

Supplemental Materials for Dakshina G. De Silva, Timothy Dunne and Georgia Kosmopoulou, “An Empirical Analysis of Entrant and Incumbent Bidding in Road Constructions Auctions,” *The Journal of Industrial Economics*, VOLUME (ISSUE), MONTH YEAR, pp. XXX-YYY.

TABLE A-I
REGRESSION RESULTS FOR LOG OF BIDS AND LOG OF WINNING BIDS: WITH FIRM EFFECTS

Independent Variable	Bid Regressions			Winning Bid Regressions	
	OLS Log of Bids	Fixed Effects Log of Bids (with Auction Fixed Effects)	Fixed Effects Relative Bids (with Auction Fixed Effects)	OLS Log of Winning Bids	OLS Relative Winning Bids
<i>Log of Engineer's Estimate</i>	.943* (.007)			.990* (.011)	
<i>Log Number of Bidders</i>	-.012 (.012)			-.056* (.017)	-.068* (.021)
<i>Bidders Facing Entrants</i>	-.009 (.018)			.001 (.034)	.016 (.036)
<i>Entrant Bid Dummy</i>	-.170* (.072)	-.092* (.031)	-.133* (.050)	-.368 (.198)	-.163* (.078)
<i>Firm's Winning to Bidding Ratio</i>	-.092* (.070)	-.032 (.058)	-.150 (.093)	.059 (.108)	.130 (.150)
<i>Log of Firm's Backlog</i>	.002* (.001)	.003* (.001)	.003 (.002)	.000 (.002)	.000 (.002)
<i>Distance to the Project Location</i>	.005 (.004)	.009 (.005)	.006 (.008)	-.000 (.006)	-.003 (.006)
<i>Average Rivals Winning to Plan holder Ratio</i>	-.276* (.113)	.284 (.186)	.411 (.300)	-.511* (.133)	-.349* (.144)
<i>Closest Rival's Distance to the Project Location</i>	.003 (.003)	.001 (.009)	-.000 (.015)	.004 (.006)	.003 (.005)
<i>Rivals Minimum Backlog</i>	-.000 (.000)	.001 (.002)	-.000 (.003)	.001 (.001)	.000 (.001)
<i>Number of Observations</i>	2782	2782	2782	770	770
<i>Adj-R²</i>	.9749	.9878	.4685	.9805	.0919

*Denotes 95% significance.

Regressions in columns 1, 4 & 5 include six project class dummy variables.

TABLE A-II
REGRESSION RESULTS FOR LOG OF BIDS AND LOG OF WINNING BIDS: ALTERNATIVE ENTRY
SPECIFICATION.

Independent Variable	Bid Regressions			Winning Bid Regressions	
	OLS	Fixed Effects		OLS	
	Log of Bids	Log of Bids (with Auction Fixed Effects)	Relative Bids (with Auction Fixed Effects)	Log of Winning Bids	Relative Winning Bids
<i>Log of Engineer's Estimate</i>	.956* (.006)			.995* (.001)	
<i>Log Number of Bidders</i>	.001 (.012)			-.044* (.018)	-.051* (.015)
<i>Bidders Facing Entrants</i>	-.003 (.019)			-.031 (.037)	-.019 (.029)
<i>Entrant Bid Dummy</i>	-.158 (.082)	-.104* (.035)	-.121* (.056)	-.377 (.222)	-.170* (.083)
<i>Firm's Winning to Bidding Ratio</i>	-.329* (.049)	-.214* (.001)	-.308* (.084)	-.094 (.067)	-.058 (.055)
<i>Log of Firm's Backlog</i>	.005* (.001)	.003* (.001)	.003 (.002)	.004* (.002)	.003* (.001)
<i>Distance to the Project Location</i>	-.006 (.005)	-.000 (.005)	-.008 (.009)	-.005 (.008)	.004 (.005)
<i>Average Rivals Winning to Plan holder Ratio</i>	-.158 (.115)	.388* (.191)	.531 (.304)	-.465* (.145)	-.387* (.121)
<i>Closest Rival's Distance to the Project Location</i>	.002 (.004)	-.012 (.010)	-.020 (.016)	.002 (.007)	-.001 (.007)
<i>Rivals Minimum Backlog</i>	-.001 (.001)	.002 (.002)	-.001 (.003)	.002 (.001)	.001 (.001)
<i>Number of Observations</i>	2262	2262	2782	631	631
<i>Adj-R²</i>	.9753	.9870	.3472	.9799	.0856

*Denotes 95% significance.

Regressions in columns 1, 4 & 5 include six project class dummy variables.

TABLE A-III
REGRESSION RESULTS FOR LOG OF BIDS AND LOG OF WINNING BIDS: WITH EXPECTED
NUMBER OF BIDDERS

Independent Variable	Bid Regressions	Winning Bid Regressions	
	OLS	OLS	
	Log of Bids	Log of Winning Bids	Relative Winning Bids
<i>Log of Engineer's Estimate</i>	.950* (.006)	.988* (.010)	
<i>Log Expected Number of Bidders</i>	.028* (.012)	-.005 (.021)	-.014 (.020)
<i>Bidders Facing Entrants</i>	-.020 (.018)	-.032 (.035)	-.011 (.034)
<i>Entrant Bid Dummy</i>	-.194* (.070)	-.396* (.173)	-.205* (.073)
<i>Firm's Winning to Bidding Ratio</i>	-.321* (.046)	-.034 (.065)	.042 (.091)
<i>Log of Firm's Backlog</i>	.004* (.001)	.003* (.001)	.002 (.001)
<i>Distance to the Project Location</i>	-.005 (.004)	-.006 (.007)	-.004 (.006)
<i>Average Rivals Winning to Plan holder Ratio</i>	-.242* (.112)	-.438* (.135)	-.295* (.125)
<i>Closest Rival's Distance to the Project Location</i>	.003 (.003)	.004 (.006)	.002 (.006)
<i>Rivals Minimum Backlog</i>	.001 (.001)	.003* (.001)	.002 (.001)
<i>Number of Observations</i>	2782	770	770
<i>Adj-R²</i>	.9736	0.9786	.0296

* Denotes 95% significance.

Regressions include six project class dummy variables.

TABLE A-IV
REGRESSION RESULTS FOR LOG OF BIDS AND LOG OF WINNING BIDS: WITH LOG OF THE
NUMBER OF PLAN HOLDERS.

Independent Variable	Bid Regressions	Winning Bid Regressions	
	OLS	OLS	
	Log of Bids	Log of Winning Bids	Relative Winning Bids
<i>Log of Engineer's Estimate</i>	.950* (.006)	.990* (.010)	
<i>Log Number of Plan holders</i>	.028* (.012)	-.016 (.020)	-.024 (.019)
<i>Bidders Facing Entrants</i>	-.022 (.018)	-.029 (.035)	-.008 (.034)
<i>Entrant Bid Dummy</i>	-.196* (.070)	-.392* (.173)	-.202* (.072)
<i>Firm's Winning to Bidding Ratio</i>	-.318* (.046)	-.038 (.066)	.035 (.091)
<i>Log of Firm's Backlog</i>	.004* (.001)	.003* (.001)	.002 (.001)
<i>Distance to the Project Location</i>	-.005 (.004)	-.006 (.007)	-.004 (.006)
<i>Average Rivals Winning to Plan holder Ratio</i>	-.211 (.108)	-.434* (.131)	-.305* (.126)
<i>Closest Rival's Distance to the Project Location</i>	.003 (.003)	.004 (.006)	.001 (.006)
<i>Rivals Minimum Backlog</i>	.001 (.001)	.002 (.001)	.001 (.001)
<i>Number of Observations</i>	2782	770	770
<i>Adj-R²</i>	.9736	0.9786	.0307

* Denotes 95% significance.

Regressions include six project class dummy variables.