisation requires stability, flexibility and openness, primarily learning about the European examples that our present research has undertaken. The stability and market-oriented characteristics of a centralised public procurement system have an impact on innovativeness. Signs that call for a profit-oriented operation, mandatory recourse, can serve as a basis for future development. It is clear that the same legal regulatory background to public procurement is not necessarily predominant in determining specific features and characteristics.

The added value of our research is the identification of characteristics that can serve as a model for developing centralised public procurement organisations. The characteristics of each country illustrate the extent to which they are going their own way, while more innovative solutions (service nature, flexible procurement scope) could build a more efficient organisation that could also increase security of supply. A major challenge in the post–COVID-19 period may be the ability of central purchasing organisations to meet demand in a crisis situation, based on a more innovative approach, a stable organisational background and efficient operations with adequate freedom of decision.

There are many studies on the benefits of centralised procurement systems. However, our research has shown that there are substantial differences between some centralised procurement solutions. A further possible research question could be whether the benefits outlined in the literature also apply to these different models.

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