Public procurement distance: analysing European public procurement policy implementation in 27 EU member states

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BESTEK EN VOORWAARDEN,

waarnaar, onder nadere goedkeuring van Zijne Excellentie den Minister van Kolonien, in het gebouw van het Departement van Marine te 's Gravenhage, *op* dinsdag *den* 16 April 1878, *bij inschrijving zal worden aanbesteed:*

het maken en leveren van een IJZEREN KUST-LICHTTOREN, *bestemd voor den* VLAKKENHOEK, *Z.-W. punt van* SUMATRA;

met den aankleve van dien, zoo als hierna is omschreven.

Aangenomen door L. J. Enthoven en Co voor ƒ 53975.- volgens kontr. goedgekeurd door Kolon. bij res. van 2 mei 1878 N° 41

EERSTE AFDEELING.

MAKEN VAN DEN TOREN.

ART. 1.

Voornaamste afmetingen.

De toren heeft de gedaante van eene afgeknotte zestienhoekige piramide.

Het ondervlak komt op 0,50 meter en het bovenvlak op 57,00 meter boven het peil, zoodat de loodregte hoogte des torens is 56,50 meter.

De middellijn van het zestienhoekig grondvlak is 10,60 meter; die van een gelijk vlak op eene hoogte van 56,00 meter uit het grondvlak 3,90 meter, en die van het zestienhoekig bovenvlak 4,20 meter.

De middellijnen zijn die van den ingeschreven cirkel der veelhoeken, genomen op het buitenvlak der wanden.

De wanden ter dikte van minstens 0,035 meter aan het grondvlak en geleidelijk verminderende tot op 0,023 meter aan den top des torens.

In den toren komt eene knip in de gedaante van een afgeknotten kegel. Het grondvlak komt op 0,50 meter en het bovenvlak op 51,18 meter boven het peil, zoodat de loodregte hoogte der knip is 50,68 meter.

Chapter 6

Distance: analysing European public procurement policy

6.1 Introduction

While the description of the data collected on the implementation of European public procurement policy was central to the previous chapter, this chapter will focus on explaining the public procurement distance in this policy. Expectations in this regard were set and described earlier and will now be tested based on the data collected. Together with the previous and concluding chapters, this chapter will answer research question 3 concerning the factors influencing European public procurement policy, which has three components. The first is the mandatory public procurement policy to be implemented, whereby the aim is to create a uniform regulatory framework for all member states within which governments can procure infrastructural works, services and supply of goods. The second component involves promoting the use of discretionary strategic policy instruments (sustainability, social policy, innovation, SME participation[37]), and the third pertains to policy to increase cross-border procurement to stimulate member states' use of the harmonised European market.

In the following, first the principles of the conducted measurements will be discussed, before presenting the outcomes of the analysis for each of the three components of European public procurement policy, providing an overview of the factors that play a role in explaining public procurement distance. Finally, the concluding section will summarise these factors. A summary of the indicators used for the dependent and independent variables is included in Appendix D, while Appendix E contains the measurement results and test values.

6.2 Measurement values

The direct influence measured of the independent variables on the dependent variable will form the basis for a statement concerning whether the formulated expectations are confirmed, employing regression and descriptive analyses. For the regression analysis, the standardised regression coefficient b^* will be used for

37 Small to medium-sized enterprises.

the measurements (holding the other predictors constant). In this study, these are statistically significant at a 99% confidence interval, divided into two significance categories of $^{**}p<.01$ and $^{***}p<.001$. This level has been chosen in light of the large number of observations because it significantly reduces the chance of incorrectly identifying an independent variable as having a certain effect on the dependent variable (false positives). A number of tables are included in this chapter to illustrate some striking measurements. The coefficients in these tables are coloured grey if this is the case. The full tables for the three policies are presented in Tables E1, E2 and E3 in Appendix E. For the descriptive analysis, statements have been used to explain actors' influence on European public procurement policy.

It has been assessed whether there is a strong correlation between the predictors used and thus whether multicollinearity exists. This is not the case, as the analysis shows,[38] with the values found for the variance explained indicating that various intervening effects might play a role in further explaining reality. The project effects[39] measured often occur together and therefore have been converted into a factor with an eigenvalue greater than 1 ($EV = 2$) and an explained variance of 66.8%. This is a valid scale where a higher value leads to stronger project effects, and the scale is reliable ($\alpha = 0.75$). This factor has been included in the model to identify which independent variables might influence these effects. A correlation table has been created for the dependent variable, showing that the questions used each relate to a different aspect of the public procurement distance phenomenon (see Table E4 in Appendix E for an overview of all the correlation coefficients).

6.3 Measurements for mandatory European public procurement policy

In this paragraph the results of the measurements concerning mandatory public procurement policy are presented. The analysis is based on a framework that incorporates several explanatory factors. These factors draw on various theoretical perspectives, such as administrative organisation, professionalism, and policy discretion. Attention is also given to potential differences in administrative culture, where variation within administrative segments—such as different levels of government—may be relevant.

To properly account for administrative culture in the analysis, dummy variables are used. This allows room for alternative explanations alongside the more

38 The variance inflation factor (VIF) for each independent variable is less than 2.

39 These are: optimism bias, whereby the costs and risks are stated too low and too optimistically; scope creep, in which the scope is made greater than is necessary; and planning fallacy, where lead times are deliberately estimated too low.

general ones. Based on this framework, ordinary least squares (OLS) regression is applied, as it is a suitable method for simultaneously testing the influence of multiple explanatory variables.

This approach ensures that the independent variables that might have a direct influence on the dependent variable – based on the literature – can be incorporated into a model. The model has been estimated in its entirety, although its results will be introduced step by step. However, application to the letter is leading in determining whether the measurement results say anything about the distance between the intended mandatory public procurement policy and its implementation in practice. If significant measurements have been found on project effects and on the extent of the satisfaction with the end result of the procurement process, this will also be mentioned. These outcomes are considered supportive of the measurement of literal rule application.

This section will elaborate on the various independent variables included in the models. To facilitate the understanding of the results, an overview of the main results will follow first. More than 13% of the variance in the literal application of procurement regulations is explained by variance in tacit knowledge, serving public interest, policy discretion, compliance, geography and the administration system. Table 1 in Appendix E provides an overview of the measurement discussed in this section.

Administrative organisation

The perspective of administrative organisation will be discussed first, comprising two indicators: *capacity* and *collaboration*. In terms of capacity, the expectation based on the literature is that the deployment of sufficient people in the form of advisers from within or outside the organisation leads to a greater ability for governments to meet policy obligations. For example, through specific knowledge development and increased expertise (expectation 1a) (Tallberg, 2002: 612-614; Radin, 2009: 371). This does not emerge from the results, as there are no significant outcomes to support the expectation that public procurement distance decreases as a government organisation has more capacity. Expectation 1a is therefore not confirmed for mandatory public procurement policy.

Concerning collaboration, the Commission encourages contracting authorities to increase their mutual collaboration rather than call for tenders individually (Commission, 2014b: recital 71, 73; 2014c: recitals 78, 80, 82). Joint tendering is also mentioned in the literature as one of the tools to compensate for a shortage of people and resources (expectation 1b) (Aiken & Hage, 1968: 927-929). No significant effects are found for literal rule application, and thus this expectation is also not confirmed.

However, limited positively significant results are found for 'collaborating with other contracting authorities' on the project effects factor. This signifies that procurement staff strive to implement public procurement policies, although the environment influences the procurement process, as described earlier in chapter 5. The model also reveals that when procurement staff collaborate more, satisfaction with the end result significantly increases.

When delving deeper into 'collaboration', it is noticeable that the Commission has observed that mutual collaboration between contracting authorities to share knowledge and capacity has remained limited. According to the Commission (2017a: 5), it only occurs in 11% of procurement procedures. Notably, over 40% of the respondents in this study claim to pay attention to collaboration, whereby the measured percentage significantly differs from that presented by the European Commission. Regarding this discrepancy, it is plausible that the Commission has an interest in increasing collaboration in procurement between member states to demonstrate that the harmonised market is being utilised increasingly successfully. European data might be influenced to some extent by political motives, which is also observed in the literature (Falkner et al., 2005: 19-20).

Professionalism

The next theoretical perspective to be discussed is professionalism, which comprises *tacit knowledge* (internalised knowledge based on experience and intuition) *formally acquired knowledge* through training and *intrinsic motivation*. It is expected here that as procurement officers' tacit knowledge about procurement increases, the procurement distance decreases (expectation 2a). Two questions have been included to measure this, whereby two dummy variables have been created. First, the influence of the annual number of tender procedures is measured, and the reference category for this question is 'supervising two or fewer tender procedures per year'. The second question concerns the influence of 'how long a procurement officer has worked in the field' (seniority). This question has the reference category of 'working in the field for less than one year'.

Another dummy variable has been created to measure the possible influence of 'training'. The reference 'learned in practice without training' is used to measure the possible influence of 'general procurement training' and 'industry-specific procurement training' on public procurement distance in comparison to respondents without procurement training.

Table 16 presents the effects of the independent variables on the dependent variable for professionalism. This table with partial measurements is included to highlight some measurements for public procurement distance that stand out with respect to this theoretical perspective.

TABLE 16

Influence of professionalism on mandatory public procurement policy

	Literal application of the rules	Project effects	End result
Dependent variable ⇨ ⇩ Independent variables	Always apply procurement regulations literally	Project effects factor	Satisfaction with the procurement result
Professionalism	***b****	***b****	***b****
Tacit knowledge (expectation 2a)			
3-5 tenders dummy	–.032	.056**	–.004
6-10 tenders dummy	–.043**	.046**	–.009
11-20 tenders dummy	–.029	.039	.008
More than 20 tenders dummy	.005	102***	.011
1-3 years' seniority dummy	–.005	.013	.034
3-5 years' seniority dummy	–.011	–.009	.045
5-10 years' seniority dummy	.006	.003	.064
More than 10 years' seniority dummy	.019	–.018	.089**
Formal knowledge (expectation 2b)			
Procurement training dummy	.029	–.032	.060***
Solely procurement training dummy	–.023	–.013	.034
Professionalism and intrinsic motivation			
Serving the public interest (expectation 3)			
Serving the public interest	.113***	.003	.080***

Regarding tacit knowledge, this table shows that respondents who execute six to ten tender procedures per year and thereby have accumulated a relatively high degree of tacit knowledge apply the rules significantly less literally than respondents with less tacit knowledge and who supervise a maximum of only two tender procedures per year. However, this negative effect is limited, and thus the results do not confirm that public procurement distance decreases under the influence of increasing tacit knowledge (expectation 2a). This outcome is striking because almost half of the population studied was 50 years or older, which points towards a certain degree of seniority (see also Table C4 in Appendix C). Based on the theory, the assumption was that more experience would lead to greater implementation of public procurement policy, thereby increasing the degree of 'specialisation' (Freidson, 2004) and reducing public procurement distance. In practice, this does not emerge from the results. It is notable in the table that project effects have an impact on procurement processes. This provides further indication that certain actors – such as individuals from within the organisation, politics, and market parties – have an underlying influence on the procurement process, as extensively discussed in Chapter 5.

The table above also shows that a decrease in public procurement distance under the influence of an increase in mental discretionary specialisation (Freidson, 2004: 28, 34) in the sense of more specialist professional knowledge through training (expectation 2b) cannot be demonstrated. Specific training does not seem as necessary as practical experience to execute public procurement policy to the letter.

Intrinsic motivation to serve the public interest is an important item in the literature explaining why people want to work for the government (Perry & Wise, 1990; Freidson, 2004: 127; March & Olsen; 2009). In line with expectation 3, the model shows that if procurement staff take into account the need to serve the public interest, this has a clearly significant positive effect on their literal rule application. Therefore, 'taking into account the need to serve the public interest' promotes the implementation of mandatory public procurement policy as intended in advance, which reduces distance, while the end result also positively increases. Accordingly, expectation 3 is confirmed for the mandatory procurement policy.

Policy discretion

The third theoretical perspective for which a significant effect on literal rule application is measured is policy discretion. For this purpose, expectation 4a stated that as policy discretion increases, public procurement distance increases. The perspective of policy discretion comprises a number of indicators, namely *discretionary leeway* and *actors*. Dummy variables have been created for the 'procurement staff' actor. The professional group of part-timers has the largest number of observations and therefore has been used as the reference category (Grace-Martin: https://www.theanalysisfactor.com/strategies-dummy-coding/#more-3224). Table 17 shows the impact of discretionary leeway on mandatory public procurement policy.

TABLE 17

Influence of policy discretion on mandatory public procurement policy

	Literal application of the rules	**Project effects**	**End result**
Dependent variable ⇨ ⇩ Independent variables	Always apply procurement regulations literally	Project effects factor	Satisfaction with the procurement result
Policy discretion actors	***b****	***b****	***b****
Discretionary leeway (expectation 4a)			
Being allowed to steer tender procedures in terms of content	–.085***	.094***	.077***
Public procurement regulations allow little discretionary leeway	.032	.106***	–.079***

The table reveals that as tenders are steered more in terms of content, literal rule application decreases. This leads to the confirmation of expectation 4a, namely that as the leeway to manage the details of tender procedures increases, public procurement distance also increases.

Project effects are also visible in this model. Again, this indicates that the environment of procurement staff influences the emergence of public procurement distance. It is also striking in the table above that respondents believe that more leeway to manage tenders in terms of content leads to better procurement outcomes, although this means that they apply the rules less literally and vice versa.

Next, expectation 4b is discussed: as procurement officers' influence on the procurement process increases, public procurement distance also increases for mandatory policy. However, the measurements do not confirm this expectation, as procurement officers do not have a significant influence on the implementation of mandatory policy.

Environment

It is possible that other actors influence the implementation of mandatory public procurement policy. To gain better insights in this respect, respondents were presented with the following statement: 'You call for tenders but you cannot award it to a winning bidder: why?' Because these are statements in which the dependent variable is included and linked to independent variables, they are not included in the regression analysis. The responses to the statements are included in Table 12 in Chapter 5. The results below are derived from the descriptive analysis, whereby the findings for the actors concerning their own organisation, politics, market parties, and media are successively discussed.

One's own organisation is found to have some influence on mandatory public procurement policy, thus confirming expectation 4c. No direct positive influence is found for the actor of 'politics', although there are indications that political influence is exerted indirectly on the procurement process behind the scenes, prior to the actual tendering and less so during the tender procedure where it can be seen by other actors (as further discussed in Chapter 5). It might be the case that this sets the direction of the procurement process beforehand, resulting in public procurement distance. This leads to the confirmation of expectation 4d for mandatory procurement policy.

According to the respondents, market parties presumably have the strongest influence on the use of the instruments among all measured actors by threatening with a complaint or legal procedure (expectation 4e). The literature shows that market parties can experience the policy regarding the instruments as difficult to apply, causing delays and increasing costs (De Souza Dutra et al., 2017). The

market is in principle also the actor with the most direct visible relationship with respondents during the procurement process, from the specification phase up to and including the selection phase in which the winning supplier is determined. The influence of market parties is further indicated by 18% of the respondents answering affirmatively to the question of whether they believe this actor exerts an influence on project effects (Table 6 in Chapter 5). Based on these data, expectation 4e is confirmed for mandatory public procurement policy.

The media as an actor plays virtually no direct role in influencing public procurement policy (expectation 4f), meaning that this expectation is not confirmed. The above discussion of actor influence is based on descriptive analysis, whereby the outcomes presented in the continuation of this paragraph are again derived from multivariate analysis.

Public administration culture and segmentation

The fourth theoretical perspective for which significant results are found for implementing mandatory policy is the public administration culture and segmentation. This approach covers several indicators, i.e. s*ector, public administration tier, compliance, geography* and *administration system*. Dummy variables are created to measure them. 'Utility sectors' is used as a reference for sector and 'local authorities' for the public administration tier. For compliance, the countries in the world of 'law observance' (Denmark, Finland, Sweden) are used as the reference group. In terms of geographical classification, the countries in the 'North' group (Denmark, Finland, Sweden) are used as the reference category. Countries with a 'federal administration system' (Austria, Belgium, Germany, Spain) are chosen as the reference category to measure the impact of segmentation by administration system on the implementation of mandatory procurement rules.

Sectors and public administration tier

Based on the literature (Bovis, 2016: 21), the expectation was formulated regarding sectors that respondents from the public and utility sectors might show a difference in influence on the development of public procurement distance in their responses based on certain values or ideas (expectation 5a). However, no results in this direction are found, and thus this expectation is not confirmed.

Concerning the levels of government, the prior assumption was that a culture-based difference could exist between the various public administration tiers in implementing the procurement process (expectation 5b). However, this is not supported, and thus this expectation cannot be confirmed for mandatory public procurement policy.

Compliance by member states

Regarding the compliance by nineteen member states, the expectation based on the literature (Falkner et al., 2005 and Falkner & Treib, 2007) was that in countries belonging to the compliance world of law observance (Denmark, Finland, Sweden, the reference), public procurement distance for mandatory policies was smaller than in countries belonging to other worlds (expectation 5c). There is a clear significant negative effect of countries from the world of 'domestic politics' (Austria, Belgium, Germany, the Netherlands, Spain and the United Kingdom) on the implementation of public procurement policies. Respondents from these countries apply the rules significantly less literally and deploy the instruments significantly less than respondents from the world of 'law observance'. There is also a significant negative effect of countries from the world of 'dead letters' (Czech Republic, Ireland, Italy, Hungary, Slovakia, Slovenia) on public procurement policy, albeit less strong than for the world of domestic politics. Both of these results lead to expectation 5c being confirmed for mandatory public procurement policy, as the three Scandinavian countries implement the mandatory public procurement policy better than the other sixteen member states in this country-based segmentation.[40]

Geographical regions

Regarding the segmentation by geographical regions, which includes all 27 member states, it was expected that for mandatory policies in countries from the 'North' region (Denmark, Finland, Sweden), procurement distance would be smaller compared to member states in the West, East, South and Central European countries (expectation 5d). However, a highly significant positive effect is measured among respondents in West (Austria, Belgium, France, Germany, Ireland, Luxembourg, the Netherlands and the United Kingdom), South (Cyprus, Greece, Italy, Malta, Portugal, Slovenia and Spain) and Central (Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovakia) regions regarding the implementation of mandatory public procurement policy. Respondents from these regions apply such policy significantly less than respondents from the North geographical region (the reference region). The only region that applies the mandatory regulations slightly less to the letter than the three Scandinavian member states is the East geographical group (Estonia, Latvia and Lithuania). The expectation (5d) that

40 Falkner et al. (2005) and Falkner and Treib (2007) examined the nineteen member states at the time: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Slovakia, Slovenia, Spain, Sweden and the United Kingdom. The European Union has since expanded to 27 member states.

public procurement distance for the mandatory policy in Northern European countries would be smaller compared to Eastern, Western, Southern, and Central European countries is not confirmed, given the strong positive measurements for the Western, Southern, and Central groups.

The geographical division including all 27 member states does not lead to confirmation of the expectation, although the breakdown by compliance in nineteen member states does. The eight member states that make a difference here are Bulgaria, Cyprus, Estonia, Latvia, Lithuania, Malta, Poland and Romania. This indicates that in analyses of public procurement distance in mandatory policy, all member states should be involved to reach a complete and balanced judgement on implementing mandatory public procurement policy in the European Union as a whole.

Public administration systems in general

In countries with unitary administration systems, the public procurement distance was expected to be smaller than in countries with federal administration systems (expectation 5e). A significant effect is measured on the implementation of public procurement policy by respondents from member states politically structured according to a unitary administration system. These respondents indicated that they apply the rules significantly less literally than those from member states with a federal administration system. Based on the literature (Le Galès, 1998: 244-245; Pollitt & Bouckaert, 2000: 41-43), the expectation was that public procurement distance would actually be smaller in unitary-governed countries[41] than in federal states.[42] However, the results do not confirm this, and thus expectation 5e is not demonstrated concerning mandatory policy.

6.4 Measurements of discretionary use of instruments

This section will discuss how the independent variables might influence the use of discretionary strategic policy instruments (sustainability, social return, innovation and SME participation). The variance explained in this model ranges from 13% for the social return instrument to 8% for the innovation instrument, and is explained by variance in capacity, collaboration, tacit knowledge, training, intrinsic motivation, discretionary leeway, procurement staff, public administration tier,

41 Unitary: Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovenia, Slovakia, the United Kingdom and Sweden.

42 Federal: Austria, Belgium, Germany and Spain.

compliance, geography, and administration system. Table 2 in Appendix E provides an overview of the measurements.

Administrative organisation

The administrative organisation is the first theoretical perspective for which significant outcomes are found for the instruments. This approach includes two indicators: capacity and collaboration. In terms of capacity, it was expected that public procurement distance decreased as a government organisation had more procurement expertise (expectation 1a). However, the model shows that when consultants are involved, the deployment of the 'sustainability', 'innovation', and 'SME participation' instruments somewhat decreases. Although the effects are not significant, it leads to the conclusion that expectation 1a – as a government organisation possesses more procurement expertise, the public procurement distance decreases – is not confirmed for discretionary policy regarding the use of the instruments.

Expectation 1b concerns mutual collaboration between contracting authorities to build knowledge and capacity. Limited statistically negative significant results are found for social return and innovation, and thus this expectation is also not confirmed for discretionary policy.

Professionalism

The second theoretical perspective for which significant outcomes are found is professionalism. This comprises a number of indicators, i.e. tacit knowledge, training and intrinsic motivation. Table 18 presents the effects of the independent variables on the dependent variable. This table is included as there are a notably large number of measurements in the negative direction affecting the deployment of the instruments.

For tacit knowledge, it was expected that as procurement officers' tacit knowledge about procurement increased, public procurement distance would decrease (expectation 2a). However, experience in terms of the number of tenders and years of employment in procurement (seniority) does not have a direct positive impact on the deployment of the instruments. Accordingly, no support is found for expectation 2a within discretionary policy.

As for formal knowledge, it was expected that public procurement distance would decrease as procurement officers were better trained (expectation 2b). However, this is not demonstrated for discretionary policy, and thus this expectation is not confirmed.

For intrinsic motivation, the expectation was that as procurement officers' intrinsic motivation to serve the public interest increased, public procurement distance would decrease (expectation 3) (Grandia, 2015: 138-139). However, according

to the measurements, more motivation to serve the public interest actually leads to less use of discretionary instruments. On this basis, expectation 3 is not confirmed for discretionary policy.

TABLE 18

Influence of professionalism on discretionary instruments

Discretionary policy instruments				
Dependent variable ⇨ ⇩ Independent variables	Sustainability	Social return	Innovation	SME participation
Professionalism	***b****	***b****	***b****	***b****
Tacit knowledge (expectation 2a)				
3-5 tenders dummy	–.043**	–.036	–.030	–.057***
6-10 tenders dummy	–.028	–.041**	–.021	–.090***
11-20 tenders dummy	–0.18	–0.52**	–0.11	–.069***
More than 20 tenders dummy	–.001	–.026	.004	–.134***
1-3 years' seniority dummy	–.040	–.009	–.029	–.011
3-5 years' seniority dummy	–.060	–.011	–.033	–.010
5-10 years' seniority dummy	–.081**	–.025	–.047	.017
More than 10 years' seniority dummy	–.089**	–.021	–.056	.003
Formal knowledge (expectation 2b)				
Procurement training dummy	–.055***	–.049**	–.055***	–.033
Solely procurement training dummy	–.034	–.024	–.028	.002
Professionalism and intrinsic motivation				
Serving the public interest (expectation 3)				
Serving the public interest	–.083***	–.113***	–.051***	–.035

Policy discretion

Policy discretion is the third theoretical perspective for which significant results are found. This approach comprises several indicators, namely discretionary leeway and actors. Table 21 shows that there are only two limited positively significant measurements.

TABLE 19

Influence of policy discretion on discretionary instruments

Discretionary policy instruments				
Dependent variable ⇨ ⇩ Independent variables	Sustainability	Social return	Innovation	SME participation
Policy discretion actors	***b****	***b****	***b****	***b****
Discretionary leeway (expectation 4a)				
Being allowed to steer tender procedures in terms of content	–.010	.004	–.025	–.031
Public procurement regulations allow little discretionary leeway	.040**	.029	.043**	.015

The table reveals that the deployment of the sustainability instrument somewhat increases – likewise the deployment of 'innovation' – when actors experience limited discretionary leeway. Based on these results, it is conceivable that less leeway (more rules) will lead to some increased implementation of the instruments, although the effect will be limited (expectation 4a). This expectation is not confirmed for discretionary policy.

For the 'buyer' as an actor, the effects are found to be similarly positive. Procurement officers apply the sustainability and innovation instruments significantly more than part-time procurement staff, and the SME tool slightly less so. Coincidentally, this is not a major effect. It emerges that in relative terms, procurement officers pay the most consideration to instruments in comparison with the other professional groups within the procurement staff group. Based on both positive measurements, the measurement regarding 'sustainability' in this model does not lead to confirmation of expectation 4b, i.e. that as the influence of procurement officers on the procurement process increases, the public procurement distance also increases for discretionary policy.

Environment

Thus far, the results presented are based on multivariate analysis. For expectations 4c to 4e regarding the possible influence of certain actors from the environment of procurement staff, the descriptive analysis in Chapter 5, Table 12 is used again. This reveals that the organisation itself has some influence on the use of the instruments, thus confirming expectation 4c. No direct significant influence is found for the actor of 'politics'. However, other measurements demonstrate that politics influences the procurement process, and thus expectation 4d is still confirmed. According to the respondents, market parties have the most

influence on the use of the instruments among all measured actors by threatening with a complaint or legal procedure. The literature shows that market parties can experience the policy regarding the instruments as difficult to apply, causing delays and increasing costs (De Souza Dutra et al., 2017). Therefore, it is imaginable that market parties indeed try to influence the implementation of sustainability policies through complaints and procedures. This leads to expectation 4e being confirmed for discretionary sustainability policies.

The final actor measured is media, which does not play a significant role in influencing the deployment of the instruments, whereby expectation 4f is not supported where discretionary instruments policy is concerned. The above results are derived from the descriptive analysis, while the results presented in the remainder of this section will be based on multivariate analysis.

Public administration culture and segmentation

The fourth theoretical perspective for which significant outcomes are found is the administrative culture and segmentation. This approach covers the indicators sector, public administration tier, compliance, geography and administration system.

Sectors and public administration tier

For the indicators sector and public administration tier, no measurements in this model point significantly in a particular direction, and thus expectations 5a and 5b are not supported for the discretionary instruments policy.

Compliance by member states

Regarding compliance by nineteen member states, the expectation was that public procurement distance in countries belonging to the compliance world of law observance would be smaller than in countries belonging to other worlds (expectation 5c).

There is a very significant negative effect of 'domestic politics' (Austria, Belgium, Germany, the Netherlands, Spain and the United Kingdom) on the use of the 'sustainability' and 'innovation' instruments. Respondents from countries of 'domestic politics' clearly deploy both instruments significantly less than those from the world of 'law observance' (Denmark, Finland, Sweden). A significant effect of 'dead letters' (Czech Republic, Ireland, Italy, Hungary, Slovakia, Slovenia) is also found regarding both of these instruments. Respondents from these 'dead letter' countries deploy the sustainability and innovation instruments significantly less than respondents from the world of 'law observance' (Denmark, Finland,

Sweden). This means that expectation 5c is confirmed for the nineteen member states examined for the use of the policy instruments.

Geographical regions

Regarding geographical regions made up of all 27 member states, it was expected that in Northern European countries, public procurement distance would be smaller compared to Eastern, Western, Central and Southern European countries (expectation 5d).

Where geography is concerned, the region has a significant effect on the deployment of the instruments. Respondents from the South (Cyprus, Greece, Italy, Malta, Portugal, Slovenia and Spain), Central (Bulgaria, Czech Republic, Hungary, Poland, Romania and the Slovak Republic) and West (Austria, Belgium, France, Germany, Ireland, Luxembourg, the Netherlands and the United Kingdom) regions deploy 'sustainability' significantly less than respondents from the North reference region. Expectation 5d proves not to be supported in the segmentation by geography for 27 member states.

In terms of mandatory policies, it is striking that once all 27 member states are included in the analysis under the geographical classification, the expectation is not confirmed where the use of the instruments is concerned. This is in contrast to the analysis based on nineteen member states, as included in the segmentation by compliance (see footnote 4). Again, this is a sign that analysing public procurement policies requires the inclusion of all member states to gain a representative picture.

Public administration systems in general

In countries with unitary administration systems, the public procurement distance was expected to be smaller compared to those with federal administration systems (expectation 5e). Respondents from unitary countries deploy instruments significantly less often than countries with a federal system of governance. This differs from the expectation raised by Pollitt and Bouckaert (2000: 41-43), according to whom central regulation leads to more control and less deviation from the rules. However, in the results from the model in this study, public procurement distance in unitary governed countries is greater than in federally governed states. This means that expectation 5e – that in countries with a unitary administration system, public procurement distance would be smaller than in countries with federal administration systems – is not supported for the deployment of policy instruments.

6.5 Measurements for cross-border awarding

This section will discuss whether the independent variables influence European policy regarding cross-border awarding to a supplier from a different country. The analysis reveals that in this model, 11% of the variance in cross-border awarding is explained by capacity, tacit knowledge, training, intrinsic motivation, actors, sector, public administration tier, compliance and geographical location. Table 3 in Appendix E provides an overview of the measurements regarding this policy component.

Administrative organisation

This theoretical perspective comprises a number of indicators, namely capacity and collaboration. For capacity, it was expected that public procurement distance would decrease as a government organisation had more procurement expertise (expectation 1a). The model showed that if procurement officers want to fill a capacity need by deployment of 'internal legal consultants', cross-border awarding increases very little. This supports expectation 1a, albeit minimally. Expectation 1b concerns mutual collaboration between contracting authorities to build the knowledge and capacity for cross-border awarding. No significant influence from greater procurement expertise is found in this model, and thus support for this expectation is not demonstrated.

Professionalism

The second theoretical perspective for which significant outcomes are found within the model is professionalism, which comprises several indicators, that is tacit knowledge, training and intrinsic motivation. Expectation 2a suggests that as tacit knowledge about procurement increases among procurement officers, public procurement distance decreases for cross-border award policies. Indeed, a small significant positive effect of the degree of tacit knowledge on 'cross-border awarding' is measured. More experienced procurement staff might have accumulated more tacit knowledge and consequently might award slightly more cross-border tenders, leading to confirmation of expectation 2a. In terms of formal knowledge, it was expected that public procurement distance would decrease as procurement officers were better trained (expectation 2b). A small positive significant measurement has been found for this expectation in this model, so this expectation is upheld for cross-border awarding.

Where intrinsic motivation is concerned, the expectation was that as procurement officers' intrinsic motivation to serve the public interest increases, public procurement distance would decrease (expectation 3). The outcome of the analysis

is indeed that if procurement staff exhibits more intrinsic motivation by considering that they serve the public good, 'cross-border awarding' increases. Respondents are probably mainly motivated to do so for cross-border tenders if they expect to find better products and services for their public abroad, as described earlier in chapter 5. Expectation 3 is therefore confirmed for the discretionary policy regarding cross-border awarding.

Policy discretion

Policy discretion is the third theoretical perspective for which significant results are found. This approach comprises a number of indicators, namely discretionary leeway and actors. For expectation 4a – that as policy discretion increases, public procurement distance also increases – no significant results are found, and thus this expectation is not supported. Expectation 4b suggests that as procurement officers' influence on the procurement process increases, public procurement distance also increases. Only one significant predictor is measured for the 'procurement staff' actor that has a limited significantly positive influence on cross-border awarding, that is 'internal legal staff member'. They apply the policy regarding cross-border awarding slightly more significantly than part-time procurement staff, whereby this minor difference confirms expectation 4b.

Environment

Thus far, the results presented are based on multivariate analysis, while the results below again are derived from descriptive analysis. As for the other actors, based on the measurements as shown in Table 12 of the descriptive analysis from Chapter 5, no outcomes are found indicating a direct influence on public procurement distance for the actors of 'own employer', 'political pressure', 'potential market party', and 'media'. Therefore, expectations 4c, 4d, 4e and 4f are not confirmed for discretionary policy regarding cross-border awarding. From the measurements regarding potential reasons to procure across the border, it emerges that procurement-related reasons mainly play a role in the awarding decision, such as expected better quality and greater knowledge of a party abroad. The outcomes presented in the continuation of this section are again derived from multivariate analysis.

Public administration culture and segmentation

The fourth theoretical perspective for which significant results are found is the administrative culture and segmentation. This approach covers several indicators, i.e. sector, public administration tier, compliance, geography and governance system. Table 20 shows the effects of the independent variables on the dependent variable, whereby significant effects can be seen, especially for compliance and geography.

TABLE 20

Influence of culture on cross-border public procurement policy

Discretionary cross-border procurement	
Dependent variable ⇨ ⇩ Independent variables	Cross-border awarding
Culture and segmentation	***b****
Sector (expectation 5a)	
Public sectors dummy	–.083***
Public administration tier (expectation 5b)	
National dummy	.055***
Regional dummy	.018
Compliance (expectation 5c)	
Domestic politics dummy	.101
Transposition neglect dummy	.151***
Dead letters dummy	–.078**
Geography (expectation 5d)	
West dummy	.098
Oost dummy	.052**
South dummy	.108**
Central dummy	.019
Public administration system (expectation 5e)	
Unitary countries dummy	–.054

Sectors

Regarding sectors, the expectation was that respondents from the public and the utility sectors might show a difference in influence on the development of public procurement distance in their responses based on certain values or ideas (expectation 5a). However, the respondents working in the public sectors deploy 'cross-border awarding' significantly less than their counterparts in the utility sectors. Therefore, expectation 5a is rejected for cross-border awarding.

Public administration tiers

Concerning the levels of government, it is conceivable that a culture-based difference might exist between the various public administration tiers in

implementing the procurement process (expectation 5b). The respondents working at the national level of government deploy 'cross-border awarding' somewhat significantly more than those in local government, as shown in Table 20. However, no significant measurement is found for the regional level. It might be the case that procurement at the national level involves a little more cross-border procedures than procurement at the local level, where staff might be slightly more focused on purchasing locally, regionally or nationally rather than from a – perhaps perceived as far and distant – foreign country. Expectation 5b that the public procurement distance is greater at the municipal level than at the regional or national level is thus confirmed for the discretionary policy regarding cross-border awarding.

Compliance by member states

As for member states' compliance, the expectation was that for cross-border awarding, public procurement distance in countries belonging to the compliance world of law observance (Denmark, Finland, Sweden) would be smaller than in countries belonging to other worlds (expectation 5c). There is a clearly significant effect of 'transposition neglect' (France, Greece, Luxembourg, Portugal) on the application of 'cross-border procurement'. Respondents belonging to this world clearly deploy this instrument significantly more than respondents from the world of 'law observance'. Countries in the 'dead letters' group award fewer cross-border tenders than those in the 'law observance' group, although the effect is much weaker than for those in the 'transposition neglect' group. This differs from what was expected based on theory (Falkner et al., 2005; Falkner & Treib, 2007). Expectation 5c is therefore not supported for cross-border awarding in the group of nineteen member states.

Geographical regions

Regarding geographical regions, the expectation was that in Northern European countries, public procurement distance would be smaller than in Eastern, Western, Central, and Southern European countries (expectation 5d). When looking at the possible influence of groups of member states on cross-border awarding from a geographical classification, it is notable that geography has a significant effect on 'cross-border awarding'. Respondents from the East region (Estonia, Latvia and Lithuania) deploy 'cross-border awarding' somewhat significantly more than those from the geographical region North (Denmark, Finland, Sweden), although the measured effect is small. It is imaginable that the countries in the East group traditionally rely more on foreign trade than other member states, given their relatively small size and geographical location. Especially countries from the South region (Cyprus, Greece, Italy, Malta, Portugal, Slovenia, and Spain) make

significantly more cross-border purchases than the North reference region. These countries might also be more focused on foreign countries for their trade contacts than the reference category. Based on these measurements, expectation 5d that public procurement distance would be smaller in Northern European countries compared to Eastern, Southern, Central and Western European countries is also not confirmed for cross-border procurement in the group of 27 member states.

Public administration systems in general

Where public administration systems are concerned, public procurement distance was expected to be smaller in countries with unitary governance systems than those with federal governance systems (expectation 5e). However, respondents from unitary-governed countries do not deploy 'cross-border procurement' significantly less than those from federally governed member states. Expectation 5e is therefore not confirmed for the discretionary policy regarding cross-border awarding.

6.6 Conclusion: Factors affecting public procurement distance

In this chapter, the results of the survey conducted among procurement officers in the European Union have been assessed for the application of European public procurement policy. For each theoretical perspective, the independent variables affecting public procurement distance emerged. The first part of this section will summarise the results of these measurements for each component of European procurement policy in a table showing confirmed and unconfirmed expectations. The second part will summarise the main explanations found for public procurement distance.

The overview below comes with a few preliminary remarks. Regarding results confirming or not confirming expectations, it applies that if a result was not significant or coefficients were significant but did not point in the expected direction, the expectation was not confirmed since the finding did not match the theory. For discretionary policy regarding the use of the instruments, the decision on whether or not the outcomes confirmed the relevant expectation was based on the total number of negative or positive standardised regression coefficients for all policy instruments together. The results for each part of the European public procurement policy are shown in the table below.

TABLE 21

Overview of expectations

Mandatory policy				C=Confirmed; N=Not confirmed
No.	**Theoretical Perspective**	**Indicator**	**Expectation**	**Mandatory Policy**
1a	Administrative organisation	Capacity	As a government organisation's procurement expertise increases, public procurement distance decreases	N
1b		Collaboration	As collaboration between government organisations increases, public procurement distance decreases	N
2a	Professionalism	Tacit knowledge	As procurement officers' tacit knowledge about procurement increases, public procurement distance decreases	N
2b		Formal knowledge	As procurement officers are better trained, public procurement distance decreases	N
3		Intrinsic motivation	As procurement officers' intrinsic motivation to serve the public interest increases, public procurement distance decreases	C
4a	Policy discretion	Discretionary leeway	As policy discretion increases, public procurement distance increases	C
4b		Public procurement officers	As procurement officers' influence on the procurement process increases, public procurement distance increases	N
4c		Own organisation	As one's own organisation's influence on the procurement process increases, public procurement distance increases	C
4d		Politics	As the influence of politics on the procurement process increases, public procurement distance increases	C
4e		Market parties	As the influence of market parties on the procurement process increases, public procurement distance increases	C
4f		Media	As the media's influence on the procurement process increases, public procurement distance increases	N
5a	Public administration culture	Sector	Within the public sectors public procurement distance is smaller compared to the utility sectors	N
5b		Public administration tier	Public procurement distance is greater at the municipal level compared to the regional or national level	N
5c		Compliance	In countries that belong to the world of law observance, public procurement distance is smaller compared to countries that belong to other worlds	C
5d		Geography	In Northern European countries, public procurement distance is smaller compared to Eastern, Western, Central and Southern European countries	N
5e		Public administration system	In countries with unitary administration systems, public procurement distance is smaller compared to countries with federal administration systems	N

TABLE 21 (CONTINUED)

Discretionary policy				C=Confirmed; N=Not confirmed	
No.	**Theoretical Perspective**	**Indicator**	**Expectation**	**Instruments**	**Cross-Border Procurement**
1a	Administrative organisation	Capacity	As a government organisation's procurement expertise increases, public procurement distance decreases	N	C
1b		Collaboration	As collaboration between government organisations increases, public procurement distance decreases	N	N
2a	Professionalism	Tacit knowledge	As procurement officers' tacit knowledge about procurement increases, public procurement distance decreases	N	C
2b		Formal knowledge	As procurement officers are better trained, public procurement distance decreases	N	C
3		Intrinsic motivation	As procurement officers' intrinsic motivation to serve the public interest increases, public procurement distance decreases	N	C
4a	Policy discretion	Discretionary leeway	As policy discretion increases, public procurement distance increases	N	N
4b		Public procurement officers	As procurement officers' influence on the procurement process increases, public procurement distance increases	N	C
4c		Own organisation	As one's own organisation's influence on the procurement process increases, public procurement distance increases	C	N
4d		Politics	As the influence of politics on the procurement process increases, public procurement distance increases	C	N
4e		Market parties	As the influence of market parties on the procurement process increases, public procurement distance increases	C	N
4f		Media	As the media's influence on the procurement process increases, public procurement distance increases	N	N
5a	Public administration culture	Sector	Within the public sectors public procurement distance is smaller than within the utility sectors	N	N
5b		Public administration tier	Public procurement distance is greater at the municipal level compared to the regional or national level	N	C
5c		Compliance	In countries that belong to the world of law observance, public procurement distance is smaller compared to countries that belong to other worlds	C	N
5d		Geography	In Northern European countries, public procurement distance is smaller compared to Eastern, Western, Central and Southern European countries	N	N
5e		Public administration system	In countries with unitary administration systems, public procurement distance is smaller compared to countries with federal administration systems	N	N

A number of independent variables emerged from the measurements that affect European public procurement policy as a whole. From the theoretical perspective of professionalism, particularly the intrinsic motivation to serve the public interest proves to be a significant factor in the overall policy. This motivation leads to better implementation of mandatory policy and promotes the degree of cross-border awarding. However, this factor has been found to have a negative impact on the deployment of discretionary instruments.

The next theoretical perspective that has a significant influence on public procurement policy is policy discretion. Having more leeway to direct tenders in terms of content ensures less literal rule application but a somewhat better end result, while less discretionary leeway leads to slightly more use of the instruments. Based on the statement scores, the descriptive analysis suggests that both procurement staff and other actors (own organisation, politics, market parties) measured are likely to exert some influence on procurement distance. However, this influence – particularly when it comes to 'politics' – is likely to be mostly indirect, making it either invisible or only partially visible.

Measurements of compliance and geography in 19 member states, which confirm the use of mandatory policy and the deployment of instruments, are notable within the theoretical perspective of culture. However, when the analysis is extended to all 27 member states, the expected patterns for these two policy components are not confirmed.

This indicates that, for a complete picture of how European procurement policy is implemented, all member states are important. It may also suggest a somewhat homogeneous implementation of European public procurement policy across the member states. Cross-border procurement appears to be of somewhat greater importance to higher tiers of government. This also applies to respondents from the Eastern and Southern regions.

The next chapter is the concluding chapter, in which the factors that hold relevance to public procurement distance will be used to answer the central research question. Based on the outcomes, recommendations will be made for bridging public procurement distance in European procurement policy, as well as offering suggestions for further research.