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# What Clients Want: Choices between Lawyers' Offerings\*

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## Abstract

We analyze a client's choice of contract in auctions where Dutch law firms compete for cases. The distinguishing feature is that lawyers may submit bids with any fee arrangement they prefer: an hourly rate, a fixed fee or a "mixed fee," which is a time-capped fixed fee plus an hourly rate for any additional hours should the case take longer than expected. This format of selling legal services is unusual in that it both forces lawyers to compete directly against each other and allows clients to easily compare these different offers. We estimate a choice model for clients and find robust evidence that hourly rate bids are a client's least-preferred choice. Our findings tentatively contradict lawyers' often made argument that hourly rates are in a client's best interest.

Keywords: Lawyers' fee arrangements, clients' choices, discrete choice models

JEL Classification Numbers: C25, D43, K10, K40

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# 1 Introduction

Hourly fees prevail as the typical fee arrangement for lawyers' services in many countries. It is argued that an hourly fee creates an incentive for the lawyer to devote sufficient time and effort to a case. As Rhode (1985, 635) puts it "[M]ost lawyers will prefer to leave no stone unturned, provided, of course, they can charge by the stone." Consequently, fixed fees are said to be infrequent because they elicit minimal effort on the lawyer's side, which is against a client's best interest.

This argumentation, however, is not uncontested. Other commentators propose the alternative hypothesis that hourly rates prevail due to law firms enjoying market power, given the informational problems involved (Hadfield 2000). Indeed, legal services have the characteristics of credence goods: clients often do not know exactly what services they need, nor how much they should pay for them (Dulleck and Kerschbamer 2006). Lawyers can exploit these informational advantages as clients suffer from search costs. A typical web site of a law firm only states that the firm charges an hourly fee depending on the complexity of the case and the financial strength of the client. To find out what that means, one needs to discuss the case extensively with a lawyer in person. Thus, even if a first consultation is for free – which is most often not the case – the client must invest a considerable amount of time to acquire a quote. It further logically follows that for most clients it would be costly to obtain more information through soliciting competing offers from other lawyers.

Switching costs are another source of a lawyers' market power as clients must

duplicate an investment specific to their current lawyer when changing to another lawyer (Farrell and Klemperer 2007). Indeed, once a client has chosen a lawyer who has started on the case, the “investment” in this lawyer accumulates. Switching to another lawyer would imply the duplication of these start-up costs. Furthermore, there are institutional barriers to entry so that competitive pressure from potential entrants is limited. The right to proceed in a Dutch civil court is reserved to lawyers admitted to the Bar Association. In addition, professional regulation restricts competition between registered lawyers as professional rules imply numerous limitations on how lawyers may pursue their business (Baarsma and Felső 2005).

Following this second line of reasoning, hourly fees are offered because law firms have market power: compared to other arrangements such fees lead only to a more expensive bill, while not necessarily rendering better services, especially if the case is relatively standard. A recent article in *The Economist* (2011) summarizes this view: “Law firms were often charging stiff rates for routine work [...]. Clients are right to demand better value for money. [...] They are asking for flat or capped rather than hourly fees.”<sup>1</sup> This reasoning is also in line with Winston et al.’s (2011 6) broader point that deregulating the market for legal services would stimulate competition which, in turn, would encourage lawyers to experiment with alternative billing practices: “To [...] improve social welfare, [...] deregulating entry by individuals and firms into the legal profession is desirable to force lawyers to compete more intensely with each other [...].”

In this paper we test the alternative hypothesis that hourly rates are not neces-

sarily in the interest of clients but that market power allows firms to charge them. In particular, we investigate what type of contract clients prefer for assistance in a legal dispute in Dutch civil courts. Our data consists of 196 bids offered in 51 Dutch auctions where lawyers compete to represent a client in a case. This format of selling legal services is unusual in that it both forces lawyers to compete directly against each other and allows clients to compare different offers. Indeed, and contrary to what is also common practice in the Netherlands, instead of only observing hourly rates, different fee arrangements are being offered in the auctions. The clients' choice set therefore includes different types of bids. As a consequence, our dataset offers a rather unique opportunity to study client preferences in a setting that is arguably more competitive than the usual market for legal services. Clients *not* choosing hourly rates in this setting would support the alternative hypothesis that legal firms offer hourly rates because they have market power in the usual market.

The auction format we investigate is organized by XS2Justice (XS2J), a franchise network for legal service providers in the Netherlands. In each auction, about three to five potential bidders are invited from a shortlist of approximately 50 small- and medium-sized Dutch law firms. Several types of fee arrangements are observed in the auction: hourly rates, fixed fees, and “mixed fees,” which are time-capped fixed fees plus an hourly rate for any additional hours should the case take longer than expected.<sup>2</sup> Clients are typically private people and small- and medium-sized companies. Their legal problems include cases that appear in Dutch civil courts, such as labor disputes for individuals and collecting debts for businesses. Each client who

signs a contract with a lawyer through the XS2J auctions pays the lawyer: there is no fee-shifting, and clients do not qualify for legal aid and do not possess a legal expenses insurance.

We estimate a client's choice of fee arrangement while controlling for the level of each bid, auction-specific circumstances, and other features of bidders that clients directly observe or that might influence their choices. We find that hourly rates are clearly the least-preferred bids. These findings are robust when including several dimensions of lawyers' bid experience in the auctions, and when distinguishing between different types of cases and clients; hourly rate bids are not chosen. Thus, while our clients have the choice to go purely for hourly rates, they overwhelmingly do *not* choose these bids.

The legal profession often argues that lawyers may be inclined to cut corners if they are not paid on an hourly basis. We therefore approached the clients ex-post and asked for their opinion of the services of the lawyers they selected through the XS2J auctions: (very) satisfactory, passable or unsatisfactory. All the clients we were able to reach were willing to confide to us their level of satisfaction, which thus excludes the possibility of sample selection bias. Only one client expressed an unsatisfactory service, and we find no statistically significant differences between satisfaction level and type of bid. This indicates that fee arrangements that include flat fees do not lower a lawyer's effort for a (standard) case acquired through the auction under investigation.

We additionally provide further context for the Dutch market for legal services

and the XS2J auctions. First, we verify that the XS2J cases are a representative sample of Dutch civil court cases. Second, we show that although the non-auction cases have similar characteristics, law offices' fee structures in general are heavily biased toward hourly fees outside the auctions. We give economic and historical rationales for why hourly fees prevail in the Dutch market for legal services. Finally, we provide a logic for why the XS2J auctions cause the form of compensation to change.

We are not the first to study different remuneration structures for legal services. Kritzer (2009) provides an elaborate overview of several fee regimes.<sup>3</sup> Hadfield (2000) discusses the implications of hourly fees and task-based fees and argues that these fee arrangements enhance the monopoly power of the legal profession. Finally, Smith and Cox (1985) present empirical evidence of law firms offering hourly versus fixed fee contracts for standard cases. Based on a survey of 1,500 US lawyers, they observe that the larger and more known a law firm, the more likely it is to offer an hourly fee contract. These fee arrangements are found to be more expensive than fixed fees, both because they include higher effective hourly rates and because they budget more hours per case. While the authors attribute their findings to a signaling of quality, their results are also fully consistent with these larger firms enjoying a higher market power. To our knowledge, however, thanks to our unique dataset we are the first to be able to present empirical evidence of clients' choice of fee arrangements, and thus of the merits of lawyers' still most-often used hourly rates.

Our paper proceeds as follows. In section 2 we discuss the data, while section 3

contains our empirical implementation. Sections 4 and 5 present the results of our empirical framework and of an ex-post survey among clients, respectively. Section 6 includes a discussion of our findings and section 7 concludes.

## **2 Data**

This section introduces the data. In the first subsection we give background information on the XS2J auctions. In subsection 2.2 we summarize the rules of the auction. We present summary statistics on bids and choices in subsection 2.3.

### **2.1 Background**

The XS2J auctions are an often-used byproduct of the core business of XS2J, a franchise network for legal service providers. The franchisees of XS2J are legally skilled professionals who provide advice and assist clients in resolving disputes outside the court system. However, as they are not members of the Bar Association, they normally cannot represent their clients in court. In situations where XS2J franchisees cannot take on a case, or when the client explicitly requests a lawyer, the case is put up for auction.

Like in most countries, law firms in the Netherlands are divided into two broad categories: on the one hand there are a handful of top law firms employing a large number of lawyers who perform highly specialized services, often on behalf of large multinational firms. On the other hand, there exists a large number of smaller law firms with usually a small number of lawyers who offer a broad range of routine

services to private people and small/medium-sized firms. The bidders in the XS2J auction are from the second category: the typical law firm in the auctions has one or two offices with about 15 lawyers in total.<sup>4</sup>

The client in the XS2J auctions is either a private person or a small/medium-sized enterprise. The private persons are typically middle-income. Clients with low income are eligible for legal aid, where the fees for lawyers are fixed by the government. At the same time, we do not have any indication of having clients from the top tail of the income distribution, since the disputed amounts are fairly moderate (see also table 3 further on). Similarly, large firms usually have in-house legal professionals who deal with the routine cases that are auctioned through the XS2J auctions. Furthermore, these large firms are in a position to shop around and acquire relatively costless a competitive offer from a law firm without the assistance of an intermediary such as XS2J.

The cases on which bidding is invited are typical civil court disputes of private people – family matters, labor disputes, and consumer disputes – and the usual conflicts of small/medium-sized businesses – contract disputes and collecting debts. Criminal cases or highly specialized fields of law such as competition law are not allocated through the XS2J auctions. At the same time, the production of standardized documents such as wills, marital agreements, and conveyancing services fall outside the scope of law firms in the Netherlands. The production of these documents is monopolized by another type of legal professionals called “notaries.”<sup>5</sup>

## **2.2 The rules of the auction**

Each auction starts with XS2J sending out invitations to a number of law firms. The invitation is accompanied by a brief description of the case, as well as a clear formulation of what services the lawyers are expected to submit a bid on; for example, legal advice, a second opinion on a contract, representation in court, and so forth. Bidders do not know the identity of the other candidates.

After the bids have been made, an XS2J jurist discusses the different bids with the client. Apart from the financial details and potential comments made by the lawyers, clients receive information on the experience of the lawyers concerned, namely the number of years they have been practicing law. The client is informed of which city the lawyers have their offices, but the lawyers' name and exact address are not revealed in advance. Subsequently, the client makes her choice of bid. The lawyers who submitted a bid but were not selected by the client, receive information on the financial terms of the winning bid (type and amount), office location, and professional experience measured in the number of years the winning bidder has been in practice.

## **2.3 Bids and choices**

Our sample contains information on all the auctions that were organized by XS2J in the period November 2004 to December 2008. All bids are observed, except for a limited number of (non-win) bids.<sup>6</sup> In total, the dataset contains 95 auctions in which 374 bids are submitted. Of course, for obvious statistical reasons we restrict ourselves to cases in which at least two bids were made and where one of the bids was chosen as

the winner.<sup>7</sup> There were five cases awarded where only a single bid was present and 27 cases were not awarded; these have been dropped from our sample. Furthermore, some auctions include bids based on a success fee, that is, where remuneration of the lawyer depends in some way on the outcome of the case. Given the complexity and questionable legal status in the Netherlands, auctions with success fee bids are excluded from the sample.<sup>8</sup> It must be noted, however, that our results are virtually identical when including these bids in the estimations as a separate category “success fees.” The final sample that is used for our analysis contains 196 bids submitted in 51 auctions.

[Insert table 1 about here]

This sample contains hourly fee bids, fixed fee bids, and mixed bids (recall that mixed bids are time-capped fixed fees plus an hourly rate for any additional hours should the case take longer than expected). Table 1 shows the auctions divided up according to the combination of bid types available. This gives us a first insight into how hourly rate bids fare against fixed fee bids and mixed fee bids, respectively. For example, as can be seen from the first row, there are 15 auctions where the three bid types are simultaneously offered. In the auctions with this combination of bid types, a total number of 22 fixed fee bids, 25 mixed fee bids and 26 hourly fee bids are present. However, while the hourly rates slightly outnumber the fixed and mixed fee bids, they win only in three of the 15 auctions where all bid types are available (whereas a mixed fee bid wins nine times, and a fixed fee three times).

For different combinations of the present bid types, the same pattern is repeated. Although hourly rate bids outnumber fixed or mixed fee bids in all auction types, hourly bids are less often chosen as the winner. These numbers hint at hourly fees being the least-preferred choice of clients. However, in order to identify a true causal relationship between the bid type and chances of winning, we revert to our econometric framework.

### 3 Empirical Implementation

First we explain the variables we use and then introduce our estimation strategy. We define our dependent variable  $Win_{ik}$  as a dummy which takes the value 1 when the submitted bid  $i$  was selected by the client in auction  $k$ , and 0 otherwise; see table 2 for the exact definition of this and all subsequent variables.

[Insert table 2 about here]

Our prime explanatory variables are, of course, the type of bids offered. These are defined as dummy variables:  $Fixed_{ik}$ ,  $Mixed_{ik}$  and  $Hourly_{ik}$ , respectively.

Furthermore, we include a measure for the price level of each bid. Note that it is not straightforward to rank bids in terms of expected payment, given the different bid types present. Table 3 provides some insight into this heterogeneity. The hourly fee bids are in the range of €100 to €268 per hour, the fixed fee bids are in the range of €150 to €6,360 in total, whereas the mixed bids show an average fixed fee part of €2,179 and an additional hourly fee part of €154 per hour if the cap is exceeded.<sup>9</sup>

[Insert table 3 about here]

Thus, clients have to make their choices with no ex-ante information on the number of hours that a particular lawyer will work on a case.<sup>10</sup> We therefore propose a definition that is based on a “mechanical” ex-ante calculation of payment that requires no knowledge of the hours that a lawyer will spend on the case. In particular, we define a bid to be higher (a dummy variable  $higher_{ik}$ ) if there is at least one other bid that yields a lower payment to the client for all possible ex-post number of hours worked.<sup>11</sup> Thus, a fixed fee is classified as higher when there is at least one other fixed fee which is lower. Likewise, an hourly fee is higher if there is at least one hourly fee that is lower. Furthermore, given their somewhat higher complexity, we give for the mixed fee bids two examples of our definition in an appendix at the end of this text. Note that a mixed fee bid can in some circumstances be compared to a fixed or an hourly fee. Indeed, when a mixed fee bid has a higher flat fee part than a competing fixed fee, it can be labeled as “higher,” as for any number of hours worked on the case the mixed fee will yield a higher payment than the fixed fee. Similarly, a mixed fee may yield a higher payment for any possible realization of hours compared to a relatively low hourly fee.

[Insert table 4 about here]

A client’s choice of the winning bid may not only depend on the type and the level of the bids. Besides bid characteristics, clients’ information on bidder characteristics may influence their choice. As said, clients are informed of the length of

the professional experience of lawyers (in number of years). In the absence of other signals, this might provide information for the client as she may believe that more experienced lawyers are better than inexperienced lawyers. As each client can only choose from her own choice set, we include professional experience in relative terms: the ratio between the experience of the lawyer with bid  $i$  and the experience of the most experienced bidder who submitted a bid in a given auction  $k$ , which defines the variable  $Experience_{ik}$ .

Second, although the client is not informed of the identity of the lawyer, she is told in which town the lawyer has his office. As the client potentially needs to visit the lawyers' office on a number of occasions, it may be that she takes the geographical distance between her own residence and the lawyer's office into account. We include the lawyer-client distance relative to the most distant lawyer in the auction.<sup>12</sup> Descriptive statistics for all our variables are given in table 4.

Our main specification can thus be summarized as follows:

$$Win_{ik} = \beta_1 Fixed_{ik} + \beta_2 Mixed_{ik} + \beta_3 Higher_{ik} + \beta_4 Experience_{ik} + \beta_5 Distance_{ik} + \eta_{ik}, \quad (1)$$

where  $i$  indexes bid and  $k$  indexes auction. We take hourly fee bids as the base and therefore include only fixed and mixed fees as explanatory bid-type variables; the coefficient estimates on fixed and mixed fee bids should thus be interpreted as relative to hourly rates. The remaining variables are the height of bid  $Higher_{ik}$ , the relative experience of the bidding lawyer  $Experience_{ik}$  and relative distance of the

lawyer's office  $Distance_{ik}$ , and  $\eta_{ik}$  is the error term.

We estimate the above model with the conditional logit estimator. This estimator fits maximum likelihood models with a dichotomous dependent variable (a winning or losing bid in the auction). Conditional logistic analysis differs from a simple logistic regression in that the data are grouped – per auction in our case – and the likelihood is calculated relative to other bids in each auction. Our methodology has the advantage that it controls for unobserved differences due to the size of the choice set (the number of bids available per auction), as well as other unobserved case-specific characteristics (see, for example, Hosmer and Lemeshow, 2000, for a comprehensive explanation). Furthermore, we allow standard errors to be clustered on the auction level. Thus, we take into account that bids in the same auction may be correlated and estimates of standard errors are accordingly adjusted.

For clarity, here we give a brief, formal explanation of how a conditional logit estimator works. Let  $k = 1, \dots, 51$  denote the 51 auctions and  $i = 1, \dots, T_k$  be the bids in the  $k$ th auction. The outcomes in an auction  $k$  can then be represented together as  $Win_k = (Win_{1k}, Win_{2k}, \dots, Win_{T_k k})$ . In each auction, only one bid wins and thus per auction  $k$  there is only one  $Win_{ik} = 1$  while the others take a value of 0. This means that  $\sum_{i=1}^{T_k} Win_{ik} = 1$ . For ease of notation, let the right-hand side variables of our main equation (1) be represented by  $x_{ik}\beta$ . The conditional probability of a possible value of  $Win_k$  can then be written as

$$\Pr(\text{Win}_k | \sum_{i=1}^{T_k} \text{Win}_{ik} = 1) = \frac{\exp\left(\sum_{i=1}^{T_k} \text{Win}_{ik} x_{ik} \beta\right)}{\sum_{d_k \in S_k} \exp\left(\sum_{i=1}^{T_k} d_{ik} x_{ik} \beta\right)}, \quad (2)$$

where  $d_{ik}$  is an indicator equal to 0 or 1,  $\sum_{i=1}^{T_k} d_{ik} = 1$ ,  $S_k$  the set of all possible combinations of one winning bid and  $T_k - 1$  losing bids in auction  $k$ .

However, while the conditional logit estimator nicely corrects for the number of bids in an auction, it still assumes that a particular choice between two bid types is not influenced by a third alternative bid type. Thus, our estimator assumes “independence of irrelevant alternatives” (IIA), which translates into assuming that the errors are independent; see, for example, Train (2009) for a detailed discussion. If the IIA assumption is violated, the conditional logit may in theory yield wrong substitution patterns. While Kropko (2010) shows that in practice a violation of the IIA assumption does not lead to worse estimations for simple logit models than more complicated estimators, we will show in the results section that the IIA assumption holds for our sample.

Furthermore, one might argue that lawyers’ participation in previous XS2J auctions may increase their chances of winning. Bidding experience could have an indirect effect through XS2J’s selection to the auction of lawyers who performed well in the past. These lawyers may potentially be of a higher quality and it may be possible to transmit this difference to clients in some way, for example, through the comments they make. We will show, however, that several dimensions of lawyers’

bid experience have no impact on their chances of winning. Moreover, we will give a tentative interpretation of our results in terms of price versus quality of legal services.

Finally, our main equation (1) estimates an average choice over all cases and clients. Although the cases in our sample are relatively standard and clients do not include very wealthy persons or large companies, it may still be that the choices of bids are heterogeneous across different types of cases or clients. Indeed, lawyers often argue that more complex cases or clients require hourly fee rates, since this is in the best interest of the client. We will, therefore, investigate whether clients' preferences differ depending on the case and client characteristics.

## 4 Results

We first show our main results and the validity of the IIA assumption. We then show that several dimensions of lawyers' bid experience and case or client characteristics have no impact on the chances of winning a case, and give a tentative interpretation of our results.

### 4.1 Main results

For all our conditional logit estimations the relative odds ratios are reported, as these are easier to interpret than marginal probabilities; see, for example, Long and Freese (2006) for an excellent exposition on this topic. In short, the odds of an event is the probability of an event taking place, divided by the probability of that same event not taking place. Take, for example, the odds for fixed fee bids in our setting. If  $p_F$

represents the probability of a fixed fee winning, then the odds for a winning fixed fee are  $p_F/(1 - p_F)$ . Given that we compare fixed fee bids with hourly fee bids (the “baseline” in our regressions), and  $p_H$  being the probability of an hourly rate bid winning, the odds of fixed fee bids relative to hourly rates’ odds are  $\frac{p_F/(1-p_F)}{p_H/(1-p_H)}$ . A coefficient that is larger than one (smaller than one) would therefore indicate that the odds of a fixed fee winning are better (worse) than the odds of an hourly fee. In fact, it reflects a factor change: a coefficient of 2 doubles the odds of winning, while that of 0.5 halves it. The exact same logic holds for the coefficient of mixed fee bids, as this is the third possible bid type.

In terms of model fit we present the value of the log likelihood ratio at convergence, the  $\chi^2$  value and the number of correct predictions of the estimation, which corresponds to the percentage of auctions where our model picks the right winner (“auction hit rate”). The benchmark for evaluation is a naïve predictor where each bid has an equal chance of winning. This amounts to each bid in auction  $k$  containing  $T_k$  bids having a winning chance of  $\frac{1}{T_k}$ , averaged over all 51 auctions in our sample, that is,  $\frac{1}{51} \sum_{k=1}^{51} \frac{1}{T_k}$ . This naïve predictor in our sample yields a 32% chance of winning.

We first report the estimation with only the three types of bids. As can be seen from column (1) in table 5, a fixed fee bid increases the odds of winning over four times, relative to bidding with an hourly fee (1% significance level). The relative odds of winning for the mixed fee bids, again relative to hourly rate bids, is over seven times (1% significance level). The same pattern, order of magnitude, and level of significance can be observed when consecutively adding our measure of what

constitutes a higher bid (column (2)), the level of experience, and the distance of the law firm’s offices to the client (column (3)).

[Insert table 5 about here]

For the control variables, the reported odds ratios are the multiplicative effect of a change in a given variable on the odds of any given type of bid. First, the bids that are labeled as higher have a significantly lower chance of winning (at the 1% significance level). The coefficient of 0.171 in column (3) means that if, for example, a fixed fee bid changed to “higher,” then the odds of winning the auction for this fixed fee would decrease by more than a factor of 5, holding the values for the other bid alternatives constant. On the other hand, the odds of winning are more than twice as high if the lawyer is more experienced (significant at the 10% level), as can be seen in column (3). Furthermore, while having offices at a relatively larger distance decreases the odds of winning (with a coefficient of 0.419), its impact is not significant.

In terms of model fit, our estimations correctly predict the winning bid in an auction between 71% and 80% of the cases. Therefore, our estimations perform considerably better than the naïve auction hit rate of 32%.

## **4.2 Independence of irrelevant alternatives**

As said, our estimates rely on the IIA assumption holding true. IIA holds if the odds of winning for one type of bid over another do not change when the third

bid type is dropped as an alternative.<sup>13</sup> For example, the relative odds of winning for a fixed fee bid with respect to an hourly fee bid should be roughly the same, irrespective of whether mixed fee bids are present or not as an alternative. The same reasoning holds for the presence of other combinations of bid types. To check the IIA assumption, we perform several generalized Hausman tests.<sup>14</sup>

In particular, we estimate the same model as in equation (1), but drop one of the bid types each time. We then compare the coefficients of these “reduced models” with the coefficients of our full model. If these are always the same then the IIA assumption holds. Our tests can never reject the equality of coefficients. In particular, when dropping mixed bids, the p-value of the  $\chi^2$  test is equal to 0.95. When dropping fixed bids, the p-value equals 0.19. Finally, when dropping hourly rate bids, its p-value is 0.45. Therefore, the IIA cannot be rejected for our sample, which leads to the conclusion that the conditional logit estimator is valid in this context.

As an additional test, we re-estimate our main equation (1), while allowing for correlation between the different choices (fixed, hourly, and mixed fee bids). To implement this model, we use the mixed logit estimator and apply two different optimization procedures.<sup>15</sup> Both optimization methods exhibit no correlation for any pair of choice alternatives and convincingly show that the null hypothesis of these coefficients being zero cannot be rejected. Moreover, the tests where the mixed logit model (with correlations) is compared to the logit model (without correlations) show that both models are the same. In particular, the  $\chi^2$ -values indicate that the

null hypothesis of both models being the same cannot be rejected; the resulting p-values are 1 and 0.994 respectively. The mixed logit analysis thus confirms that our sample complies with the IIA assumption and that, therefore, the conditional logit model is the preferred estimation method as it is the most efficient estimator.

### 4.3 Lawyers' previous auction participations

While our estimations should not suffer from an omitted variable problem (we include all variables that are directly observable by the clients), one could still argue that participating in previous XS2J auctions increases lawyers' chances of winning. An effect may come into play because, for example, legal experts of XS2J invite lawyers to the auction that are known to have performed well in previous auctions and cases. These lawyers may then be of a higher "quality." If this difference can be in some way transmitted to clients, then lawyers with more bidding experience may have a higher chance of winning.

We therefore re-estimate our main model (1), but add successively three bid-experience related variables. First, we include the number of times the office of a bidding lawyer has participated in previous auctions (variable  $Prev\ Participation_{ik}$ ).<sup>16</sup> Second, we add the number of times the participating lawyer's office has actually won in previous auctions ( $Prev\ Won_{ik}$ ), with the underlying idea that winning lawyers are perhaps of an even higher quality. Finally, to contrast experienced offices with law companies that have no bid experience at all, the dummy variable  $First\ Time_{ik}$  is inserted. Exact definitions and summary statistics of these variables can be found

in tables 2 and 4, respectively.

The results are shown in table 6. First, the number of previous participations have no effect on the odds of winning a particular auction. Indeed, as can be seen from columns (1) to (3), participation in other auctions yields a relative odds ratio of about 1, which indicates that offices that participate frequently in the XS2J auctions have roughly the same odds as others. Moreover, the coefficients in all three specifications are not significant. The same pattern can be observed for the other bid-experience related variables. Offices that have previously won have about the same chance of winning the current auction, and this effect is non-significant; see columns (2) to (3). Finally, column (3) shows that first-time participants have a slightly lower chance of winning with a relative odds ratio of 0.936, but this impact is again insignificant. On the other hand, the main results stay robust to including these bid-experience related variables. In sum, the bidding history of lawyers' offices has no impact on clients' choices.

It is perhaps interesting to note at this point that lawyers with more bid experience do not offer different fee contracts, further excluding any possibility of endogeneity. Indeed, (non-reported) regressions show that both previous participations and previous wins have no impact at all on the type of fee contract that lawyers offer. On the contrary, case-specific dummies have more explanatory power, indicating that lawyers bid mostly depending on the particular case they are facing.<sup>17</sup> This therefore excludes strategic bidding behavior by lawyers in the XS2J auctions, which might be explained by the fact that these auctions should be relatively unimportant

for a law firm’s portfolio. The lack of strategic interaction allows us to focus solely on clients’ choices.

[Insert table 6 about here]

#### 4.4 Cases and clients

The XS2J auctions deal mainly with standard cases, while clients are mostly middle-class private persons or relatively small companies. Still, our sample shows some heterogeneity across legal disputes and clients. Accordingly, we would like to explore here to what extent our main findings – that is, clients dislike hourly rate bids – are similar for different case and client characteristics. Indeed, one could perhaps expect differential responses if one follows the argument of some lawyers that hourly rates induce optimal effort. According to this reasoning, for higher financial value cases clients might prefer hourly rates, as a good outcome could then become relatively more important than a low cost. Similarly, clients with more cash to spend might be less interested in the cost side and would place a higher value on results. Thus, if hourly rates are expected to deliver a better outcome then these should prevail for those categories.

For this purpose, we re-do our main estimation of equation (1), but allow for an additional different impact of our bid variables along distinct categories of cases and clients. In particular, we add the interaction terms of bid types and dummies that reflect these different categories. If the reasoning of “hourly rates lead to higher effort”

is correct, then these interaction terms could yield significant coefficient estimates.

First, we isolate the cases where no estimate of the expected financial value is available (to neither bidder nor client). These cases are typically more complex and potentially have a higher (emotional) value for clients. Indeed, they treat issues such as child custody, adoption, and family and neighbor disputes. The outcome of these cases arguably matter more to people than, say, a late delivery of a large batch of fruit (of which the value is relatively easy to estimate). For 15 cases, comprising a total of 88 bids, there was no financial information available. As one can see from column 1 of table 7, while the bid variables interacted with the dummy “*Not Financial*” are all non-significant, the main effects of fixed and mixed fee bids stay significant and positive (although the fixed fee bids lose some significance). Therefore, while hourly rates are still the least-preferred fee type, the client’s choice is qualitatively not different for non-financial cases.

Second, one may think that for those cases where a financial estimate was made, a larger financial value may be of greater importance to clients. We categorize those cases that are above the median value as being of high value (consisting of 43 bids in 11 cases). As is clear from column 2 of table 7, the bid variables interacted with the dummy “High Value” are not significant. On the other hand, the main effects of fixed and mixed fee bids are still significant and positive. Therefore, cases with a larger financial stake do not induce clients’ preferences to change.

Finally, one could argue that firms have more money to spend than private persons, which in turn could make firms relatively more interested in the results (as

opposed to the costs). We therefore differentiate between firms and private persons. There are 16 auctions that were requested by private persons, in which 65 bids have been submitted. Column 3 of table 7 shows that private persons' choices are no different from that of companies, as the bid variables interacted with the dummy "*Private Client*" show no significant impact.

[Insert table 7 about here]

In sum, we do not find a different choice pattern when we look at distinct categories of cases and clients. These results first of all mean that our main findings are not driven by one particular category of cases or clients. Moreover, our findings here are also consistent with the reasoning that clients do not prefer hourly rates when stakes are higher or clients have more money. Therefore, one may tentatively conclude that hourly rate fee bids are not seen as inducing higher effort in relatively standard cases.

## 4.5 Price versus quality

Do clients only choose on the basis of price or do they also take the lawyers' quality into account? The price is an important factor for clients in deciding which lawyer to hire. As our estimations robustly show, the higher bids have lower odds of winning by at least a factor of five; see, for example, the coefficients for the variable "higher" in table 5. However, an element of "quality" also plays a role in the client's choice of a lawyer for our cases. Indeed, a more experienced lawyer has a substantially

higher chance of winning the contract. In particular, our estimations show that when having double the experience as other competing lawyers in the auction (in years), this increases the chances of winning by a factor of about three; see, for example, the coefficients for the variable “experience” in table 5. In addition, clients obtain information about the lawyer’s location so that they can take that information into account when choosing their lawyer (although it does not have a statistically significant impact according to our estimations).

Furthermore, the type of pricing scheme could also be considered a quality dimension. A risk-averse client will consider a fixed fee contract to be of higher quality than an hourly rate contract if the expected number of hours spent on the case is the same; see also the next section on the relation between type of contract and risk aversion. As confirmed by the auction organizer XS2J, lawyers who are “experts” in the particular type of case that is being auctioned could in principle differentiate themselves here from colleagues with a less perfect match of expertise.

But also in the market for legal goods in general, clients find it hard to assess the quality of lawyers (Hadfield 2000). This is even more so for clients that need a lawyer in civil court cases such as a divorce or adoption; these clients typically need to contact a lawyer only a few times in a lifetime. Because of these substantial informational asymmetries between lawyers and their clients, legal services have the characteristics of credence goods, i.e., it is hard for consumers to judge quality (Dulleck and Kerschbamer 2006). Not only ex-ante, but even an ex-post assessment of the provided services is complicated. This means that, although the quality of

lawyers is of course important, clients in general have few tools to take this quality component into account when hiring a lawyer.

In sum, the quality of the lawyer probably does play a role in the client's decision to some extent, even if clients choose mainly on the basis of price. The reason is that the experience of the lawyer, the location of the lawyer's office, and the offered price structure could be informative of the lawyer's quality. However, even if clients can take some quality elements into account, for most clients, quality assessment of legal services is difficult, not only in our auctions but also in the general market for legal services.

## 5 Lawyers' effort

The previous analysis shows that clients do not prefer hourly rates as a payment scheme for their cases. However, it has been extensively argued by the defenders of hourly rates that fixed fees (and to some extent mixed fees) run the risk that lawyers do not put enough effort into solving the case to a satisfactory level.

To check whether this may indeed be the case and whether clients are satisfied *ex-post*, we contacted clients in March 2011 and asked what they thought of the services of the lawyers they selected through XS2J. Overall, we collected information from 24 of the 57 clients. The reason for not having a higher response rate is that we did not have up-to-date contact details; we tried to contact clients in March 2011, whereas the contact details date back to the period 2004–2008 (when the auctions took place). While having a response rate of less than 50%, there is no

sample selection bias. Indeed, all clients that we reached answered our question of how satisfied they were with the services of the lawyers. The clients answers were classified into three categories: (very) satisfied, acceptable, and not satisfied.<sup>18</sup>

[Insert table 8 about here]

The results of the survey are summarized in table 8. There are 19 clients who were (very) satisfied, while four said that the service was acceptable, that is, got a “pass.” Only one client reported that she was not satisfied. Furthermore, although this client had chosen a fixed fee bid, we find no statistically significant differences between the level of satisfaction and the type of bid.<sup>19</sup> These responses suggest that (i) there are no problems with lawyers’ effort level in general and (ii) there is no connection between the bid type and effort level in our cases.

## 6 Discussion

In this section, we discuss our results. First, to check the external validity of our findings, in subsection 6.1 we argue that the XS2J cases do not form a self-selected group of atypical legal cases by showing that they are a representative sample of Dutch civil court cases. Second, in subsection 6.2 we provide evidence to support our assertion that the fee structures of Dutch law offices are heavily biased in favor of hourly fees outside the auctions, even though the cases offered in the auction have similar characteristics as the cases in the usual market. We give economic and historical rationales for why this occurs. Finally, in subsection 6.3 we provide a logic

for why the XS2J auctions cause the form of compensation to move away from hourly fees.

## 6.1 Representativeness of the XS2J cases

To check whether the legal cases put up for auction are representative, we first classified the XS2J cases into the relevant legal areas, based on the case descriptions, in order to see which categories they represent.

The XS2J auctions concern civil cases for which a lawyer is needed – handled in civil courts.<sup>20</sup> Civil courts in the Netherlands operate according to the Civil Code books, largely based on the Napoleonic Code (Meijer and Sjoerd 2002). There are four main categories in the Civil Code: “Natural Persons and the Family,” “Legal Persons,” “Obligations and Contracts,” and “Patrimony and Property.” As can be seen from table 9, all Civil Code areas are represented in the auctions.

[Insert table 9 about here]

Furthermore, we were able to find data on the aggregate statistics for civil cases in the Netherlands in Van Velthoven (2007) regarding the monetary values and type of plaintiff/defendant.<sup>21</sup> Table 10 presents the distribution of the monetary value for cases initiated by summons in civil courts in the Netherlands and compares those values to the XS2J sample. First of all, as can be seen in the last column, the XS2J cases represent a wide range of cases in terms of monetary value. Moreover, the distribution of values in the XS2J sample follows closely that of summons in civil

courts. Indeed, the categories follow the same ordinal ranking for both the civil court cases and the XS2J sample. For example, in 34% of the summons cases there is no estimate of financial value, whereas this is 41% for the XS2J cases.<sup>22</sup> This is for both samples the largest category. As another example, the category €1 – €5000 is for both samples the smallest: 2.9% and 0% for the civil courts and XS2J samples, respectively. A formal test confirms that both samples show the same distribution. Assuming a multinomial distribution, the Pearson's  $\chi^2$  test shows a p-value of 0.22 and therefore cannot reject the equality of both samples.

While there are unfortunately no such detailed data on civil cases initiated by petition, Van Velthoven (2007) reports that at least 50% of those cases in the year 2005 had no estimate of financial value. Thus, also for these cases this is the largest category.

[Insert table 10 about here]

In terms of type of party, table 11 characterizes natural persons versus legal entities by their role in the dispute in both the civil courts and the XS2J samples. First, as can be seen from the bottom half of the table, the XS2J auctions represents a fairly even distribution in this dimension. Furthermore, in terms of type of plaintiff, the distribution is similar for the sample of Dutch civil court cases and the XS2J cases; 50% are a natural person for civil court cases and 51% for the XS2J cases. In terms of defendant, on the other hand, there are some differences: 52% are natural persons in all civil court cases and 39% in the XS2J sample. Formal tests confirm

these observations. Assuming binomial distributions, for plaintiffs the Pearson's  $\chi^2$  test shows a p-value of 0.38 and therefore cannot reject the equality of both samples. For defendants, on the other hand, the Pearson's  $\chi^2$  test shows a p-value of 0.01 and therefore rejects the equality of both samples.

[Insert table 11 about here]

In sum, given that the main areas of Dutch civil law are represented by the XS2J cases, these are not a self-selected group of cases in terms of legal area. Furthermore, both in terms of monetary value and type of party involved, the XS2J sample shows a lot of variation and is similar to the general population of civil courts. Therefore, the XS2J sample is a representative sample of Dutch civil cases.

## **6.2 Fee structures of the non-auction market**

While the XS2J auctions include cases that are representative for the Dutch legal market, our assertion is that the market for legal services outside the auctions is biased toward hourly fees. In order to verify what fee structures dominate in the non-auction market, we drew a random sample from the population of lawyers active during the period under research and collected information on the fee structures their law offices' web sites offer. The randomization procedure is explained in detail in the appendix.

As table 12 below shows, of the 319 offices for which there is information on tariff structures, 277 offer as the only tariff an hourly rate and make no mention

of any other fee arrangement. This amounts to 86.8% of all offices for which we found information on tariffs. Additionally, 13 offices offer a standard hourly rate, but mention somewhere less prominently on their web pages that, although hourly rates are the rule, other fee arrangements are possible in special circumstances. This amounts to 4.1% of the law offices with information. Therefore, more than 90% of our sample for which there is information on tariff structures, i.e., the sum of these two categories, is strongly biased toward offering hourly fees. Finally, 28 (8.8%) propose several fee structures on an equal basis, whereas 1 (0.3%) office offers only fixed fees.

[Insert table 12 about here]

Additionally, we looked at what the law offices that participated in the XS2J auctions offer *outside* these auctions. Out of the 46 law offices in our sample, one law office had ceased to exist and 12 do not provide information on their fee structure. This leaves us with 33 law offices which have a web site and offer information on tariff structures. As can be seen from table 13, 21 offices (about 64%) offer only hourly rates, while for seven (about 21%), the default offer is hourly rates, although they mention that other arrangements are available. Thus, almost 85% of the participating lawyers are inclined to offer hourly fees outside the auctions.<sup>23</sup>

[Insert table 13 about here]

In sum, based on the findings of our random sample, it is safe to say that hourly rates are the preferred fee choice by the overwhelming majority of law offices in the

Netherlands. Even lawyers that participate in the XS2J auctions – and often bid there with fixed fee structures – are biased toward offering hourly fees outside the auctions.

The question is then why the Dutch market for legal services is heavily biased in favor of hourly fees. We give first a general/conceptual explanation of why hourly fees prevail in the legal profession and shortly discuss thereafter some historical reasons. Our conceptual discussion uses the following, interrelated elements that contribute to lawyers favoring hourly fees. First, legal services show characteristics of so-called “credence goods” – goods for which it is hard for consumers to judge what quality they need, even after consumption. Because it is difficult for clients to assess what exactly and how much time is required to solve their case, lawyers can use hourly fees to “overtreat” clients, i.e., work more hours on a case than is really needed. Second, lawyers facing some uncertainty prefer to charge hourly fees as this allocates the risk to the client. And third, lawyers can exploit these informational advantages and transfer the risk to clients since competition in the legal sector is rather low as clients suffer from search costs and switching costs. Moreover, some institutional elements serve as an entry barrier into the legal profession, while others limit the competition from within. We now elaborate on these three reasons.

First, because of substantial informational asymmetries between lawyers and their clients (Hadfield 2000), legal services have the characteristics of credence goods: clients often do not know exactly what services they need, nor how much they should pay for them (Dulleck and Kerschbamer 2006). For example, it is difficult for a client

to assess the number of hours billed. There is no publicly available information in the Netherlands on what would be a “reasonable” number of hours for certain types of cases. Furthermore, even if the client believes the bill to be unreasonably high, she does not benefit from filing a complaint to the Dutch Bar Association. A disciplinary commission may reprimand the lawyer in question, but it does not have the competence to impose any financial compensation. These disciplinary measures are also confidential: the identity of the professional who has received a reprimand is not published. This means that clients who seek a lawyer have no information on past complaints about a particular lawyer’s billing practice.<sup>24</sup> As a consequence, an hourly fee both enables and gives lawyers an incentive to overtreat clients, i.e., spend too many hours on a case.

Second, a lawyer can fully insure himself by charging hourly fees if there exists some ex-ante uncertainty on the workload of a case. An hourly fee structure for lawyers is essentially a cost plus (or C+) contract, which is common in the context of public procurement.<sup>25</sup> A C+ contract shifts the risks related to the workload from the seller to the buyer. While this may be fine for a public agency, clients of lawyers may be risk averse and hence prefer more certainty regarding their legal bill.

A lack of competition between lawyers enables them to shift all the risks to their clients. That is, if lawyers were competing more intensely, we should expect to see at least some risk sharing between lawyers and their clients. More specifically, we should expect to see more fixed fee contracts (that shift all workload-related risk to the lawyers) and mixed fee contracts (where lawyers and clients share the risks).

Lawyers' market power may originate from several sources.

The first sources of market power are search and switching costs, which are briefly discussed in the introduction of this paper. Market intransparency further amplifies clients' search costs. In principle, a client could initially check lawyers' web sites for information. However, price information on the web sites of law firms is in general too vague to make an informed decision. Related, price comparison web sites are confined to ranges of hourly fees. Furthermore, a lawyer offering an hourly fee makes it more difficult for the client to compare the price quote to other lawyers as clients do not know how many hours the lawyer will charge ex-post. Indeed, a lawyer working for an hourly fee may take on types of cases that he is relatively inexperienced with, without running the risk of not being compensated for the time spent, while at the same time potentially being able to increase his client base; see also endnote 23 for additional information on this matter. This is a particular concern in the Netherlands because most Dutch law offices' web pages do not advertise precise areas of expertise, but instead offer a wide range of domains.

Furthermore, there are institutional barriers to entry so that competitive pressure from potential entrants is limited. The right to proceed in Dutch civil courts is reserved for lawyers admitted to the Bar Association. Prerequisites for admission to the Bar Association include an academic degree in law and a traineeship of three years supervised by a registered lawyer with at least eight years of experience.

In addition, professional regulation restricts competition between registered lawyers, as professional rules imply numerous limitations on how lawyers may pursue their

business (Baarsma and Felsó 2005). For instance, there are limitations on employment (a lawyer may only be hired by another lawyer or another registered professional, such as a notary), control and ownership of a law firm (a law firm may only be owned and controlled by lawyers), and cooperation (which is only allowed with other licensed professionals). Furthermore, lawyers face restrictions on advertising and the use of referral fees.

In sum, the regulation of the market for legal services may stifle competition between lawyers. As a consequence, lawyers are hardly encouraged to offer innovative pricing structures like fixed fees and mixed fees, as Winston et al.'s (2011 98) quote further illustrates – “Our concerns about inefficiencies in the legal profession are shared to some extent by practicing lawyers and government policymakers, but they have yet to call for the sweeping reforms we call for here. The recession that began in late 2007 prompted some responses by law firms to reduce the cost of legal services. Evan R. Chesler, a presiding partner at Cravath, Swaine, and Moore, one of the nation’s leading law firms, raised eyebrows by recommending that lawyers stop billing clients by the hour and instead set a fixed price for the requested services to improve the predictability – and apparent reasonableness – of legal expenses. [...] Changes in billing practices and the availability of lower-cost legal services suggest that more sweeping reforms are desirable.”

Hourly fees have been also traditionally promoted by the Dutch Bar Association (Baarsma and Felsó 2005). Until 1997, it published recommendations on hourly fees depending on the monetary value of the dispute. For instance, the latest announce-

ment amounted to the equivalent of about €91 per hour for “small claims” and an hourly fee of about €318 for disputes concerning a high monetary value. For disputes of a non-monetary nature, the Bar Association recommended an hourly fee of roughly €132. Since 1997 no such recommendations have been published. Nevertheless, the old practice of recommended hourly fees implies that hourly fees have strong historical roots.

The current practice concerning legal aid also points to the widespread use of hourly fees. If a client’s income is below a certain threshold, she qualifies for legal aid. These are set by the Ministry of Justice and are expressed in terms of an hourly fee. More specifically, the fee was set at €100 during the time of the XS2J auctions. Thus, the default in the Netherlands is to set hourly fees.

In sum, hourly fees are favored by lawyers as they allow them to exploit informational advantages and serve as insurance against uncertainty. The use of hourly fees is feasible since competition in the legal sector is limited. Indeed, consumers face high search costs and switching costs, while on the supply side institutional entry barriers are high and regulations limit competition between practicing lawyers. In addition, hourly fees have strong historical roots in the Netherlands. Therefore, the non-auction market in the Netherlands is heavily biased in favor of hourly fees.

### **6.3 The auction setting**

In the subsection, we argue why lawyers would charge a different fee structure than in the usual market for legal services. We do so by sketching an informal discussion

on the mechanism that could be at play. First, all participating lawyers face direct competition in the auction. Therefore, in order to obtain a case they must now make more attractive offers to the client than in the usual markets where lawyers have substantial market power.

Furthermore, typically, there is heterogeneity among participating lawyers for each case. Indeed, as confirmed by the auction organizers XS2J, lawyers who are “experts” in the particular type of case that is being auctioned can differentiate themselves from colleagues with a less perfect match of expertise, i.e., they can offer a more competitive contract. This particular heterogeneity, however, is not observed directly by clients, as they only receive information on the price and type of fee offered, the city where the lawyer’s office is located, and on the years of practice.

But before bidding, the lawyers are explicitly reminded by XS2J that they may offer fixed fee or hourly fee contracts (or a combination). In other words, they can submit two-dimensional bids  $(p_f, p_h)$ , where  $p_f$  is a fixed fee he wishes to obtain if the client selects him and  $p_h$  his hourly rate. Let us assume that clients assign a score to each bid of the type  $S(p_f, p_h) = p_f + \alpha p_h$ , where  $\alpha$  can be naturally interpreted as the number of hours that the client a priori expects the lawyer to work on the case. The client selects the lawyer whose bid produces the lowest score. After the case is completed, the winning lawyer will then be rewarded according to the actual number of hours spent on the case, rather than according to his score based on the expected number of hours  $\alpha$ . Indeed, a lawyer typically hands in the bill for the actual number of hours worked, if the contract is (partly) based on hourly fees.

The above-described mechanism is similar to Ewerhart and Fieseler’s (2003) model, where a buyer seeks to select a supplier in a procurement auction to complete a project. In their model the suppliers’ cost functions contain fixed and variable costs. Suppliers are heterogeneous in the sense that their “type” (e.g., the number of hours they need to finish the project) varies between them. Suppliers know their own type, but it is not observable to the buyer. Suppliers submit two-dimensional bids: a fixed fee and an hourly fee. Bids are evaluated according to a commonly known scoring rule that adds the submitted fixed fee and  $\alpha$  times the hourly fee part of the bid. The weight  $\alpha$  for hourly fees is based on the buyer’s expected number of hours the project will take. The contract is assigned to the bidder with the lowest score. After the winning bidder completes the project, the buyer will compensate him according to his bid and the actual number of hours spent on the project. Ewerhart and Fieseler (2003) show that both hourly-rate bids and fixed-fee bids can emerge in the equilibrium of the auction. First, consider a bidder who is less efficient than the weight  $\alpha$  of the hourly fee in the scoring rule, i.e., he expects to work longer on the case than the buyer has estimated (where number of actual hours  $t$  are greater than  $\alpha$ ,  $t > \alpha$ ). For such a bidder, it will be optimal to bid a strictly positive hourly rate and a fixed fee equal to zero. In this way the bidder minimizes his total score without sacrificing revenue when winning. Analogously, bidders for whom  $t < \alpha$  optimally submit a strictly positive fixed fee and an hourly fee equal to zero. As a consequence, bidders either submit pure hourly-rate bids or pure fixed-fee bids in equilibrium.

There are differences in the details of the described procurement auction and the

XS2J auction; for instance, clients in the XS2J auction do not announce their scoring rule in advance. Furthermore, lawyers submit mixed fee bids, probably due to risk-sharing considerations that are not in Ewerhart and Fieseler (2003). However, the main mechanism could be similar: lawyers who are “experts” in the particular type of case that is being auctioned are more likely to bid fixed fees, whereas others would be more inclined toward hourly fee bids.

Unfortunately, we cannot directly test this theoretical prediction on the basis of our data because we do not have the precise information on the specialization of each law office. Indeed, their web pages invariably offer legal help in a wide variety of the typical fields that small and medium-sized offices would offer.<sup>26</sup> However, our empirical analysis provides some evidence that is consistent with the above explanation. When we run estimations of bid type on all the lawyer-specific variables we possess – such as previous participations and years of experience in the legal profession – none of these dimensions can explain much of the variation in bid type; see also table 6. This means that experience per se does not explain bidding behavior. However, case-specific dummies do have explanatory power, indicating that lawyers’ bids depend on the case they face. As such, a particular case may match the specialization of the lawyers.

In sum, we have argued that lawyers are more likely to offer alternative pricing structures in the XS2J auctions than in the usual market because the former environment is more competitive. In addition, we have offered a sketch of formal reasoning to show why some lawyers offer fixed fees rather than hourly rates in the auctions.

## 7 Conclusions

In this paper we analyze the clients' choice of contract in auctions where lawyers compete for routine cases. Our dataset has the unique feature that lawyers submit bids with the fee arrangement of their choice. We observe offerings of hourly rates, fixed fees, and mixed fees. Thus, bidders do not stick to the usual hourly rate. This allows us to study which bid type clients choose.

We find that hourly fees are clients' least-preferred choice. This conclusion is robust for distinguishing between different types of clients and cases, and is not influenced by lawyers' auction experience. Therefore, our results support the hypothesis that market power allows lawyers to offer fixed fees in the market for legal services. In contrast, our results are not consistent with lawyers' oft-stated argumentation that hourly rates are in a client's best interest. An ex-post survey of clients confirms this finding: clients are satisfied in general, and there is no correlation between fee type and level of satisfaction.

Our findings suggest that selecting a lawyer through an auction may benefit clients who are looking to solve an incidental legal problem. Indeed, soliciting offers through an auction format forces lawyers to directly compete for and provide the needed treatment. The usual safeguards on decent legal service provision are in place through the auctioneer's selection of lawyers invited into the auction.

Finally, we suggest several avenues for future research. While we have some information on the ex-post level of satisfaction, it would be interesting for future studies to have detailed information on the effective number of hours worked and

the amount of money paid. Also, it must be noted that success fees (or contingent fees) are limited in the Netherlands. Further work, therefore, could be to investigate client preferences in other legal regimes, such as the US.

## Notes

<sup>1</sup>The philosophy of a recently founded and rapidly expanding Washington-based law firm, called Clearspire, is in line with this logic. On its website one can read that “[...] The billable hour has ruled the legal world, pitting the financial interests of the firm against the client. Clearspire replaces time-based billing with fixed-fee project pricing.” ([www.clearspire.com/end-billable-hour](http://www.clearspire.com/end-billable-hour)).

<sup>2</sup>While widely used in the United States, success fees are controversial in the Netherlands: no cure – no pay is declared illegal. No cure – little pay is not forbidden, but the boundaries of what is allowed are rather fuzzy; see <http://advocaten.advocatenorde.nl/wetenregelgeving/vademecum.asp>.

<sup>3</sup>While not applicable in our setting, the bulk of the (mainly theoretical) literature on fees for legal services deals with the analysis of success fees, since these are widely used in the United States. See, for example, Dana and Spier (1993) and Rubinfeld and Scotchmer (1993) for excellent early works, and Emons (2007) for a more recent study.

<sup>4</sup>The law firms participating in the XS2J auctions are short-listed on the internet site of XS2J, <http://www.xs2justice.nl>

<sup>5</sup>A notary is licensed by the state to perform acts in certain legal affairs, in particular witnessing signatures on documents.

<sup>6</sup>Our database is based on the e-mail box of the organizers of the auctions. The bids that we do not observe – at most five bids – were submitted by fax.

<sup>7</sup>A client can also choose to refuse all bids in an auction. In most of these cases the dispute is not awarded because the case appears without merit, which becomes apparent from the comments lawyers make on the case.

<sup>8</sup>As noted earlier in the introduction, success fees are controversial in the Netherlands and industry experts believe that success fees are rare in general. Nevertheless, in our sample we observe 21 bids where the remuneration of the lawyer depends to some degree on the outcome of the case. There are many ways to specify a success fee, and indeed, almost all of the observed bids have a different structure. For instance, we observe a high hourly fee versus a low hourly fee in case of winning versus losing. Another version is a fixed fee plus an hourly fee, the latter only due when winning. We also see bids where the fee is based on some percentage of the case value plus an additional fee (fixed or hourly), where the additional fee was in some bids only applicable in case of losing while in other bids, only in case of winning.

<sup>9</sup>The observed lower bound of €100 for the hourly fees corresponds to €1 more than the hourly fee a lawyer could earn by doing legal aid, which is set by the government at €99 per hour.

<sup>10</sup>There are no official recommendations given in the Netherlands for all case types that we have in our sample, despite these being relatively standard. Also the auction organizer XS2J does not

provide for an estimate of the expected number of hours. Thus, it is hard for a client to even have a rough estimate of the number of hours that is reasonable in such disputes.

<sup>11</sup>Our definition of a higher bid corresponds to what is called a dominated bid or dominated strategy in game theory (see, for example, Mas-Colell et al. 1995).

<sup>12</sup>In a limited number of cases, the client lives abroad. As distance here does not constitute an advantage or a disadvantage to any bidder, we set the distance at 0 for all bidders in these auctions.

<sup>13</sup>One could further argue that the control variables represent “alternatives” as well. Table 5 shows that these do not change the odds of a particular bid type winning.

<sup>14</sup>The standard Hausman test relies on assumptions that are not satisfied in our context. First, the estimated variance component estimation does not satisfy the required asymptotic properties. And second, one cannot apply the standard Hausman test when errors are clustered. We estimate the simultaneous (co)variance of our models via a sandwich estimator which can overcome these limitations; see, for example, White (1996) for a discussion of sandwich estimators and their properties.

<sup>15</sup>We use the mixed logit estimator in Stata 13 and first apply the *melogit* command, which estimates our mixed-effects logistic regression and performs optimization by using the original metric of variance components. This is the most commonly used methodology. We add to this classic methodology an alternative estimation method, *meqrlogit*, which uses the QR decomposition of the variance-components matrix. This method may aid convergence when variance components are near the boundary of the parameter space, which would be the case if correlations of our choices are close to zero. We do not report these estimations in the paper, but results are available upon request.

<sup>16</sup>It seems more natural to us to include variables related to the office of the lawyer, and not just the individual lawyer, as lawyers’ offices are easier identifiable by XS2J. Quality may be better defined at the office level and information on previous auctions and cases can be passed on to other lawyers in the same office. It must be noted, however, that results are qualitatively the same when we include lawyer-specific variables.

<sup>17</sup>This finding is in line with Maheshri and Winston (2013) who report that the variation of hourly rates in the US cannot be explained by several variables related to lawyers’ experience.

<sup>18</sup>Unfortunately, we could not gather information on the total sum paid and the number of hours worked on the case. Clients expressed both difficulties remembering these amounts and a reluctance to provide financial information.

<sup>19</sup>The correlation between satisfaction and fixed fee bids is -0.17 (with a p-value of 0.43), whereas with mixed fee bids it equals 0.12 (p-value 0.57) and with hourly fee bids it is 0.05 (p-value 0.82).

<sup>20</sup>Each of the 11 district courts in the Netherlands has a number of venues that deal with issues related to the administrative sector, civil sector, and criminal sector. Criminal cases go to a separate criminal court. Administrative cases, small claims (cases below a monetary value of €5,000 at the time of our sample), labor cases, and those involving the lease of residential and commercial property do not need representation of a lawyer, and go to a “cantonal court.”

<sup>21</sup>Quantitative information on Dutch civil court cases is scarce as information registration is done at the local court level and no standardized procedures existed for the period of our sample. The consequence of this is that, for example, exact case classifications are not available, and for many cases there is no information at all. Although not representing the full sample of cases for the above-mentioned reasons, Van Velthoven (2007) is to our knowledge the best available source of information for the time-period of our sample.

<sup>22</sup>These cases are typically complex and potentially have a high (emotional) value for clients. Indeed, they treat issues such as child custody, adoption, and family and neighbor disputes.

<sup>23</sup>These figures also tentatively suggest that lawyers who participate in the XS2J auctions might revert to hourly fees outside the auctions, even when bidding fixed fees in the auctions. This observation could be consistent with the reasoning that the XS2J auction allows lawyers to attract new clients. The underlying idea is that once a lawyer has won the auction and has successfully handled the case, the client will return to the same law office if she needs legal assistance for other cases. But then, the lawyer no longer faces direct competition for the client so that he can charge hourly fees if he prefers to do so. Such “bargains-then-ripoffs” price pattern is common in markets where clients face switching costs (Farrell and Klemperer, 2007).

<sup>24</sup>Sources: Baarsma and Felsó (2005) and <https://www.advocatenorde.nl/624/bedrijven/tuchtrechter.html>

<sup>25</sup>For example, in the area of construction, Bajari and Tadelis (2001) show that sellers prefer C+ contracts over fixed-price contracts for relatively complex projects.

<sup>26</sup>While XS2J offered some anecdotal evidence, they could not provide us with a precise list of specializations for each lawyer, as this is informal and not clear-cut knowledge.

# Appendix

## Some examples of higher mixed bids

We give two examples of labeling mixed fee bids as higher. First, imagine that there are two mixed bids in an auction, bids A and B respectively. Bid A offers a fixed fee of €2,000 covering the first 11 hours and an hourly fee of €190 from that point on, whereas bid B consists of €1,600 for 10 hours and subsequently an hourly fee of €170. Bid A is clearly higher than bid B for any number of hours dedicated to the case, and is therefore qualified as “higher.” Second, suppose there are two mixed bids in another auction, bids C and D. Bid C consists of €1,500 for the first five hours and after that charges €170 per hour; bid D offers €1,600 for the first four hours and then €100 per hour. Bid C would be the lowest if the case takes four hours (€1,500 for bid C versus €1,600 for bid D). But if the case takes seven hours, then bid D would yield a lower payment (€1,840 for bid C versus €1,800 for bid D). Here, neither C nor D is labeled as “higher.” Figure 1 depicts the four bids.

[Insert figure 1 about here]

### **Random sample procedure of Dutch law offices**

The random sample is drawn from a hard copy of the year book of the Dutch Bar Association (“Nederlandse Orde van Advocaten”) of 2005. The reasons to consider this book as a starting point are twofold. First, the XS2J sample consists of cases in the period 2004–2008. As such, 2005 seems like a good proxy for the market for our random sample. And, second, perhaps the year 2006 would have been even better, but the Dutch Bar Association edited this year book only until the year 2005 as a hard copy. Thereafter, information on lawyers has been accessible online (the web site’s address is <https://www.advocatenorde.nl/>). However, retrieval from this online database cannot be done randomly. It contains no list of the entire population of registered lawyers. One can only search on name, location or keyword where for each entered search string – e.g., lawyers that contain the letter A – a list of maximum 100 results is returned. Furthermore, the search results contain duplicates and the returned list is not identical for repetitions of the same search string.

The 2005 book contains an alphabetical list of all individual registered Dutch lawyers and information on all Dutch law offices in that year by court district – about 3,600 in total. From this book, we have generated a random sample that contains roughly 10% of all law offices, i.e., 362 observations.

Our randomization procedure is as follows. We took the alphabetical list of individual lawyers as a starting point. As only individual lawyers are officially registered in the Netherlands – and not law offices – this is the relevant unit of observation to start with to produce a random sample. This list contains 69 pages, where each page

consists of three columns with about 60 lawyers per column. We let the statistical package Stata randomly generate nine page numbers, and for each of these pages a column number (1, 2 or 3). This gave us a list of 362 lawyers and corresponding law offices (i.e., approximately 9x60 law offices). When we encountered a lawyer working for a law office that was already in our list, we replaced this lawyer by the first lawyer of the next column, and so forth.

For our generated sample of 362 law offices we retrieved information of their web sites on the fee arrangements they offer. Note that even though our sample is drawn from the population of lawyers in 2005, we could only collect information on their law offices' pricing schemes from 2014, as this random sample was generated during a revision of this article. We found 351 offices to still exist in 2014 and to have a web site. While some offices changed the composition of lawyers or merged with another office since 2005, only a few went out of business. On the offices' web sites we looked at whether information about fee structures is provided. This was the case for 319 offices; this also indicates that the other 32 law offices are thus totally untransparent about fee structures.

## References

- [1] Baarsma, B., and F. Felsó. 2005. “Het Proces als Domein - Over de Effecten van het Procesmonopolie van de Advocatuur.” *SEO-report nr. 846*.
- [2] Bajari, P. and S. Tadelis. 2001 “Incentives Versus Transaction Costs: A Theory of Procurement Contracts.” *RAND Journal of Economics*, Vol. 32, pp. 387–407.
- [3] Dana, J. and K. Spier. 1993. “Expertise and Contingent Fees: the Role of Asymmetric Information in Attorney Compensation.” *Journal of Law, Economics, and Organization*, 9: 349–367.
- [4] Dulleck, U. and R. Kerschbamer. 2006. “On Doctors, Mechanics, and Computer Specialists: The Economics of Credence goods.” *Journal of Economic Literature*, 44: 5-42.
- [5] Economist, The. 2011. “How to Curb Your Legal Bills.” May 5.
- [6] Emons, W. 2007. “Conditional versus Contingent Fees.” *Oxford Economic Papers*, 89: 89-101.
- [7] Ewerhart, C. and Fieseler, K. 2003. “Procurement Auctions and Unit-Price Contracts.” *RAND Journal of Economics* 34: 568-580.
- [8] Farrell, J., and P. Klemperer. 2007. “Coordination and Lock-in: Competition with Switching Costs and Network Effects.” *Handbook of Industrial Organization* 3: 1967-2072.

- [9] Hadfield, G.K. 2000. "The Price of Law: How the Market for Lawyers Distorts the Justice System." *Michigan Law Review*, 98: 953-1006.
- [10] Hosmer Jr., D. W., and S. Lemeshow. 2000. *Applied Logistic Regression*. 2nd ed. New York: Wiley.
- [11] Kritzer, H.M. 2009. "Fee Regimes and the Cost of Civil Justice." *Civil Justice Quarterly*, 28: 344-366.
- [12] Kropko, J. 2010. "A Comparison of Three Discrete Choice Estimators." Unpublished manuscript.
- [13] Long S. J. and J. Freese. 2006. *Regression Models for Categorical Dependent Variables Using Stata*. College Station, Tex.: StataCorp LP.
- [14] Maheshri, V. and C. Winston. 2013. "An Exploratory Study of the Pricing of Legal Services." *International Review of Law and Economics*, forthcoming.
- [15] Mas-Colell, A., M.D. Whinston and J.R. Green. 1995. *Microeconomic Theory*. New York: Oxford University Press.
- [16] Meijer, G. and Sjoerd, Y. 2002. "Influence of the Code Civil in the Netherlands." *European journal of Law and Economics*, 14: 227-236.
- [17] Rhode, D. L. 1985. "Ethical Perspectives on Legal Practice." *Stanford Law Review*, 37: 589-635.

- [18] Rubinfeld, D. and Scotchmer, S. 1993. "Contingent Fees for Attorneys: An Economic Analysis." *RAND Journal of Economics*, 24: 343-356.
- [19] Smith, J.K. and Cox, S.R. 1985. "A Contractual Solution To Bilateral Opportunism." *The Journal of Legal Studies*, 14: 167-183.
- [20] Train, K. 2009. *Discrete Choice Methods with Simulation*. Cambridge University Press.
- [21] Van Velthoven, B. 2007. *Civiele Rechtspraak in Eerste Aanleg. Een Eerste Stap op Weg naar Kwantificering van de Maatschappelijke Betekenis van de Rechtspraak*. Boom Juridische Uitgevers.
- [22] White, H. 1996. *Estimation, Inference and Specification Analysis*. Cambridge: Cambridge University Press.
- [23] Winston, C., R.W. Crandall, and V. Maheshri. 2011. *First Thing We Do, Let's Deregulate All the Lawyers*. Brookings Institution Press.

## Tables

Table 1: Types of bids

| Types of bids present | # Auctions | Total # bids |           |           | Winning # bids |           |          |
|-----------------------|------------|--------------|-----------|-----------|----------------|-----------|----------|
|                       |            | Fixed        | Mixed     | Hourly    | Fixed          | Mixed     | Hourly   |
| Fixed, Mixed & Hourly | 15         | 22           | 25        | 26        | 3              | 9         | 3        |
| Fixed & Mixed         | 2          | 2            | 2         | –         | 1              | 1         | –        |
| Fixed & Hourly        | 7          | 9            | –         | 12        | 7              | –         | 0        |
| Mixed & Hourly        | 17         | –            | 27        | 48        | –              | 14        | 3        |
| Fixed                 | 6          | 14           | –         | –         | 6              | –         | –        |
| Mixed                 | 2          | –            | 4         | –         | –              | 2         | –        |
| Hourly                | 2          | –            | –         | 5         | –              | –         | 2        |
| <b>Total</b>          | <b>51</b>  | <b>47</b>    | <b>58</b> | <b>91</b> | <b>17</b>      | <b>26</b> | <b>8</b> |

Auctions grouped by types of bids present. *# Auctions* represents the number of auctions in each group. *Total # bids* represents the number of bids per bid type that were offered in each group. *Winning # bids* represents the number of bids per bid type that won in each group.

Table 2: Variable definitions

| Variable                   | Definition  |
|----------------------------|---|
| $Win_{ik}$                 | Dummy equal to 1 if bid $i$ in auction $k$ wins   |
| $Fixed_{ik}$               | Dummy equal to 1 if bid $i$ in auction $k$ is a fixed fee   |
| $Mixed_{ik}$               | Dummy equal to 1 if bid $i$ in auction $k$ is a mixed fee   |
| $Hourly_{ik}$              | Dummy equal to 1 if bid $i$ in auction $k$ is an hourly fee   |
| $Higher_{ik}$              | Dummy equal to 1 for bid $i$ if there is another bid which yields a lower payment to the client for all possible ex post realizations of hours worked on case $k$ . |
| $Experience_{ik}$          | The length of professional experience of the lawyer with bid $i$ (in years), relative to the most experienced bidder in auction $k$                                 |
| $Distance_{ik}$            | The distance between client and the lawyer with bid $i$ (in kilometers), relative to the most distant bidder in auction $k$   |
| $Prev\ Participation_{ik}$ | Number of times that the law firm behind bid $i$ participated in an auction previous to auction $k$   |
| $Prev\ Won_{ik}$           | Number of times that the law firm behind bid $i$ won an auction previous to auction $k$   |
| $First\ Time_{ik}$         | Dummy equal to 1 if auction $k$ is the first time that the law firm behind bid $i$ participates in an auction   |

Table 3: Height of bid according to bid type (in €)

|                   | N  | Mean  | Sd    | Min | Max   |
|-------------------|----|-------|-------|-----|-------|
| Hourly fee        | 98 | 178   | 30    | 100 | 268   |
| Fixed fee         | 51 | 2,000 | 1,364 | 150 | 6,360 |
| Mixed fee         | 62 |       |       |     |       |
| - Fixed fee part  |    | 2,179 | 1,040 | 275 | 5,500 |
| - Hourly fee part |    | 154   | 30    | 100 | 239   |

Table 4: Summary statistics

|                                  | N   | Mean  | Sd    | Min | Max |
|----------------------------------|-----|-------|-------|-----|-----|
| Win <sub>ik</sub>                | 196 | 0.260 | 0.440 | 0   | 1   |
| Fixed <sub>ik</sub>              | 196 | 0.240 | 0.428 | 0   | 1   |
| Mixed <sub>ik</sub>              | 196 | 0.296 | 0.458 | 0   | 1   |
| Hourly <sub>ik</sub>             | 196 | 0.464 | 0.500 | 0   | 1   |
| Higher <sub>ik</sub>             | 196 | 0.423 | 0.495 | 0   | 1   |
| Experience <sub>ik</sub>         | 196 | 0.566 | 0.356 | 0   | 1   |
| Distance <sub>ik</sub>           | 196 | 0.737 | 0.343 | 0   | 1   |
| Prev Participation <sub>ik</sub> | 196 | 5.883 | 6.188 | 0   | 29  |
| Prev Won <sub>ik</sub>           | 196 | 1.439 | 2.258 | 0   | 10  |
| First Time <sub>k</sub>          | 196 | 0.158 | 0.366 | 0   | 1   |

Table 5: Which Type of Bid Wins - Main Results

|                  | (1)                 | (2)                 | (3)                  |
|------------------|---------------------|---------------------|----------------------|
| Fixed            | 4.370***<br>(2.295) | 3.157**<br>(1.546)  | 3.499**<br>(2.002)   |
| Mixed            | 7.794***<br>(4.082) | 7.512***<br>(3.830) | 7.762***<br>(4.233)  |
| Higher           |                     | 0.232***<br>(0.120) | 0.171***<br>(0.0918) |
| Experience       |                     |                     | 2.929*<br>(1.667)    |
| Distance         |                     |                     | 0.419<br>(0.292)     |
| Observations     | 196                 | 196                 | 196                  |
| Auction hit rate | 0.804               | 0.765               | 0.706                |
| Log likelihood   | -50.59              | -44.65              | -42.26               |
| $\chi^2$         | 15.41               | 20.06               | 21.83                |

The dependent variable represents the win or lose of a bid. We use the conditional logit estimator with auction fixed effects. Coefficients reported in terms of odds ratios. Robust standard errors, clustered over the auction are reported in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 6: Which Type of Bid Wins - Lawyers' Bid Experience

|                     | (1)                  | (2)                  | (3)                  |
|---------------------|----------------------|----------------------|----------------------|
| Fixed               | 3.217*<br>(1.945)    | 3.130*<br>(1.953)    | 3.158*<br>(1.974)    |
| Mixed               | 7.325***<br>(3.960)  | 7.367***<br>(4.009)  | 7.352***<br>(4.007)  |
| Higher              | 0.152***<br>(0.0888) | 0.149***<br>(0.0855) | 0.150***<br>(0.0853) |
| Experience          | 3.086*<br>(1.810)    | 3.181*<br>(1.894)    | 3.180*<br>(1.886)    |
| Distance            | 0.438<br>(0.311)     | 0.425<br>(0.302)     | 0.426<br>(0.304)     |
| Participation Other | 1.046<br>(0.0397)    | 1.032<br>(0.0694)    | 1.030<br>(0.0721)    |
| Won Other           |                      | 1.038<br>(0.164)     | 1.040<br>(0.166)     |
| First time          |                      |                      | 0.936<br>(0.560)     |
| Observations        | 196                  | 196                  | 196                  |
| Auction hit rate    | 0.725                | 0.745                | 0.745                |
| Log likelihood      | -41.75               | -41.68               | -41.67               |
| $\chi^2$            | 22.78                | 23.64                | 23.75                |

The dependent variable represents the win or lose of a bid. We use the conditional logit estimator with auction fixed effects. Coefficients reported in terms of odds ratios. Robust standard errors, clustered over the auction are reported in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 7: Split sample estimations

|                       | (1)<br>Not fin      | (2)<br>High value    | (3)<br>Private Client |
|-----------------------|---------------------|----------------------|-----------------------|
| Not fin*Fixed         | 0.555<br>(0.630)    |                      |                       |
| Not fin*Mixed         | 1.277<br>(1.406)    |                      |                       |
| Not fin*Higher        | 1.182<br>(1.182)    |                      |                       |
| High value*Fixed      |                     | 0.615<br>(0.739)     |                       |
| High value*Mixed      |                     | 0.452<br>(0.563)     |                       |
| High value*Higher     |                     | 2.710<br>(2.950)     |                       |
| Private client*Fixed  |                     |                      | 0.309<br>(0.348)      |
| Private client*Mixed  |                     |                      | 0.955<br>(1.119)      |
| Private client*Higher |                     |                      | 0.862<br>(0.915)      |
| Fixed                 | 4.152*<br>(3.301)   | 3.998*<br>(2.837)    | 6.968**<br>(6.106)    |
| Mixed                 | 6.925***<br>(5.108) | 9.809***<br>(6.326)  | 8.128***<br>(6.423)   |
| Higher                | 0.153**<br>(0.118)  | 0.133***<br>(0.0835) | 0.164**<br>(0.138)    |
| Experience            | 3.164*<br>(1.989)   | 2.763*<br>(1.627)    | 3.321**<br>(1.856)    |
| Distance              | 0.384<br>(0.276)    | 0.426<br>(0.301)     | 0.326<br>(0.236)      |
| Observations          | 196                 | 196                  | 196                   |
| Nsplit                | 88                  | 43                   | 102                   |
| Auction hit rate      | 0.706               | 0.725                | 0.725                 |
| Log likelihood        | -41.97              | -41.53               | -41.67                |
| $\chi^2$              | 20.73               | 23.71                | 25.20                 |

The dependent variable represents a win or lose of a bid. We use the conditional logit estimator with auction fixed effects. Coefficients reported in terms of odds ratios. Robust standard errors, clustered over the auction are reported in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 8: Ex-post level of satisfaction

|                  | Fixed | Mixed | Hourly | Total |
|------------------|-------|-------|--------|-------|
| Not satisfied    | 1     |       |        | 1     |
| Acceptable       | 1     | 2     | 1      | 4     |
| (Very) Satisfied | 6     | 9     | 4      | 19    |

Table 9: Distribution of XS2J cases according to main areas of Dutch Civil Code

|                                | # Cases | % Cases |
|--------------------------------|---------|---------|
| Natural Persons and the Family | 16      | 31.4%   |
| Legal Persons                  | 8       | 15.7%   |
| Obligations and Contracts      | 20      | 39.2%   |
| Patrimony and Property         | 3       | 5.9%    |
| Unclassifiable                 | 4       | 7.8%    |

Out of the 51 XS2J cases in our sample, for four cases the case description was insufficient to classify; whereas two other cases concerned two legal areas at the same time.

Table 10: Monetary value distribution in Dutch civil court cases and the XS2J sample

|                                | Civil Courts (Summons) | XS2J  |
|--------------------------------|------------------------|-------|
| €1 - €5,000                    | 2.9%                   | 0%    |
| €5,001-€10,000                 | 18.7%                  | 9.8%  |
| €10,001-€20,000                | 17.5%                  | 15.7% |
| €20,001-€100,000               | 19.9%                  | 29.4% |
| More than €100,000             | 6.9%                   | 3.9%  |
| No estimate of financial value | 34.1%                  | 41.2% |

Statistics of civil courts are based on 51,877 cases initiated by summons in Dutch civil courts in 2005 (source: Van Velthoven, 2007).

Table 11: The type of party —natural person versus legal entity— by their role in the dispute: Civil Courts and the XS2J sample

|              |                | Defendant      |              |         | Total |
|--------------|----------------|----------------|--------------|---------|-------|
| Plaintiff    |                | Natural Person | Legal Entity | Unknown |       |
| Civil Courts | Natural Person | 31%            | 7%           | 12%     | 50%   |
|              | Legal Entity   | 21%            | 17%          | 11%     | 48%   |
|              | Unknown        | 0%             | 0%           | 1%      | 1%    |
|              | Total          | 52%            | 25%          | 23%     | 100%  |
| XS2J         | Natural Person | 33%            | 14%          | 4%      | 51%   |
|              | Legal Entity   | 6%             | 27%          | 4%      | 37%   |
|              | Unknown        | 0%             | 6%           | 6%      | 12%   |
| Total        |                | 39%            | 47%          | 14%     | 100%  |

Statistics are based on 220,220 cases in Dutch civil courts in 2005 (source: Van Velthoven, 2007).

Table 12: Fee structure of random sample taken from Bar-registered Dutch law offices

|               | Only Hourly<br>Rate | Standard Hourly<br>Rate | Several<br>Rates | Only Fixed<br>Fee | Total |
|---------------|---------------------|-------------------------|------------------|-------------------|-------|
| # Law Offices | 277                 | 13                      | 28               | 1                 | 319   |
| % Law Offices | 86.8%               | 4.1%                    | 8.8%             | 0.3%              | 100%  |

Information taken from law offices' web sites in 2014. See also the appendix for a detailed explanation of how this random sample is generated.

Table 13: Fees of XS2J participating law offices, offered *outside* the auctions

|               | Only Hourly<br>Rate | Standard Hourly<br>Rate | Several<br>Rates | Only Fixed<br>Fee | Total |
|---------------|---------------------|-------------------------|------------------|-------------------|-------|
| # Law Offices | 21                  | 7                       | 5                | 0                 | 33    |
| % Law Offices | 63.6%               | 21.2%                   | 15.2%            | 0%                | 100%  |

Information taken from law offices' web sites. Out of our sample of 46 law offices, 45 still exist in 2014 and have a web site. Out of these 45 web sites, 33 offer information about fee structures.

# Figures

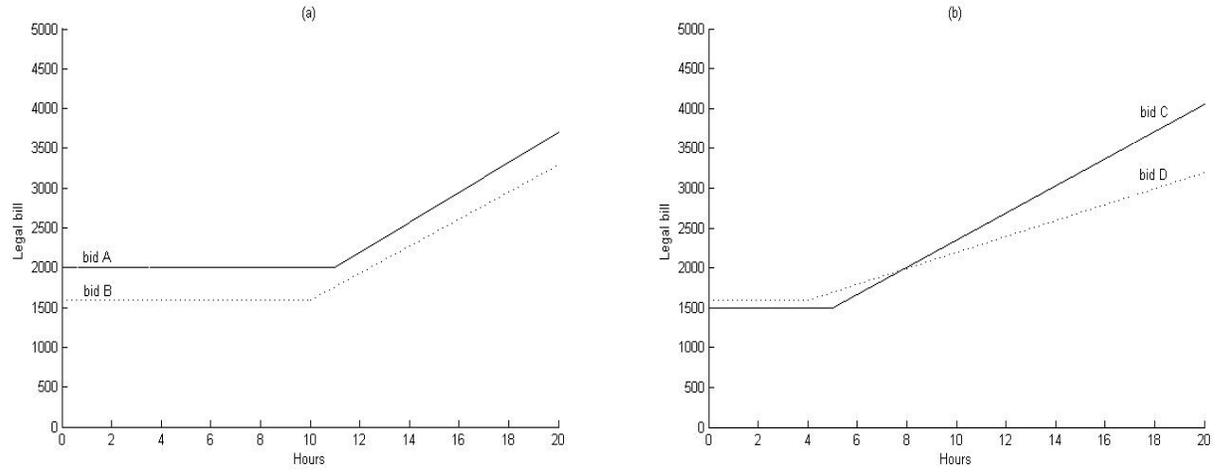


Figure 1: Mixed fee arrangements and higher bids