Chapter 4

Cooperation for Tenders: Is It a Threat to Competition?

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INTRODUCTION

This chapter is based on a study on the working of an exemption on the Dutch Competition Law that elevates the prohibition on cooperation by firms in certain cases (Felső, Baarsma & Mulder, 2005). This exemption is formalized in the “Decree of Exemption for Combination Formation” (in Dutch: Besluit vrijstelling combinatieovereenkomsten), here referred to as “exemption for combinations.” Our study on the effects of this decree was carried out in the second half of 2004 on behalf of the Dutch Ministry of Economic Affairs. Although the main purpose of the research was to evaluate the effects of this exceptional exemption, our findings, we believe, have general implications that are of interest to those who are interested in topics at the intersection between Competition Law and public procurement.

REGULATORY BACKGROUND

So, what is this Exemption for Combinations? The Dutch Competition Law came into effect on January 1, 1998. Following the European Competition Law, this law prohibits agreements between undertakings which have the effect or object of prevention, restriction or distortion of competition (Article 6, Section 1 of the Dutch Competition Law). Any agreements pursuant to this article are incompatible with Competition Law and are automatically void (Article 6, Section 2). As the date when the new law would come to force was approaching, the concerns by the construction sector grew on the implications of this new law for the phenomenon called “combinations.” At that point there was no formal definition on what combinations are. Roughly, we speak of combinations when two or
more companies make an agreement that they intend to carry out a project together and, therefore, they tender together for that certain public procurement project. Even though combinations only concern short term cooperation, combination agreements can be seen as agreements that have the effect or object of restriction of competition, as the general nature of the agreement is that the competition between the participants is eliminated for that certain project. As combination agreements were thought to become void with the new regulation, an urge arose to find a way that allows for cooperation by firms on tenders that would be beneficial for both the participants and the contracting authority.

How can combinations be beneficial for both parties? There are numerous situations where combinations are beneficial. For example, it could be that company A does not have all the expertise that is necessary to tender for or carry out a certain project. By forming a combination with company B that does have the missing expertise but lacks other, they can, in cooperation, tender together for the project of interest. This type of combination introduces more competition to the market as opposed to less competition: in the absence of the possibility to cooperate, company A and B would not have been able to compete for the project at all. It could also be the case that a public procurement project is simply too large compared to the capacity of one company. Consequently, it would take far too long to accomplish the project. By letting companies cooperate on the project, the contracting authority gets the work done in time. Also situations exist in which it becomes attractive for companies to cooperate, but the extent to which the contracting authority benefits from the cooperation depends on the terms of the contract. By forming combinations, companies reduce certain risks, for example related to the balance between the discontinuity of projects versus the impossibility to fulfill projects that are awarded. However, it is not a priori clear in what way and to what extent the contracting authority is benefiting from the reduction of these risks.

To make sure that the possibility to form these “socially” beneficial combinations stays intact under the Competition Law, the Decree of exemption for combination formation has been issued. First of all, this decree gives a proper definition on what a combination is. There are a number of criteria an agreement between
two or more firms has to satisfy in order to qualify as a combination. A combination agreement is a written agreement between two or more companies, where the parties indicate that they will tender together for a specific project by submitting a joint price. Furthermore, all parties to the agreement pledge to carry out a substantial part of the job, if the project is awarded to the combination. The combination agreement should, however, not impose more restrictions than indispensable to the attainment of the agreement.

After giving a proper definition of combinations, the Decree states that Article 6, Section 1 of the Dutch Competition Law (the prohibition on anticompetitive agreements) does not apply to combinations, provided that the nature and size of the project is in proportion to the number of participants in the combination. The starting point of our study was to find out what the effects of this decree were.

Now let’s take a step back, and take a closer look at the reach of the decree – both the expected and practical reach. While the general impression was that the new Competition Law would make combinations as such void, this turns out not to be the case. According to European Guidelines, the prohibition on anticompetitive agreements applies to agreements between companies who are competing with each other, or in legal terms: who are horizontally aligned (Guidelines on the applicability of Article 81 to horizontal cooperation agreements, [2001] OJ C 3/2). If companies are not in competition to one another, then the prohibition does not apply. So a combination formed by company A and B with two distinct expertises is not subject to the prohibition of anticompetitive agreements. That is, there is no need to exempt this combination from the prohibition on anticompetitive agreements. If companies are directly competing with each other but none of the participating parties has the ability to tender for or carry out the project individually, again according to the European Guidelines, the prohibition does not apply. So a project in which competing companies form a combination because none of the parties would be able to carry out the project individually is also not subject to the prohibition on anticompetitive agreements. This is due to the fact that they are not competing for the project. Furthermore, even if the participating companies are competitors and even if all parties could carry out the project individually, the prohibition does not apply if the contracting authority demands cooperation by the competitors. What is left are the combinations that are formed by
direct competitors, that is, where both (or all) parties could tender and carry out the project individually. It is such combinations that competition law applies to and which the construction sector feared would become void in the absence of the exemption for combinations.

The Decree gives an exemption from prohibition on cooperation for combinations formed by direct competitors where participants are able to carry out the project individually if the nature or the size of the project is in proportion to the number of participants. The assessment of proportionality should be based on an assessment of the size and the capacity of the participants in the combination. This is of course not very specific nor clear. The “Note of Explanation” to the Decree, supplemented later than the issue date of the Decree gives further criteria for the assessment:

- The agreement contributes to improving the production or distribution of goods or promotes technical or economic progress;
- The agreement allows a fair share of the resulting benefits to the users;
- The agreement does not impose restrictions which are not indispensable to the attainment of the objectives; and
- The agreement does not lead to the elimination of competition on a substantial part of the products or services in question.

For an economist it is a puzzle to figure out in what way these criteria help to assess whether the nature and the size of the project is in proportion to the number of participants, taking the size and capacity of the participants into account. Anyway, the reader with some background in European Competition Law will immediately recognize that the criteria a-d are the same criteria as given in Article 81, Section 3. This is the exemption on the cartel prohibition (Article 81, Section 1, EC Treaty). Since May 1, 2004, companies in the EU must assess the potential effects of their conduct themselves and must check whether their conduct is compatible with competition law. The above criteria are crucial in the self-assessment. In 2004 the Dutch Competition Law has also been changed by adding Section 3 to Paragraph 1 of Article 6 Mw in the same vein.

To make a long story short, the Decree had a much smaller reach than was originally intended, but that was because Competition Law
itself applied to a much smaller range of agreements than was initially expected. Furthermore, with the adjustment of the Dutch Competition Law in conformity with the European Competition Law, we now have a general exemption for agreements alike. So basically, the Decree on exemption for combinations was a half-empty concept to begin with and by now, it hardly adds anything to Competition Law, regarding the original purpose. However, the word “capacity” in the assessment of whether the exemption applies, as we argue later, is complicating the situation, as long as the Decree is in force, that is, until January 1, 2008. The Dutch Competition Authority is currently evaluating the desirability of prolongation of the Decree.

So, even if the specific regulation we studied does not make much sense, we believe, a number of questions remain of interest. It still is interesting to see how often companies cooperate on tenders, and why they do that. Furthermore, it is interesting to have a general idea on how often the prohibition on anticompetitive agreements applies in first instance, that is, how often cooperating companies are direct competitors without being forced to cooperate by the contracting authority. It is even better, if we can find a method to estimate the likelihood that combinations are formed where the prohibition applies and the criteria that make the prohibition inapplicable do not apply. This would give us an idea on how often a combination is a violation of the cartel prohibition. Finally, it is also interesting to see how compliance with this aspect of competition law is supervised. All these insights will shed some light on a number of pitfalls and puzzles procurement authorities face on a daily basis.

Tendering in combinations is believed to be a frequent phenomenon in the Dutch construction industry (for instance by the Dutch Parliamentary Inquiry Committee on Construction Fraud). Nevertheless, combinations are also formed in other sectors. Our study has a special focus on combinations that won the large Dutch public procurement projects in the construction sector. We compare these projects with (1) public procurement projects in other sectors, (2) with small public procurement projects in the Dutch construction sector and (3) large construction projects in France and (4) Germany.

A clarifying note is necessary here. The difference between subcontracting agreements and combinations is slight, nevertheless these are two distinct concepts. The main difference lies in liability: with subcontracting, it is the contractor that is liable for the project as
whole. With combinations all participating parties are liable. Another, maybe less concrete difference is that for combinations to be qualified as such, all parties to the agreement must carry out a substantial part of the job. As the original purpose of the study was to evaluate the exemption for combinations, we look at combinations and not at subcontracting. So the figures that are presented in the coming paragraphs refer to combinations and not to subcontracting. Nevertheless, we believe that for large public procurement projects it is the right way of looking at cooperation for tenders, at least for the Dutch construction case.¹ This is true because of the following two reasons.

First of all, companies prefer to form combinations to being a subcontractor, as experience acquired in the role of subcontractor is (partially) discarded when looking at experience requirements in future procurements. When you are the contractor or a combinant, you build up experience much faster. As procurement rules discriminate between experience acquired as a combinant on the one hand and as a subcontractor on the other hand, the formation of combinations is induced in two ways: in one way because fewer companies have acquired enough experience in the past to be able to tender for a project and in another dynamic way, combinations are favoured because they enable companies to acquire more experience to have a good position for future projects.

The second reason why companies prefer not to rely on subcontracting is probably specific to the Dutch construction sector. As opposed to the customs in other sectors, the offer of the subcontractor to the contractor in the pre-contractual phase is not binding. The contractor does not have any certainty on the willingness of the subcontractor to carry out the project on a reasonable price. As the tenderer cannot employ a new subcontractor after the project is awarded to him (because that third party would have to be introduced during the tendering and not afterwards), this is a major discouragement to work with subcontracting for large public procurement projects.

This chapter is organized as follows. In section 2 we explain how we collected the empirical data and how we organized the data. Section 3 presents the main quantitative results of the analyses: how often projects are awarded to combinations, why firms cooperate on projects, the benefits from combinations, according to building firms
and how procurement authorities view combinations. In section 4 we discuss the implications of the results. We discuss topics like competition problems with combinations, the difficulty of controlling compliance with Competition Law and invalid arguments for the necessity of cooperation for tenders. We end our discussion with a set of recommendations.

RESEARCH METHODS

We have constructed a number of databases using the Tenders Electronic Daily (TED) internet application. This application provides information on documents that have appeared in the Supplement to the Official Journal over the period 1999-August 2004. Each public procurement project above a certain threshold contract value requires publication of a number of documents on the TED site (the Supplement). The threshold varies for different types of projects, for works for example, it is 5 million Euros. The requirement applies to, for example, the call for expression of interest, the call for tenders, the contract awards where the winner of the contract is published, etc. As we were collecting information on the winners and competitors, we were interested in publications of the contract awards.

However, only in 50% of the registered public procurement projects (where a call for tender has been published) also a publication on the contract award was available. Many interview partners confirmed that this does not mean that we have a biased sample. It most probably means that while procurement authorities have a clear interest in publishing the call for tender in the Supplement, after the selection of the best offer, they just have no interest in publishing information on the contract award. According to our interview partners, the publication is often just simply forgotten. Furthermore, even in the cases when a contract award is published, the publication can be quite brief. For example, in roughly 60% of the Dutch project awards (all sectors) the contract value is not published. This has made our goal of constructing a representative sample somewhat complicated.

Finally we have worked with the following five samples, out of which the first four are based on TED data:
- A sample of 400 out of the total of 9,283 published Dutch contract awards, that is representative for sectors and years;

- A full sample of the 1,188 contract awards in the construction sector in the Netherlands;

- A sample of 90 contract awards by French institutions, which we have drawn to check whether the results are in line with international trends; and

- Ninety (90) contract awards by German institutions; and

- Information on the 7,544 Dutch contract awards in the construction industry that do not fall under the European procurement regime (projects with a contract value lower than the European threshold); these public procurement projects were published in the Dutch journal *Cobouw.*

The most important variable of all five samples is whether the winner of the project is a combination or not. Combinations are often recognizable by the name: combination COMPANY NAME-COMPANY NAME or partnership COMPANY NAME/COMPANY NAME. There are however other cases in which it is not immediately clear whether the winner is a combination or not. This is the case when firms decide to establish a new firm with the only purpose of carrying out the project in question. To take these kind of combinations into account, we have carried out an internet search on all company names indicated by Ltd/Inc. or partnership (BV or Vof in Dutch). In the few doubtful cases, we assumed that the winner was an individual company. That is, if the figures are biased, this implies an underestimation of the incidence of combinations.

The five samples differ somewhat in the composition of variables. Also what we considered a record differs between samples. In Samples 1, 3 and 4, we consider the collection of subprojects published in one document as one record. If any of the subprojects is awarded to a combination, then these have been counted as a combination. In Sample 2, if the project is split into parts and awarded separately, then we have a separate record for each subproject. In Sample 5 every record is one project, so the above distinction is not applicable.

The five samples from contract awards gave us insights in the frequency of contracts awarded to combinations, the number of firms
that form a combination and on the link between the size of the project and cooperation by firms on the tender. These databases, however, do not offer insights in the reasons underlying the decision to form a combination. Also the data do tell us anything about the competitors in the tender, the ones that did not win the tender. In order to get this missing information, we have carried out two surveys. First, by means of an internet survey amongst procurement authorities on their experience with and views on the procurement process of a certain project, but also on cooperation by companies in general. Second, we have carried out a telephone survey among the firms who won. Both samples include the same projects, it is only the respondent that differs: on one hand the procurement authority and on the other hand the winners of the procurement. In both surveys we questioned subjects in the construction sector as well as two other sectors in order to have a reference against which we can evaluate the results for the construction industry.

Finally, we have checked our results in personal interviews with numerous procurement experts, several procurement authorities and large construction firms.

RESULTS

How Often Do We See Combinations?

When we started our research, the general impression was that Dutch construction companies frequently tender together in "combinations" for public procurement projects. Earlier research carried out by Cap Analyses looked at the 100 largest public procurement projects in the construction sector in the period 1998 – 2001, and concluded that 61% of these projects are awarded to a combination [Cap Analysis Group (Europe), 2002, pp. 22-23]. If only infrastructure projects are concerned, then 80% of the projects were awarded to a combination. Moreover, every project in the top 10 of the largest projects is carried out by combinations. All the combinations formed for the top-10 projects include at least one of the largest Dutch construction companies, but in most of the combinations, we see a number of the largest companies. Of course, as these figures refer to the largest projects, it may be that the size of these projects simply require cooperation by large firms. As it turned out later, for many of these projects there was substantially more
going on than just tendering in combinations, but we will come back to that later.

As the impression was that construction companies make a habit of cooperating in tenders, the first question was how often we found combinations in a sample drawn from a larger population than just the largest projects (and consisting of a longer time frame). Another point of interest was whether cooperation for tenders is significantly different in the construction sector compared to the other sectors of the economy.

Table 1 summarizes the results for the sample drawn from public procurement projects from all sectors of the Dutch economy (Sample 1). As shown, approximately 10% of the projects were awarded to a combination. In the construction sector, combinations are somewhat

<table>
<thead>
<tr>
<th>Sector (cpv code)</th>
<th>N</th>
<th>Awarded to combination</th>
<th>Average no participants</th>
<th>Average no of competitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textile (products) ea (17-19)</td>
<td>9</td>
<td>0%</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Wood and paper (products) (20-22)</td>
<td>7</td>
<td>14%</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Petroleum-, chemical (products), rubber, plastic and film products (23-25)</td>
<td>8</td>
<td>13%</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Fabricated products and materials (28)</td>
<td>11</td>
<td>10%</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Machinery, equip. and associated products (29)</td>
<td>12</td>
<td>0%</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Office and computing equipment and supplies (30)</td>
<td>29</td>
<td>3%</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Electrical equipment and consumables (31)</td>
<td>8</td>
<td>13%</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>(Tele)communication and related equipment (32)</td>
<td>10</td>
<td>0%</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Medical, optical and precision devices etc, pharmaceuticals ea (33)</td>
<td>14</td>
<td>14%</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Transport equipment (34-35)</td>
<td>13</td>
<td>15%</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Manufactured goods ea (36)</td>
<td>10</td>
<td>20%</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Construction work (45)</td>
<td>39</td>
<td>15%</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Repair-, maintenance-, retail- ea services (50-55)</td>
<td>25</td>
<td>13%</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Transport and communication (60-64)</td>
<td>26</td>
<td>8%</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>
TABLE 1 (Continued)

<table>
<thead>
<tr>
<th>Sector (cpv code)</th>
<th>N</th>
<th>Awarded to combination</th>
<th>Average no of participants</th>
<th>Average no of competitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial intermediation services (66)</td>
<td>23</td>
<td>0%</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Computer and related services</td>
<td>24</td>
<td>12%</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>R&amp;D and related consultancy services (73)</td>
<td>7</td>
<td>0%</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Legal, accounting, auditing, business, management and related services (741)</td>
<td>13</td>
<td>0%</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Engineering and related technical consultancy services (742)</td>
<td>18</td>
<td>11%</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Recruitment and personnel services (745)</td>
<td>23</td>
<td>4%</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Cleaning services (747)</td>
<td>23</td>
<td>0%</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Accounting ea professional services (743,744,746,748)</td>
<td>11</td>
<td>0%</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Public sector and personal services (75-99)</td>
<td>37</td>
<td>16%</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Percentage of total / average</td>
<td>9%</td>
<td>3.4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Sample size</td>
<td>397</td>
<td>372</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

more frequent (15%), but we also see that the construction sector is not an outlier. Several other sectors have comparable figures on the percentage of combinations, and the sector manufactured goods, furniture, handicrafts and associated consumables even has a considerably higher percentage of projects carried out in combinations (20%).

Table 2 compares the construction projects that have a contract value above the European threshold and the projects that do not fall under the European regime. The table shows that the incidence of combinations is higher for large projects than for small projects. This brings us to the next question, namely: is there a link between the size of a project and the need to form a combination?

Contract Size and Combinations

One of the reasons why firms would need to cooperate would be that the project is too large for one firm to carry out individually. In this sense, it is interesting to check whether the size of the average
TABLE 2
Results Full-Sample of Large And Small Dutch Public Procurement Projects in the Construction Sector (Samples 2 and 5)

<table>
<thead>
<tr>
<th>Year</th>
<th>Size of project above the European Threshold</th>
<th>% of large construction projects awarded to a combination</th>
<th>% of small construction projects awarded to a combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>24.4%</td>
<td>11.9%</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>25.5%</td>
<td>12.5%</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>20.5%</td>
<td>14.0%</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>14.7%</td>
<td>9.8%</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>13.0%</td>
<td>7.6%</td>
<td></td>
</tr>
<tr>
<td>2004*</td>
<td>7.8%</td>
<td>7.1%</td>
<td></td>
</tr>
</tbody>
</table>

Note: * For the period of 1/1 to 8/19.

project is correlated with the percentage of combinations in the sector. It turns out, that on the aggregated level, as given in Table 1, this is not the case: the average size of the projects and the percentage of combinations is not correlated.

However, if we look at the construction projects only, we do find overwhelming evidence that large projects induce more cooperation than smaller projects. For instance, if the projects of the full sample of Dutch construction projects (Sample 2) are ordered by contract value, then we see that over 40% of the projects in the top quartile is awarded to combinations whereas, in only 3% of the lowest quartile projects we observed a combination.

A more formal analysis confirms this picture. We estimated a logit model on the data containing Dutch large construction projects (i.e., a value above the European threshold). The endogenous variable is the observation that the winner of the tender is a combination.

We include a constant term, the project size and the timing of the tender as exogenous variables. The estimation results of the model are shown in Table 3. Here we find a significant positive relationship between the size of the project and the fact that the project is awarded to a combination. We can translate these estimates of the logit model into the following rule of thumb: ceteris paribus, by increasing the size of a project by one million Euro, the probability of observing a combination is increasing by 1.1%.
TABLE 3
Estimation results, logit model on all Dutch construction projects above the European threshold, the dependent variable is 1 if the project is awarded to a combination, else 0 (Sample 2)

<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
<th>St. error</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-1.607</td>
<td>0.222</td>
<td>0.000</td>
</tr>
<tr>
<td>Contract value (in 100000 Euro)</td>
<td>0.007</td>
<td>0.001</td>
<td>0.000</td>
</tr>
<tr>
<td>Dummy before 2001</td>
<td>0.135</td>
<td>0.262</td>
<td>0.607</td>
</tr>
<tr>
<td>Dummy after 2001</td>
<td>-0.668</td>
<td>0.258</td>
<td>0.010</td>
</tr>
</tbody>
</table>

Cartel Investigations

The careful reader may have noticed a trend break in the figures in Table 2: combinations were much more frequent before 2001 than thereafter. This change in behavior is most certainly attributable to the large scandal in the Dutch construction sector that was uncovered in 2001. On November 9 2001, Zembla, a Dutch news program broadcast an item on fraud and cartel agreements in the Dutch construction sector. This TV program had quite an impact resulting in criminal investigations, investigation by the Competition Authority and a parliamentary inquiry on many construction projects, firms and the sector as a whole. The general finding was that the Dutch construction industry was engaged in cartel practices on a large scale. All these investigations have brought about a change in the behavior of firms and procurement authorities.

According to our survey, procurement authorities believe that since the construction fraud and cartel scandal, the formation of unnecessary combinations is much less frequent. However, multidisciplinary projects still face the necessity of cooperation. Consequently, combinations still occur. More than half of all authorities (60%) take the view that some companies form a combination more frequently than others. Especially combinations of big(ger) companies that could have submitted a tender on their own arouse suspicion. At the same time the authorities believe that for the small(er) projects the number of (unnecessary) combinations has rapidly decreased.

Also companies admit that there was a time when firms were cooperating on tenders out of habit – regardless whether it was
necessary or not. But time has changed and large construction firms avoid participating in unnecessary combinations as they wish to avoid any suspicion.

In the logit model described above, we also included two variables on the timing of the tender. With these variables we can also formalize the effects of the scandal on cooperating behavior of firms while controlling for the size of the project. The estimation results are given in Table 3. Again, we can translate the estimation results in a rule of thumb: by keeping the contract value constant, we see that the probability of observing a combination was 10.3% lower after 2001 than before.

**Number of Participants and Identity of the Participants**

Table 1 also contains information on the average number of participants in the combination. The sector computer and related services is the sector with the most participants per combination (8). This figure is, however, dominated by one extremely large project: a project that is split into 8 parts and whereby all parts are awarded to a combination of the same 12 companies. Another sector with relatively many participants to combinations (5) is a sector that is closely related with the construction sector: architectural-, engineering-, construction- and related technical consultancy services. The construction sector is in this respect below the average with 3 participants per combination on average.

Our survey results confirm that this average is indeed plausible. Our respondents indicated that in 49% of the combinations, the combination is formed by two parties and in 35% of the cases a combination consisted of three participants.

Furthermore, our survey results suggest that besides competence and experience, business culture is a very important factor when it comes to the formation of combinations. If the culture of two business "connects", the chance for future combinations increases. For example 83% of the participants in a combination in our survey sample, had previously worked together before the project in question. Besides that, 88% of the companies indicated that some companies combined forces more often in combination than others do.
Number of Tenderers

The TED publications also offer information on the number of competitors that have submitted their offer for the given project. The last column of Table 1 is the average number of tenderers per public procurement project. The average number of tenderers is 5 and the figures do not differ very much across the sectors. Our analysis does not show any correlation between the size of the project and whether or not the project is awarded to a combination or the number of participants to the combination. Not surprisingly, it appears that the number of tenderers is strongly dependent on the type of procedure.

International Comparison

For the international comparison of construction projects we look at the “lowest project level,” that is, if a public procurement project is split and awarded in parts, then we take each part individually as a separate unit. The first striking result of the international comparison is that the Dutch construction projects (evaluated at the lowest project level) are much larger than the French as well as the German public procurement projects (see Table 4). The largest projects are often awarded in parts in France and Germany, this is much less a custom in the Netherlands. As we will see below, this does not generally lead to a lower incidence of combinations (in Germany the percentage is lower, but in France it is higher).

It seems that competition, at least in terms of number of applicants for German projects is more intense than for Dutch or French projects. The high average number of competitors in Table 4 is however partly caused by an outlier of a 1.8 million Euros’ worth project with 55 applicants. On average, the general impression on German projects is that the number of competitors is much more dispersed than that of the Dutch or French projects. For the French projects we often see 3, 4 or 5 competitors, and for Dutch projects it is 5 or 7. These overrepresented numbers are especially frequent for larger projects. So it seems that French and Dutch procurement authorities work more frequently with a pre-selection than German contracting authorities do. And as such, it is not surprising that no clear link exists between the number of competitors and the size of the project.

Although it is not quite clear to what extent French side-contracting constructions are indeed comparable to Dutch
combinations, we still attempt a rough comparison. The French public procurement projects are relatively often awarded to “combinations:” 22% as shown in Table 4. In Germany (3%) we rarely see combinations. Unfortunately, we do not have data on subcontracting in Germany, but circumstantial evidence suggests that a lot of subcontracting occurs in Germany. So, it is quite likely that a comparison with German subcontracting would be a better comparison. The general conclusion on the international comparison is that, on average, cooperation by firms on public construction projects in the Netherlands is in between that of France and Germany, but it is closer to the French situation of relatively frequent cooperation. Nevertheless, this conclusion should be treated with great care, as the form of cooperation might differ between the different countries with different procurement rules.

Finally, Table 4 shows information on the average size of combinations. Dutch combinations are on average larger than French or German combinations: 3 participants versus 2.4 and 2.3.

Why Do Companies Cooperate on tenders?

As TED data could not offer us insights in the underlying reasons for forming a combination, we have taken a sample of Dutch contract awards and approached both the procurement authority and the winner of the tender with questions on one particular project. Both

<table>
<thead>
<tr>
<th>TABLE 4</th>
<th>Netherlands</th>
<th>France</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size</td>
<td>882</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Average project size</td>
<td>6,451,950</td>
<td>518,717</td>
<td>435,026</td>
</tr>
<tr>
<td>Contract value published</td>
<td>68%</td>
<td>80%</td>
<td>73%</td>
</tr>
<tr>
<td>Average number of competitors per project</td>
<td>7.3</td>
<td>3.3</td>
<td>10.4</td>
</tr>
<tr>
<td>% awarded to combination</td>
<td>17%</td>
<td>22%</td>
<td>3%</td>
</tr>
<tr>
<td>Average number of participants to the combination</td>
<td>3</td>
<td>2.4</td>
<td>2.3</td>
</tr>
</tbody>
</table>
procurement authorities and the winning combinations were offered a list of possible motives for cooperating on the tenders. The possible motives are as follows (here, the ordering and the wording is less neutral than in the survey, in order to make the motive clearer):

1) (Indirectly) demanded/required by contracting authority (company is not allowed to tender individually).
   - Disproportional requirements set by contracting authority (e.g. on experience or turnover);
   - Pre-selection, where candidates are ordered by certain criteria and only top 5 (or some other predetermined number) of candidates are asked to submit a proposal: to make sure that a company has a chance of being invited, it needs to look as large and experienced as possible, regardless of what is necessary for the specific project;
   - Forming a combination is directly demanded by the contracting authority: demanding a combination is illegal. However, according to companies this requirement is occasionally put forward.

2) Economic reasons to cooperate on tenders (company is unable to tender individually)
   - Individual firms are unable to tender individually as they do not fulfill the requirements set by the procurement authority, where the criteria are set in proportion to the necessities of the project (e.g. because it is a design and conduct project requiring different expertise);
   - Individual firms could tender (as it fulfills the criteria set) but are unable to carry out the work individually as it lacks some expertise that is necessary for the project, but not specified in the criteria set by the procurement authority;
   - Individual firms are able to tender and are able to carry out the project, but are unable to finance the project individually;
   - The project implies unknown or substantial risks that the company cannot bear on an individual basis;
   - Participants do not have sufficient capacity to carry out the project individually.
3) Improving the position of the company (company does not want to tender individually)
- Company wants to enter a new geographical market, and decides to tender together with a local firm to compensate for its lack of familiarity with the region specific conditions;
- The competitor is cheaper on parts of the project, for example because it is located closer to the place where the project has to be carried out.

Table 5 presents the underlying reasons for forming a combination as reported by firms and contracting authorities. The first four rows represent the situations, in which the participants to the combinations were unable to individually tender or carry out the project that was subject to the survey. As it turns out, the first four rows in both columns account for about three quarters of the combinations. That means that for about 75% of the combinations the prohibition on anticompetitive agreements does not apply, as the participants were not competing for the project in question. As 15% of the projects are granted to a combination and only in 25% of the combinations the prohibition on anticompetitive agreements apply, we estimate that at most in 3.75% of the public procurement projects a combination may incur a violation to the prohibition.

<table>
<thead>
<tr>
<th>Reasons for Cooperation</th>
<th>According to Company</th>
<th>Procurement Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of special expertise</td>
<td>37%</td>
<td>23%</td>
</tr>
<tr>
<td>Unable to individually carry out the project</td>
<td>13%</td>
<td>24%</td>
</tr>
<tr>
<td>Expertise required by contracting authority</td>
<td>13%</td>
<td>18%</td>
</tr>
<tr>
<td>Minimum turnover required by procurement authority</td>
<td>13%</td>
<td>9%</td>
</tr>
<tr>
<td>Other</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Efficiency</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Spreading the risk</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>Combination demanded by contracting authority</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Do not know</td>
<td>2%</td>
<td>6%</td>
</tr>
<tr>
<td>Entering new (geographical) market</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Competitor is more efficient on a certain part</td>
<td>0%</td>
<td>1%</td>
</tr>
</tbody>
</table>
However, even if the cartel prohibition applies in the first instance, if the number of the participants in the combination is proportional to the nature and the size of a project, the exemption for combinations applies. For instance, if a company under investigation reports that cooperation on a tender was necessary because of capacity constraints, then it is exempted from the prohibition.

Also, different views are possible on what is meant with the term “necessary.” We have asked companies, who were awarded a project as a participant in a combination, how good their chances were, if they had applied individually. Surprisingly, 57% of the combinations who reported that forming a combination was necessary, still believed that they would have had a reasonable chance to win the tender individually. About one third of these companies even believed that they would have had a good chance of winning the tender if they had submitted a tender on their own.

**Great Confusion on the Rules**

It seems that there is great confusion on what is allowed and what is not, and what the implications of Competition Law and the exemption for combinations are. Let’s start with the people who were in charge of the public procurement projects at the contracting authorities. Only about one third of the respondents from contracting authorities reported that they knew the exemption. As it turns out, most of them just gave a socially desirable answer; as when the respondent was asked further questions, it often turned out that they did not know or understand the exemption. Most procurement authorities believe that combinations would be a violation to competition law in the absence of the decree on exemption. And they stress the importance of the exemption in cases where companies just cannot tender without a partner. In those cases combinations increase and do not decrease competition.

It is also remarkable that the respondents who reported that they did not know about the exemption believed that somebody else within their institution knows about the exemption and will actively check whether or not combinations are illegal.

Only a few procurement authorities knew about the exemption. Some of these people honestly reported that they do not understand the decree. The ones who did understand the decree, reported that nobody within their institution was supervising compliance.
Finally, some respondents, who knew about the Decree, believed that it really does not matter, as a contracting authority cannot disregard a proposal by a combination because of the Holst-Italia arrest. This is however a misunderstanding; the Holst-Italia arrest states that a combination cannot be disqualified just because it is a combination (Decision Holst Italia SpA, case C-176/98, European Court of Justice). But it does not say that unlawful combinations should be accepted.

As procurement authorities were not aware of or were confused about the decree, it is no wonder, that the Dutch Competition Authority has never received a complaint from a contracting authority about a suspicious combination, as reported in a letter from the Dutch Competition Authority to the Minister of Economic Affairs at the beginning of 2004. Because no one has ever complained about a combination, neither the Dutch Competition Authority nor the European Commission has ever assessed a combination.

The Dutch Competition Authority also claims - in the letter mentioned above - that the criteria of the Decree are so vague that the Competition Authority could not make an assessment on a combination, even if it did get a notification. The main problem is that the competition authority is unable to make an assessment of the capacity constraints of a certain firm.

The fact that the Competition Authority has never received a complaint on a combination may sound strange at first. Of course, as procurement authorities were not aware of the Decree, it is not surprising that they did not complain of non-compliance to the Decree. But as it turns out, cartellish behavior existed on a large scale in the construction sector, among others by frequently forming combinations. By forming a combination with the competitor, participants can be sure that they will not undercut each other at the tender. Is it realistic to believe that no contracting authority has ever noticed a suspicious combination? Well, this is not quite the case. It is simply not in the interest of a contracting authority to notify the Competition Authority. The main priority of the procurement authority is to get the project done on time. The notification of the Competition Authority of a suspicious combination however would result in a great delay in the awarding process of the project. That is, procurement authorities are better off not questioning suspicious situations, as long as the prices charged are within the range of the budget. It is
simply not reasonable or practical to put the burden of control on the contracting authority.

Until now, we have concluded that procurement authorities are not aware of the Decree, and even if they were, it is unreasonable to believe that they would exercise control on compliance to Competition Law. Furthermore, the Competition Authority is unable to make an assessment of the lawfulness of a combination as long as the assessment has to be based on a uncontrollable criterium as the capacity of a company. But were companies aware of the rules and the gap in the rules?

As it turns out, construction companies, and mainly the larger ones, are better informed than the procurement authorities. Large construction companies nowadays have a juridical department that closely follows regulatory matters and checks whether the conduct of the firm is in compliance with Competition and other law. These firms are aware of the rules of the game. They are also aware of the gap in the rules, because of the word “capacity” in the assessment of the criteria. Nevertheless, as the construction fraud and cartel scandal caused a serious damage to the overall image of the sector, they momentarily are playing rather low-key in order to avoid suspicion.

**DISCUSSION**

**Do Combinations Form a Competition Problem?**

Now, let’s get back to the question posed in the title of this chapter. Do combinations form a threat to competition? Cooperation on tenders by non-competing companies is not anticompetitive: it enhances competition rather than reduces it. On the other hand, submitting a project proposal by two or more firms that would each be capable of carrying out a project individually can be seen as anticompetitive. However, it does matter how many other potential candidates are present. The crucial thing is whether sufficient competition remains after the participating companies have agreed on cooperating on a tender. The problem is that no basic rules exist indicating what sufficient competition is (i.e., are two enough, or are five parties necessary?). Some procurement authorities are convinced that if more than one candidate proposes, then the offers are by definition competitive and the lowest price is a competitive price. Some procurement authorities believe that competition is fierce
for construction projects; others have learned from the construction cartel scandal and think of combinations as a sign of reduced competition or even cartel agreements.

Is competition in the construction sector high or low? Of course, there are differences between the intensity of competition in the different subsectors, regions, and time periods, or for the larger projects, even for individual projects. Nevertheless, in general, we believe that the industry and especially the segment of infrastructure projects have features that induce fierce competition, but the competition is intense to such a degree that it becomes very attractive for firms to share the market and raise prices (Bijvoet et al., 2002). And the Netherlands is probably not the only country that faces this competition problem in the construction sector.

Construction projects are like tournaments: the winner takes all. There is a limited number of large projects and each company must ensure enough projects for a continuous workload. In the absence of cartel agreements, a serious threat of discontinuity of work is present and firms have an incentive to compete fiercely and even ruinously so that profit margins would approach zero.

At the same time, the ground is fruitful for anticompetitive agreements: the market is very intransparent for the contracting authority (e.g., it has little information on what reasonable prices are). Projects have to be carried out on location, every location having different circumstances that influence the cost structure. Also, the biggest projects are often unique so it is not always possible for the contracting authority to apply a rule of thumb. The currently popular multidisciplinare projects and design and conduct projects make the intransparency even worse.

As competition is fierce and procurement authorities have an information disadvantage, a great incentive exists for firms to collude, share the market and raise prices above costs. Also, the markets are to a great extent local (e.g., a result of high transport costs, limited transportability of crucial building materials such as asphalt) so collusion does not need to involve many firms.

So it is very tempting for construction enterprises to form a cartel. However, the cartel needs some mechanism to keep it intact. The best way to make sure that your competitor is not undercutting you is to tender together for the project. Forming a combination with direct
competitors in various line-ups is helpful in monitoring and neutralizing the competitors.

Combinations formed by direct competitors should thus be suspicious. And in this sense, two candidates is not equal to competition, and the lowest price is not by definition a competitive price (especially if it is far above the estimates made by the contracting authority).

**Supervision Related to Combinations**

The Dutch Competition Authority states that the criteria given in the exemption are vague. As long as the assessment that the nature and the size of the project is proportional to the number of combinants takes the capacity of the combinants into consideration, supervision of the original goal of the exemption is somewhat impossible.

We agree with the Competition Authority. We believe that the problem is that the term “capacity”, can be interpreted in many ways. Strictly speaking, capacity concerns the stream of future projects, and it relies heavily on beliefs of future success rates. Any project proposal a company has submitted and awarded or pending until the award of the project in question should be taken into account by the assessment of capacity. That is because once you tender for a project you are obliged to carry it out if you win. Subcontracting as a means of solving capacity problems is not an option, as subcontractors should be introduced during the tendering process.

What can we say about the quantification of capacity? In any case, future tenders, the ones that a firm has not yet submitted a proposal to before the announcement of the winner of the procurement project, should not be taken into account. Tenders that are awarded to a company should fully be taken into account. But how do you quantify the chances for winning of pending project proposals? And how do you quantify the ability of the firm to expand, in order to be able to carry out the project individually? Very difficult questions indeed, and one cannot expect the Competition Authority to pretend being in the position of the firm in question and make the estimates.

When we argue that only 3.75% of the procurement projects fall under the prohibition of anticompetitive agreements, we have also
discarded combinations that would fall under the prohibition of anticompetitive agreements should we only take the revised Competition Law into account, but not the Decree. These are the projects when the respondent reported that they could not have carried out the project individually, where the respondent implicitly assumed that capacity is a valid argument. And even if the 3.75% of the respondents were accused of making an illegal agreement, once they have employed a lawyer, they could reasonably argue that they indeed had capacity problems.

So, if capacity problems are regarded as a valid argument, it becomes a license to cooperate and there is no limit on cooperation. The competition authority cannot easily make a judgement whether a firm at a certain moment in time is or is not threatened by capacity problems. So as long as capacity is one of the criteria for the necessity of cooperation, no combinations can be found unlawful. We, therefore, strongly argue for the abolishment of the exemption.

However, capacity constraints can be a serious problem even for a benevolent company. As argued earlier, the construction sector can be compared to a series of tournaments. The winner takes all. If a firm does not achieve enough and therefore does not win enough, then it is out of business and goes bankrupt. But being too successful is very risky, too. We believe that more flexibility of procurement rules should be allowed regarding sub-contracting, as a means of solution to capacity problems, also after the project has been awarded.

Of course, strict rules on the participants who are actually carrying out the work are necessary in order to have safeguards on the expertise of the participants. Mutual liability also serves this goal. One wonders why these methods are necessary for public projects while private projects manage quality control with subcontracting and overall liability of the contractor. While public procurement authorities are responsible for the wise use of public finance, private contracting authorities are responsible for the money of their shareholders. So why not introduce more subcontracting?

However, revising rules on ex post subcontracting is not sufficient on its own. The rules that discriminate on experience acquired as a subcontractor versus combinant should be abolished. For the Dutch construction sector some other things have to change, too. The habit
that subcontracting agreements in the pre contractual phase are not binding is unacceptable.

**Recommendations**

Here we summarise the things that – in our opinion – should change:

- The Decree on exemption for combinations should be abolished. The original goals of the decree are now incorporated in the general exemptions in Competition Law.

- Acknowledging capacity problems as legitimate reason for the necessity of cooperation for tenders is the same as accepting cooperation on tenders.

- Capacity problems should be met by subcontracting arrangements. We plead for more room for subcontracting arrangements for public procurement projects. Also, experience acquired as a subcontractor should count as experience points for future tenders. Finally, sub-contracting agreements in the precontractual phase should be binding.

- Increase awareness of procurement authorities that more than one application is not the same as competition, and the lowest price is not by definition a competitive offer.

- It is not practical to put the burden of controlling compliance with competition law on procurement authorities: the notification of the Competition Authority in a suspicious situation will in the first place jeopardise their first priority to get the project done in time.

- Although we did not specifically address it in the text above, we would also strongly advise limiting the size of the projects (award it by parts), in order to lessen the need to form a combination as a result of capacity problems.

- Finally and maybe most importantly: restrict the number of laws, exemptions and other rules on procurement. Procurement authorities do not see the woods for the trees and choose to take no risk when it comes to interpreting rules.

**ACKNOWLEDGMENTS**

The authors wish to thank Carlijn Bijvoet who was involved in setting up the field study and Dr. Huib van Romburgh for answering
numerous questions on public procurement rules. Finally, we wish to thank the Dutch Ministry of Economic Affairs who commissioned the study that formed a major input for this chapter.

NOTES

1. The comparisons with other sectors and French and German projects may, therefore, contain some flaws.

2. Cobouw is a Dutch daily newspaper targeting an audience in and around the construction sector: people employed in the sector, architects, engineers, contracting authorities, suppliers of building materials etc. It offers news and discussions on various topics ranging from financial news, innovations, technical developments to labour market related issues and many more. A particular interesting feature of this chapter is that all Dutch tenders that are below the European threshold (and are therefore not published in Tenders Electronic Daily of the EU) are published in this chapter.

3. Here, we only present the most important results, for information on the sample, response and the detailed results, see Felsö et al. (2005).

REFERENCES

