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*Flora Felso<sup>1</sup>*

*Sander Onderstal<sup>2</sup>*

*Jo Seldeslachts<sup>2</sup>*

<sup>1</sup> Netherlands Bureau for Economic Policy Analysis (CPB), the Netherlands;

<sup>2</sup> Faculty of Economics and Business, University of Amsterdam, and Tinbergen Institute.

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The Netherlands  
Tel.: +31(0)20 525 8579

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

Flóra Felső<sup>†</sup>      Sander Onderstal<sup>‡</sup>      Jo Seldeslachts<sup>§</sup>

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## Abstract

We analyze a client's choice of contract in auctions where Dutch law firms compete for routine cases. The distinguishing feature here 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. Furthermore, 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 empirically 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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<sup>†</sup>Netherlands Bureau for Economic Policy Analysis (CPB).

<sup>‡</sup>University of Amsterdam and Tinbergen Institute. The research of Sander Onderstal has been made possible by financial support from the Dutch National Science Foundation (NWO-VICI 453-03-606).

<sup>§</sup>Corresponding author. University of Amsterdam, Tinbergen Institute and KU Leuven, Roetersstraat 11, 1018 WB Amsterdam, The Netherlands, J.W.Seldeslachts@uva.nl. Jo Seldeslachts recognizes financial assistance from the EU 7th Framework Program for Research.

# 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) 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 interest.

This argumentation, however, is not uncontested. Other commentators indicate that hourly rates prevail due to law firms enjoying a high price-setting 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). A typical website 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 competing offers from other lawyers.

Following this 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 standard. A recent article in *The Economist* (2011) summarizes this second 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>

In this paper we take a look at which of the two rationales is followed by clients. In particular, we investigate what type of contract clients prefer for assistance in a routine legal dispute. Our data consists of 196 bids offered in 51 Dutch auctions where lawyers compete to represent a client in a relatively easy 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 easily 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 includes, therefore, different types of bids. As a consequence, our dataset offers a rather unique opportunity to study client preferences. Clients *not* choosing hourly rates in this setting may hint at market power by legal firms that offer hourly rates.

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 compa-

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<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

nies. Their legal problems include relatively simple cases such as labor disputes for individuals and collecting debts for businesses. Each client who contracts a lawyer through the XS2J auctions pays the lawyer: there is no fee-shifting, because 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 invariably 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 are not the first to study different remuneration structures for legal services. 

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allowed are rather fuzzy; see <http://advocaten.advocatenorde.nl/wetenregelgeving/vademecum.asp>.

Kritzer (2009) provides an elaborate overview of the 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 on law firms offering of 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 on clients' choice of fee arrangements, and thus on 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. Finally, section 6 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.

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<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.

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 is 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

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



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 the routine legal 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 an invitation being sent by XS2J 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; e.g., a 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 are 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, i.e., the number

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

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 height), 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, i.e., 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

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<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

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.

Table 1: Types of bids

<i>Types of bids present</i>	<i># Auctions</i>	<i>Total # bids</i>			<i>Winning # bids</i>		
		<i>Fixed</i>	<i>Mixed</i>	<i>Hourly</i>	<i>Fixed</i>	<i>Mixed</i>	<i>Hourly</i>
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
Total	51	47	58	91	17	26	8

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.

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

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.

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 nine times a mixed fee bid wins, and three times a fixed fee). 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 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.

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>

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<sup>9</sup>The observed lower bound of €100 for the hourly fees corresponds to €1 more than the hourly

Table 2: Variable definitions

<i>Variable</i>	<i>Definition</i>
$Win_{ik}$	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 €)

	<i>N</i>	<i>Mean</i>	<i>Sd</i>	<i>Min</i>	<i>Max</i>
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

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. Remark that a mixed fee bid can in some circumstances be compared with 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.

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 about the length of the professional experience of lawyers (in number of years). In the absence of other

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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 e.g., Mas-Colell et al., 1995).

Table 4: Summary statistics

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

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.

<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.

Our main specification can thus be summarized as follows:

$$\begin{aligned}
 Win_{ik} = & \beta_1 Fixed_{ik} + \beta_2 Mixed_{ik} + \\
 & \beta_3 Higher_{ik} + \beta_4 Experience_{ik} + \beta_5 Distance_{ik} + \eta_{ik},
 \end{aligned} \tag{1}$$

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 e.g., 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, we shortly give here a 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

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

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 e.g., 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 auc-

tions 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, e.g., through the comments they make. We will show, however, that several dimensions of lawyers' bid experience have no impact on their chances of winning.

Finally, our main equation (1) estimates an average choice over all cases and clients. Although the cases in our sample are 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 are different 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.

## 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 e.g., 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, i.e.,  $\frac{1}{51} \sum_{k=1}^{51} \frac{1}{T_k}$ . 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)).

Table 5: Which Type of Bid Wins - Main Results

	(1)	(2)	(3)
Fixed	4.370*** (2.295)	3.157** (1.546)	3.499** (2.002)
Mixed	7.794*** (4.082)	7.512*** (3.830)	7.762*** (4.233)
Higher		0.232*** (0.120)	0.171*** (0.0918)
Experience			2.929* (1.667)
Distance			0.419 (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. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

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 about 83%, holding the values for the other bid alternatives constant. On the other hand, the odds of winning is 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

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<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 e.g. White (1996) for a discussion of sandwich estimators and their properties.

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.

### 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*<sub>ik</sub>).<sup>15</sup>

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<sup>15</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.

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)-(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)-(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 bid 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 bid 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>16</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 solely focus on clients’ choices.

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

	(1)	(2)	(3)
Fixed	3.217* (1.945)	3.130* (1.953)	3.158* (1.974)
Mixed	7.325*** (3.960)	7.367*** (4.009)	7.352*** (4.007)
Higher	0.152*** (0.0888)	0.149*** (0.0855)	0.150*** (0.0853)
Experience	3.086* (1.810)	3.181* (1.894)	3.180* (1.886)
Distance	0.438 (0.311)	0.425 (0.302)	0.426 (0.304)
Participation Other	1.046 (0.0397)	1.032 (0.0694)	1.030 (0.0721)
Won Other		1.038 (0.164)	1.040 (0.166)
First time			0.936 (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. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

<sup>16</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.



## 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 - i.e., 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 or 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 non-financial cases do not yield a different impact on clients’ choices.

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.

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

Table 7: Split sample estimations

	(1) Not fin	(2) High value	(3) Private Client
Not fin*Fixed	0.555 (0.630)		
Not fin*Mixed	1.277 (1.406)		
Not fin*Higher	1.182 (1.182)		
High value*Fixed		0.615 (0.739)	
High value*Mixed		0.452 (0.563)	
High value*Higher		2.710 (2.950)	
Private client*Fixed			0.309 (0.348)
Private client*Mixed			0.955 (1.119)
Private client*Higher			0.862 (0.915)
Fixed	4.152* (3.301)	3.998* (2.837)	6.968** (6.106)
Mixed	6.925*** (5.108)	9.809*** (6.326)	8.128*** (6.423)
Higher	0.153** (0.118)	0.133*** (0.0835)	0.164** (0.138)
Experience	3.164* (1.989)	2.763* (1.627)	3.321** (1.856)
Distance	0.384 (0.276)	0.426 (0.301)	0.326 (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. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

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 standard cases.

## 5 Lawyers' effort

The previous analysis shows that clients do not choose 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 out of the 57 clients. The reason of 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. Clients answers were classified into three categories: (very) satisfied, acceptable, and not satisfied.<sup>17</sup>

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, i.e., got a “pass.”

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<sup>17</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.

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

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>18</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 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 are not consistent with lawyers’ often 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.

<sup>18</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).

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 and provide for 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 amounts 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's preferences in other legal regimes, such as the US.

### Appendix: Some examples of higher mixed fee 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.

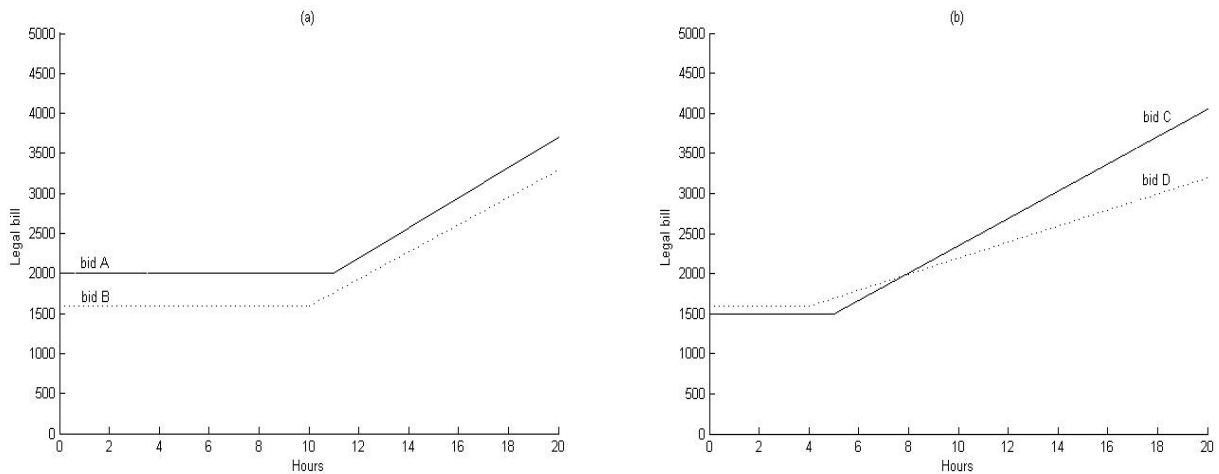


Figure 1: Mixed fee arrangements and higher bids

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