

Online Appendix

LAWYER EXPERTISE AND CONTRACT DESIGN –
EVIDENCE FROM M&A NEGOTIATIONS

Christel Karsten, Ulrike Malmendier and Zacharias Sautner

MARCH 29, 2021

The Online Appendix consists of two sections: Appendix A provides additional tables; and Appendix B presents the proof for Proposition 1.

A. Additional Tables

Table A1. *Allocation of Deals to Lawyers.*

Survey Responses on Allocation of Lawyers to Clients			
	# 1 Factor	# 2 Factor	# 3 Factor
<i>Partner-Client Relation</i>	14		
<i>Expertise</i>		8	1
<i>Internal Politics</i>		2	
<i>Availability</i>		1	5
<i>No Response</i>	5	8	13
Total	19	19	19

This table presents survey responses by lawyers of our law firm to the question ‘How are deals allocated to partners within your law firm?’ We provided the survey participants with a list of factors that could potentially drive the allocation (‘Expertise’, ‘Availability’, ‘Partner-Client Relation’, ‘Other [to be named]’) and asked them to mark the first, second, and third most important factor. A total of 19 lawyers, all at the partner level, participated in the survey. All of these lawyers are included in the sample. Our sample contains 20 lawyers from our law firm, so one of these lawyers did not participate in the survey. The survey contained other question about the lawyers’ assessment of key important contract clauses. These questions are not covered in this paper due to space constraints. We conducted the survey in person in October 2012.

Table A2. *In-House Lawyer, and Industry Distribution of Sample.*

Panel A: In-house Lawyers and Buyer/Seller Types						
	Buyer Type					
	<i>Family</i>	<i>Financial</i>	<i>Government</i>	<i>Private Equity</i>	<i>Strategic</i>	<i>Total</i>
<i>Outside Legal Counsel</i>	1%	6%	7%	21%	60%	95%
<i>In-house Lawyer</i>	0%	1%	0%	1%	3%	5%
	Seller Type					
<i>Outside Legal Counsel</i>	13%	6%	2%	15%	54%	89%
<i>In-house Lawyer</i>	5%	1%	0%	0%	5%	11%

Panel B: Industry Distribution of Sample			
Industry	Target	Buyer	Seller
<i>Insurance & Real Estate</i>	11%	37%	45%
<i>Manufacturing</i>	28%	17%	23%
<i>Public Administration</i>	0%	0%	1%
<i>Services</i>	32%	16%	5%
<i>Transportation & Communication</i>	9%	10%	7%
<i>Wholesale Trade</i>	12%	13%	11%
<i>Other Industry</i>	8%	7%	8%

This table presents in panel A information on which buyers and sellers use in-house lawyers instead of outside legal counsel, and in panel B information on the industry distribution of the sample. Statistics are reported at the deal level.

Table A3. *Correlations.*

Panel A: Negotiation Outcomes								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
<i>Warranties</i>	(1)	1.00						
<i>%Warranties w/o Knowledge Qualifier</i>	(2)	0.02	1.00					
<i>Warranties Not Material</i>	(3)	0.24*	0.17*	1.00				
<i>MAC Clause</i>	(4)	0.25*	-0.10	0.06	1.00			
<i>First Draft By Buyer</i>	(5)	0.24*	0.37*	0.20*	0.09	1.00		
<i>Closing Time</i>	(6)	0.04	-0.24*	0.10	0.38*	-0.40*	1.00	
<i>Acquisition Premium</i>	(7)	0.15	0.08	0.00	-0.04	-0.03	-0.11	1.00
Panel B: Relative Lawyer Expertise								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
<i>Relative Lawyer Expertise</i>	(1)	1.00						
<i>Years as Partner</i>	(2)	0.67*	1.00					
<i>Deal Experience</i>	(3)	0.66*	0.47*	1.00				
<i>M&A Specialist</i>	(4)	0.67*	0.49*	0.64*	1.00			
<i>Chambers Recommendation</i>	(5)	0.66*	0.29*	0.61*	0.49*	1.00		
<i>Law School Ranking</i>	(6)	0.73*	0.42*	0.31*	0.36*	0.21*	1.00	
<i>US Education</i>	(7)	0.67*	0.33*	0.10	0.25*	0.21*	0.76*	1.00

Panel A reports rank correlations of negotiation outcomes, and panel B reports rank correlations of *Relative Lawyer Expertise* and the six index components. The sample consists of 151 acquisitions of private targets between 2005 and 2010. Not all variables are available for all deals. Detailed variable definitions are in the Data Appendix.* indicates significance at the 5% level.

Table A4. *Negotiation Outcomes and Relative Lawyer Expertise: Estimates without Controls.*

	Contract Design			Bargaining Process		Negotiation Index
	%Warranties			First Draft By Buyer	Closing Time	
	w/o Kn. Qual.	Warranties Not Material	MAC Clause			
(1)	(2)	(3)	(4)	(5)	(6)	
<i>Relative Lawyer Expertise</i>	0.18*** (4.46)	0.69*** (3.03)	1.04*** (4.30)	1.18*** (3.42)	-59.60*** (-3.72)	3.04*** (6.76)
Model	OLS	Logit	Logit	Logit	OLS	Ordered Probit
Obs.	111	111	78	111	111	111
Adjusted/Pseudo R ²	0.128	0.162	0.106	0.159	0.032	0.104

This table presents OLS, Logit (marginal effects), and Ordered Probit regressions relating *Relative Lawyer Expertise* to M&A negotiation outcomes. *Relative Lawyer Expertise* is an index between 0 and 1, where higher (lower) values indicate more legal expertise on the buyer side (seller side). Column 3 contains only deals signed and closed on different days as MAC clauses are otherwise not relevant. Detailed variable definitions are in the Data Appendix. *t*-statistics for standard errors clustered by drafting-law-firm are reported in parentheses. *** indicates significance at 1%, ** at 5%, and * at 10%.

Table A5. *Negotiation Outcomes and Relative Lawyer Expertise: Robustness Checks.*

	<i>MAC Strength</i>	<i>Negotiation Index</i>	<i>Revised Negotiation Index</i>	<i>Negotiation Index</i>
	(1)	(2)	(3)	(4)
<i>Relative Lawyer Expertise</i>	2.23** (2.31)	2.36*** (5.63)	2.40*** (6.26)	1.83*** (2.87)
<i>Acquisition Premium</i>		-0.13 (-1.10)		
<i>Relative Size</i>	0.10* (1.70)	0.05 (1.33)	0.06** (2.32)	0.02 (0.50)
<i>Cross-Country Deal</i>	-0.54 (-1.12)	-0.97*** (-2.79)	-0.91** (-2.40)	-1.02** (-2.04)
<i>Log(Target Book Value)</i>	-0.12* (-1.72)	-0.32*** (-3.01)	-0.13** (-1.96)	-0.27*** (-3.18)
<i>Asset Deal</i>	-0.58 (-1.36)	-0.57** (-2.21)	-0.25 (-0.87)	-0.43 (-1.26)
<i>Seller Bank Top 10</i>	-0.09 (-0.19)	0.16 (0.33)	0.31 (0.57)	0.18 (0.39)
<i>Buyer Bank Top 10</i>	0.21 (1.12)	0.36 (1.18)	0.28 (1.02)	0.36 (1.21)
<i>Warranties</i>		0.00*** (3.04)	0.01*** (3.20)	0.01** (2.06)
<i>Approvals Required</i>		0.01 (0.22)	0.05 (0.78)	0.03 (0.42)
Model	Ordered Probit	Ordered Probit	Ordered Probit	Ordered Probit
Obs.	74	105	105	88
Pseudo R ²	0.129	0.213	0.172	0.152

This table presents Ordered Probit regressions relating *Relative Lawyer Expertise* to the *Negotiation Index*. *Relative Lawyer Expertise* is an index between 0 and 1, where higher (lower) values indicate more legal expertise on the buyer side (seller side). Column 1 uses as dependent variable an index that captures the strength of the MAC clause by considering to what extent certain events are excluded from the MAC clause (*MAC Strength*). Column 2 controls for the *Acquisition Premium*. Column 3 uses an alternative construction of the *Negotiation Index* in which *Closing Time* is excluded. Column 4 uses the *Negotiation Index* contains only deals in which both the buyer and the seller used outside legal counsel (no in-house lawyers). Column 1 contains only deals signed and closed on different days as MAC clauses are otherwise not relevant. Detailed variable definitions are in the Data Appendix. Year indicators and constants are included but not reported. *t*-statistics for standard errors clustered by drafting-law-firm are reported in parentheses. *** indicates significance at 1%, ** at 5%, and * at 10%.

Table A6. *Details on MAC Clauses.*

Panel A: Number of Exceptions to the MAC Clause		
Mean		
<i># MAC Clause Exceptions</i>	2.5	
Panel B: MAC Clause Exceptions		
Type	Frequency	Examples for MAC Clause Exceptions
<i>Economic/Political Events</i>	29%	‘Change in global, national, or regional political conditions’, or ‘A change in economic conditions or financial markets in general’, or ‘Any change, event or circumstance affecting the regulated futures and commodities trading industry’, or ‘Local, regional, national or international conditions affecting the business’.
<i>Adverse Industry Events</i>	33%	‘Any change or event to the extent that this affects or is likely to affect all companies and businesses carrying on similar business in the countries in which the group carries on business’, or ‘Seasonal fluctuations in the group's business’, or ‘Changes in economic or market conditions in the industries in which the Group conducts its operations’.
<i>SPA-related Events</i>	6%	‘Any matter which is a consequence of the purchaser being the purchaser under this agreement’, or ‘Any action taken by the seller required to be taken pursuant to this agreement’, or ‘Any actions not taken by the seller, since they were prohibited by the agreement’.
<i>Deal Announcement Events</i>	22%	‘Any event arising out of the announcement or pendency of this agreement or of any of the transactions contemplated hereby’, or ‘Any action, suit, or legal proceeding arising from, or relating to the transaction contemplated by this agreement’, or ‘Any loss or adverse change in the relationship with employees, customers or suppliers caused by the pendency or announcement of the transaction’.
<i>Terrorism Events</i>	18%	‘Any acts of war (declared or undeclared), armed hostilities, sabotage or terrorism’.
<i>Recession Events</i>	14%	‘Changes or developments in financial or securities markets or in current exchange or interest rates’.
<i>Legal Changes</i>	25%	‘Any change in Laws after signing, or interpretations thereof’.
<i>Accounting Changes</i>	20%	‘A change since the reference time in Generally Accepted Accounting Principles’.
<i>Force Majeure</i>	10%	‘Weather conditions or other force majeure events. Hurricane, tornado, flood, earthquake, or other natural disaster’, or ‘Any health related epidemics or the like affecting the industries or market in which the Business is conducted and/or affecting the regulated futures and commodities trading industry and/or affecting the customer’.
<i>Other Events</i>	20%	Any exceptions to the MAC in the contract that are not covered by the categories above.

This table provides descriptive statistics on events that are included in the contracts as exceptions to the MAC clause. Our sample contains a total of 51 contracts that contain a MAC clause. The number of MAC clause exceptions in panel A varies between 0 and 13.

Table A7. *Negotiation Outcomes: Separate Effects of Index Components.*

	Contract Design			Bargaining Process		
	<i>%Wts. w/o Kn. Qual.</i>	<i>Warranties Not Material</i>	<i>MAC Clause</i>	<i>First Draft By Buyer</i>	<i>Closing Time</i>	<i>Negotiation Index</i>
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Years as Partner</i>	0.05** (2.07)	0.17** (2.46)	0.06 (0.47)	0.08 (1.03)	-50.21*** (-3.29)	0.40** (2.19)
<i>Deal Experience</i>	0.06*** (3.15)	0.29*** (2.92)	0.24 (1.13)	0.49 (1.64)	-27.94 (-1.51)	1.37*** (3.76)
<i>M&A Specialist</i>	0.13** (2.16)	0.22** (2.06)	0.42 (0.98)	0.62 (1.42)	-59.01 (-1.56)	1.38* (1.89)
<i>Chambers Recomm.</i>	0.03 (0.82)	0.12 (0.89)	0.33*** (2.66)	0.18 (0.79)	-9.68 (-0.49)	0.43 (1.08)
<i>Law School Ranking</i>	0.06* (1.83)	0.15*** (3.03)	0.30** (2.36)	0.31 (1.55)	-21.31 (-1.28)	1.08*** (3.69)
<i>US Education</i>	0.12*** (2.87)	0.24** (2.39)	0.42*** (3.07)	0.44** (2.07)	-10.20 (-0.46)	1.54*** (4.88)

This table reports OLS and Logit (marginal effects) regressions relating the six components that make up *Relative Lawyer Expertise* to negotiation outcomes in M&A transactions. Each coefficient in the table is obtained from a separate regression relating one specific negotiation outcome to one specific component of relative lawyer expertise. The six relative expertise variables range between 0 and 1, where higher values indicate more legal expertise on the buyer side. The regressions use the same control variables as those in Table 4 (not reported). The regressions in column 3 contain only deals where signing and closing were not on the same day as MAC clauses are otherwise not relevant. Detailed variable definitions are in the Data Appendix. *t*-statistics for standard errors clustered at the drafting-law-firm level are reported in parentheses. *** indicates significance at 1%, ** at 5%, and * at 10%.

Table A8. *Negotiation Index and Relative Lawyer Expertise: Fixed-Effects Regressions.*

	<i>Negotiation Index</i>			
	(1)	(2)	(3)	(4)
<i>Relative Lawyer Expertise</i>	2.62*** (6.08)	6.49*** (3.94)	1.98*** (6.10)	2.34*** (3.60)
<i>Relative Size</i>	0.02 (0.71)	0.22** (2.48)	0.03 (0.88)	0.10 (1.54)
<i>Cross-Country Deal</i>	-0.99** (-2.55)	-1.77*** (-7.12)	-0.81** (-2.52)	-0.70 (-1.50)
<i>Log(Target Book Value)</i>	-0.25*** (-3.45)	-0.73*** (-9.42)	-0.18*** (-3.00)	-0.27* (-1.83)
<i>Asset Deal</i>	-0.63** (-2.15)	0.07 (0.09)	-0.49* (-1.87)	0.04 (0.04)
<i>Seller Bank Top 10</i>	0.09 (0.18)	1.09** (1.97)	0.08 (0.18)	0.36 (0.47)
<i>Buyer Bank Top 10</i>	0.34 (1.13)	1.24*** (3.62)	0.28 (1.01)	0.53* (1.82)
<i>Warranties</i>	0.00** (2.43)	-0.01 (-1.22)	0.00** (2.37)	0.00 (0.40)
<i>Approvals Required</i>	-0.00 (-0.03)	0.17* (1.95)	-0.02 (-0.44)	0.03 (0.26)
Model	Ordered Probit	Ordered Probit	OLS	OLS
Drafting-Law-Firm Fixed Effects	No	Yes	No	Yes
Client Fixed Effects	No	Yes	No	Yes
Lawyer Fixed Effects	No	Yes	No	Yes
Obs.	105	105	105	105
Adjusted/Pseudo R ²	0.205	0.511	0.365	0.310

This table presents Ordered Probit and OLS regressions relating *Relative Lawyer Expertise* to the *Negotiation Index*. In columns 2 and 4, we simultaneously include three sets of fixed effects: (i) drafting law-firm fixed effects; (ii) (restricted) fixed effects for each client involved in more than two sample, and (iii) lawyer fixed effects. The client fixed effects are for all clients of all law firms. The lawyer fixed effects are for our law firm's lawyers. Detailed variable definitions are in the Data Appendix. Year indicators and constants are included but not reported. *t*-statistics for standard errors clustered at the drafting-law-firm level are reported in parentheses. *** indicates significance at 1%, ** at 5%, and * at 10%.

Table A9. *Acquisition Prices and Investor Types: Terms for Price Effects.*

	<i>Acquisition Premium</i>
	(1)
<i>Private Equity Seller</i>	-3.21 (-1.00)
<i>Private Equity Buyer</i>	1.09 (0.38)
<i>Strategic Seller</i>	-3.26 (-1.43)
<i>Strategic Buyer</i>	2.97 (0.91)
<i>%Warranties w/o Knowledge Qualifier</i>	1.52 (0.30)
<i>Warranties Not Material</i>	-2.09*** (-2.92)
<i>MAC Clause</i>	-1.37* (-1.83)
<i>Private Equity Seller x %Warranties w/o Knowledge Qualifier</i>	4.90 (1.26)
<i>Private Equity Buyer x %Warranties w/o Knowledge Qualifier</i>	-3.06 (-0.86)
<i>Strategic Seller x %Warranties w/o Knowledge Qualifier</i>	2.33 (0.98)
<i>Strategic Buyer x %Warranties w/o Knowledge Qualifier</i>	-4.47 (-1.10)
<i>Private Equity Seller x Warranties Not Material</i>	-1.17 (-0.77)
<i>Private Equity Buyer x Warranties Not Material</i>	2.20* (1.73)
<i>Strategic Seller x Warranties Not Material</i>	1.06 (0.80)
<i>Strategic Buyer x Warranties Not Material</i>	1.40 (1.20)
<i>Private Equity Seller x MAC Clause</i>	-1.00 (-0.99)
<i>Private Equity Buyer x MAC Clause</i>	0.82* (1.99)
<i>Strategic Seller x MAC Clause</i>	-0.58 (-0.49)
<i>Strategic Buyer x MAC Clause</i>	1.41** (2.66)
<i>Relative Lawyer Expertise</i>	-1.98** (-2.17)
Controls as in Table 9	Yes
Model	OLS
Obs.	105
Adjusted R ²	0.328

This table presents OLS regressions relating the interaction between different buyer or seller types and contract clauses to the *Acquisition Premium*. Detailed variable definitions are in the Data Appendix. Year indicators and constants are included but not reported. *t*-statistics for standard errors clustered at the drafting-law-firm level are reported in parentheses. *** indicates significance at 1%, ** at 5%, and * at 10%.

B. PROOF OF PROPOSITION 1

We show that, for given relative lawyer expertise L_i/L_j and relative size N_i/N_j , the absolute size N_i and expertise L_i do not affect bargaining strength and, hence, the distribution of surplus (Y_i, Y_j) , i. e., $F(C, L_i/L_j, L_i) = F(C, L_i/L_j, \Gamma L_i), \forall \Gamma > 0, C, L_i, L_j$ and $G(N_i/N_j) = G(N_i/N_j, \Lambda N_i), \forall \Lambda > 0, N_i, N_j$. Plugging the definitions of p_B and p_S into $p_B + p_S = 1$, we obtain

$$1 = \phi_S(C) + \phi_B(C) + \phi_l F\left(C, \frac{L_B}{L_S}, L_B\right) + \phi_l F\left(C, \frac{L_S}{L_B}, L_S\right) + \phi_n G\left(\frac{N_B}{N_S}, N_B\right) + \phi_n G\left(\frac{N_S}{N_B}, N_S\right),$$

which can be re-expressed as

$$1 - \phi_S(C) - \phi_B(C) - \phi_n G\left(\frac{N_B}{N_S}, N_B\right) + \phi_n G\left(\frac{N_S}{N_B}, N_S\right) = \phi_l F\left(C, \frac{L_B}{L_S}, L_B\right) + \phi_l F\left(C, \frac{L_S}{L_B}, L_S\right)$$

and, alternatively, as

$$1 - \phi_S(C) - \phi_B(C) - \phi_l F\left(C, \frac{L_B}{L_S}, L_B\right) - \phi_l F\left(C, \frac{L_S}{L_B}, L_S\right) = \phi_n G\left(\frac{N_B}{N_S}, N_B\right) + \phi_n G\left(\frac{N_S}{N_B}, N_S\right).$$

After multiplying both the buyer's and seller's lawyer expertise by some $\Gamma > 0$, (5) becomes

$$1 - \phi_S(C) - \phi_B(C) - \phi_n G\left(\frac{N_B}{N_S}, N_B\right) + \phi_n G\left(\frac{N_S}{N_B}, N_S\right) = \phi_l F\left(C, \frac{L_B}{L_S}, \Gamma L_B\right) + \phi_l F\left(C, \frac{L_S}{L_B}, \Gamma L_S\right),$$

and hence $F\left(C, \frac{L_B}{L_S}, L_B\right) + F\left(C, \frac{L_S}{L_B}, L_S\right) = F\left(C, \frac{L_B}{L_S}, \Gamma L_B\right) + F\left(C, \frac{L_S}{L_B}, \Gamma L_S\right)$. Since F is non-decreasing in the absolute level of expertise, we obtain

$$F\left(C, \frac{L_i}{L_j}, L_i\right) = F\left(C, \frac{L_i}{L_j}, \Gamma L_i\right).$$

Similarly, after multiplying both the buyer's and seller's size by some $\Lambda > 0$, (6) becomes

$$1 - \phi_S(C) - \phi_B(C) - \phi_l F\left(C, \frac{L_B}{L_S}, L_B\right) - \phi_l F\left(C, \frac{L_S}{L_B}, L_S\right) = \phi_n G\left(\frac{N_B}{N_S}, \Lambda N_B\right) + \phi_n G\left(\frac{N_S}{N_B}, \Lambda N_S\right),$$

and hence $G\left(\frac{N_B}{N_S}, \Lambda N_B\right) + G\left(\frac{N_S}{N_B}, \Lambda N_S\right) = G\left(\frac{N_B}{N_S}, N_B\right) + \phi_n G\left(\frac{N_S}{N_B}, N_S\right)$. Since G is non-decreasing in absolute level of client size, we obtain

$$G\left(\frac{N_i}{N_j}, N_i\right) = G\left(\frac{N_i}{N_j}, \Lambda N_i\right).$$

Since this is true for arbitrary levels of $N_i, N_j, C, L_i, L_j, \Gamma$, and Λ , we conclude $F\left(C, \frac{L_i}{L_j}, L_i\right) =$

$F\left(C, \frac{L_i}{L_j}, \Gamma L_i\right), \forall C, L_i, L_j, \Gamma > 0$, and $G\left(N_i/N_j, \Lambda N_i\right) = G\left(N_i/N_j\right), \forall \Lambda > 0, N_i, N_j$. This finishes the proof.