

ONLINE APPENDIX: Table I

Regressions Explaining Relative Rank for Stock-Financed Deals Using *All_GrProReturn* and *(All_GrPro)(TaxΔ)*

This table reports sample-selection corrected OLS regressions explaining the bargaining split between target and acquirer acquirer shareholders in stock-financed deals. The sample consists of 1,881 mergers announced during 1981-2006 for which both the acquirer and target are listed on the NYSE, AMEX, or NASDAQ, are not in the financial services industry, are not regulated utilities and for which stock comprises at least 50% of the consideration. A Heckman two-stage regression is estimated in which the first stage is a probit regression on the payment method (stock vs. cash) and the second stage is an OLS regression corrected for sample-selection (i.e. payment method choice). The dependent variable in the first-stage probit specification takes the value one if the deal consideration (proposed or completed) comprises more than 50% stock. The specification of the probit is the same as model (4) in this Table with the additional variable *Acq Cashflow/Tgt_Size* defined as the acquirer's cash flow (EBIDT minus interest expense minus taxes minus preferred and common dividends) divided by the market value of the target's common equity. The output from the first stage of the two-stage regression is reported in the first column of results. The dependent variable in the second stage regression is *Relative Rank*, the ratio of the percentile rank of the target firm *CAR* to the percentile rank of the target firm *CAR* plus the percentile rank of the acquirer firm *CAR*. *CAR* is the cumulative abnormal return over days -63 to +126 around the merger announcement using a market model estimated with the CRSP value-weighted market return over days -318 to -64. Institutional ownership is measured at the latest quarter-end prior to the merger announcement using the CDA/Spectrum 13F database, and institutional style preference (growth vs. value) is according to Abarbanell, Bushee, and Raedy (2003). *All_GrPro* is the aggregate ownership by all growth-oriented institutions of the target divided by the aggregate ownership of all institutional owners of the target. *All_Agg* is the total institutional ownership in the target. *All_GrProReturn* is the average holding period return of all growth-oriented institutions invested in the target in the quarter before the merger announcement interacted with the proportion of the target held by growth-oriented institutions. *TaxΔ* is the change in the capital gains tax rate from the baseline of 20%. *Target Return* is the target firm's return over the year prior to the merger announcement. *Transient_Agg* is ownership by transient investors (those with relatively short holding periods) as classified in Bushee (2001) and Bushee and Noe (2000). *Log(Acquirer Scaled Size)* is the market value of the acquirer's common equity divided by the size of the equity market used in the CRSP value-weighted market index. *Log(Relative Acquirer Size)* is the log of the market value of the acquirer's equity divided by that of the target. *Acquirer Leverage* is the ratio of total debt to total assets. *Non-diversifying* is an indicator set to one if the acquirer and target share the same three-digit SIC code. *Toehold_Dum* is a dummy variable that takes the value one if the bidder holds the target's stock as of the announcement date. *Combined Value* is the weighted average (using the prior fiscal year's total assets as weights) of the target and acquirer CARs over days -63 to +126 around the merger announcement using a market model estimated with the CRSP value-weighted market return over days -318 to -64. Statistical significance of Heckman's *Lambda* implies that sample selection is relevant. Year and industry dummies are included (but not reported) and heteroskedasticity-adjusted p-values are in parentheses beneath coefficients.

	1 st Stage	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
All_GrPro	0.9916*** [<0.001]	-0.1890*** [<0.001]	-0.1923*** [<0.001]	-0.1548*** [0.004]	-0.1590*** [0.005]	-0.2187*** [<0.001]	-0.2218*** [<0.001]	-0.1751*** [0.002]	-0.1791*** [0.004]
All_GrProReturn	0.0622 [0.501]		-0.0032* [0.083]		-0.0029* [0.085]		-0.0097* [0.059]		-0.0087* [0.062]
(All_GrPro)(TaxΔ)	-0.0706 [0.989]			-1.6066* [0.098]	-1.6210* [0.099]			-1.9019* [0.092]	-1.8739* [0.095]
TaxΔ	9.3730** [0.028]			0.3624 [0.714]	0.3070 [0.760]			0.3667 [0.739]	0.2369 [0.840]
Target Return	-0.1164** [0.050]		0.0037 [0.723]		0.0041 [0.697]		0.0079 [0.507]		0.0074 [0.524]
All_Agg	-0.7788*** [0.002]	0.1235** [0.020]	0.1289** [0.021]	0.1319** [0.014]	0.1382** [0.014]	0.1414** [0.012]	0.1519** [0.015]	0.1448*** [0.010]	0.1547** [0.011]
Transient_Agg	1.1291** [0.023]	-0.3374*** [<0.001]	-0.3437*** [0.001]	-0.3450*** [<0.001]	-0.3531*** [<0.001]	-0.3413*** [0.001]	-0.3482*** [0.002]	-0.3415*** [0.001]	-0.3483*** [0.001]
Log(Acq P/B)	0.3208*** [<0.001]	0.0077 [0.552]	0.0060 [0.668]	0.0064 [0.623]	0.0044 [0.759]	-0.0090 [0.554]	-0.0122 [0.481]	-0.0087 [0.560]	-0.0119 [0.481]
Log(Acq Scaled Size)	0.1149*** [0.001]	-0.0148** [0.038]	-0.0153** [0.044]	-0.0153** [0.033]	-0.0161** [0.037]	-0.0215** [0.010]	-0.0227** [0.017]	-0.0213** [0.011]	-0.0224** [0.016]

Log(Acq Rel. Size)	-0.3215***	0.0452***	0.0467***	0.0463***	0.0483***	0.0596***	0.0631***	0.0586***	0.0620***
	[<0.001]	[<0.001]	[0.001]	[<0.001]	[0.001]	[<0.001]	[0.001]	[<0.001]	[<0.001]
Acq Leverage	-1.0354***	-0.0594	-0.0555	-0.0526	-0.0479	-0.0003	0.0075	0.0015	0.0090
	[<0.001]	[0.253]	[0.303]	[0.316]	[0.380]	[0.996]	[0.908]	[0.980]	[0.888]
Non-Diversifying	0.0508	-0.0301**	-0.0311**	-0.0312**	-0.0323**	-0.0296*	-0.0317*	-0.0311*	-0.0330*
	[0.523]	[0.048]	[0.046]	[0.042]	[0.040]	[0.079]	[0.083]	[0.063]	[0.064]
Toehold_Dum	-0.9070***	0.1126**	0.1181**	0.1182**	0.1248**	0.1335**	0.1426**	0.1326**	0.1414**
	[<0.001]	[0.032]	[0.031]	[0.025]	[0.024]	[0.026]	[0.030]	[0.026]	[0.027]
Combined Value	-0.0849	-0.0609***	-0.0607***	-0.0602***	-0.0599***	-0.0830***	-0.0835***	-0.0822***	-0.0826***
	[0.363]	[<0.001]	[<0.001]	[<0.001]	[<0.001]	[<0.001]	[<0.001]	[<0.001]	[<0.001]
Acq Cashflow/Tgt_Size	-0.0147**								
	[0.045]								
Constant	0.9102	0.5578***	0.5612***	0.5409***	0.5442***	0.5318***	0.5363***	0.5092***	0.5136***
	[0.124]	[<0.001]	[<0.001]	[<0.001]	[<0.001]	[<0.001]	[<0.001]	[<0.001]	[<0.001]
Heckman's Lambda		-0.1642***	-0.1742**	-0.1712***	-0.1831***	-0.2169***	-0.2362***	-0.2116***	-0.2300***
		[0.009]	[0.011]	[0.007]	[0.008]	[0.001]	[0.002]	[0.001]	[0.002]
Observations	1,881	830	830	830	830	712	712	712	712

ONLINE APPENDIX: Table II

Probit Regressions Explaining Method of Payment Choice *All_GrProReturn* and *(All_GrPro)(TaxΔ)*

This table reports probit regressions explaining the choice between stock and cash mergers accounting for the difference in anticipated premiums. The sample consists of 1,881 mergers announced during 1981-2006 for which both the acquirer and target are listed on the NYSE, AMEX, or NASDAQ, are not in the financial services industry, and are not regulated utilities. The probit regression binary dependent variable takes the value one if the deal consideration (proposed or completed) comprises more than 50% stock. *Predicted Prem (Cash-Stock)* is the difference in predicted premiums. The predicted premium for stock deals is the fitted value from model 2, 3, 6 or 7 in Table III depending on sample (all versus completed) and tax variable, *All_GrProReturn* or *(AllGrPro) x (TaxΔ)* as noted in each specification below. The predicted premium for cash deals is estimated from similar models but on the basis of cash deals. *All_GrProReturn* is the average holding period return of all growth-oriented institutions invested in the target in the quarter before the merger announcement interacted with the proportion of the target held by growth-oriented institutions. *TaxΔ* is the change in the capital gains tax rate from the baseline of 20%. Target Return is the target firm's return over the year prior to the merger announcement. *All_Agg* is the total institutional ownership in the target. Institutional ownership is measured at the latest quarter-end prior to the merger announcement using the CDA/Spectrum 13F database. For the remaining variables, market values are measured 20 days prior to the merger announcement and accounting items are measured at the latest fiscal year-end prior to the merger announcement. *Log(Acquirer P/B)* is the log of the acquirer's price-to-book ratio of equity. *Log(Acquirer Scaled Size)* is the market value of the acquirer's common equity divided by the size of the equity market used in the CRSP value-weighted market index. *Log(Relative Acquirer Size)* is the log of the market value of the acquirer's equity divided by that of the target. *Acquirer Leverage* is the ratio of total debt to total assets. *Non-diversifying* is an indicator set to one if the acquirer and target share the same three-digit SIC code. *Toehold_Dum* is a dummy variable that takes the value one if the bidder holds the target's stock as of the announcement date. Year and industry dummies are included (but not reported) and heteroskedasticity-adjusted pvalues are in parentheses beneath coefficients, which are marginal effects.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sample:	All	All	All	All	Completed	Completed	Completed	Completed
Tax Variable Used in Predicted Premium Regression	<i>All_GrProReturn</i>	<i>All_GrProReturn</i>	<i>(All_GrPro) x (TaxΔ)</i>	<i>(All_GrPro) x (TaxΔ)</i>	<i>All_GrProReturn</i>	<i>All_GrProReturn</i>	<i>(All_GrPro) x (TaxΔ)</i>	<i>(All_GrPro) x (TaxΔ)</i>
Predicted Premium (Cash-Stock)	0.5503*** [<0.001]	0.4245*** [<0.001]	0.7080*** [<0.001]	0.6455*** [<0.001]	0.5538*** [<0.001]	0.3752*** [<0.001]	0.7329*** [<0.001]	0.6020*** [<0.001]
<i>All_Agg</i>		-0.0342 [0.649]		0.0031 [0.966]		-0.0550 [0.501]		-0.0126 [0.875]
<i>Log(Acq P/B)</i>		0.1022*** [<0.001]		0.0574*** [0.004]		0.1178*** [<0.001]		0.0709*** [0.002]
<i>Log(Acq Scaled Size)</i>		0.0282** [0.035]		0.0108 [0.412]		0.0394*** [0.008]		0.0219 [0.135]
<i>Log(Acq Rel. Size)</i>		-0.0659*** [<0.001]		-0.0217 [0.203]		-0.0987*** [<0.001]		-0.0524*** [0.006]
<i>Acq Leverage</i>		-0.3651*** [<0.001]		-0.2996*** [<0.001]		-0.3692*** [<0.001]		-0.3024*** [0.001]
<i>Non-Diversifying</i>		-0.0204 [0.489]		-0.0604** [0.034]		-0.0116 [0.717]		-0.0534* [0.089]
<i>Toehold_Dum</i>		-0.2522*** [<0.001]		-0.1911*** [0.002]		-0.2070*** [0.009]		-0.1447* [0.067]
Observations	1,881	1,881	1,881	1,881	1,545	1,545	1,545	1,545
Pseudo R-squared	0.220	0.251	0.253	0.267	0.221	0.258	0.260	0.274

ONLINE APPENDIX: Table III

Institutional Monitoring, Acquirer Valuation, and Capital Gains using *All_GrProReturn* and *(AllGr_Pro)(TaxΔ)*

This table reports sample-selection corrected OLS regressions explaining the premium in stock-financed deals. The sample consists of 1,881 mergers announced during 1981-2006 for which both the acquirer and target are listed on the NYSE, AMEX, or NASDAQ, are not in the financial services industry, are not regulated utilities, and for which stock comprises at least 50% of the consideration. *Panel A* investigates the role of institutional monitoring of the target by examining the extent to which institutions are relatively short-term or long-term investors. *Transient_Agg* is ownership by transient investors (those with relatively short holding periods) as classified in Bushee (2001) and Bushee and Noe (2000). *Dedicated_Agg* is ownership by dedicated investors (those with relatively long holding periods) as classified in Bushee (2001) and Bushee and Noe (2000). *Panel B* investigates the role acquirer valuation. *Log(Acquirer P/B)* is the log of the acquirer's price-to-book ratio of equity. *Acquirer Return* is the acquirer firm's return over the year prior to the merger announcement. In both panels a Heckman two-stage regression is estimated in which the first stage is a probit regression on the payment method (stock vs. cash) and the second stage is an OLS regression corrected for sample-selection (i.e. payment method choice). The dependent variable in the first-stage probit specification takes the value one if the deal consideration (proposed or completed) comprises more than 50% stock. The specification of the probit is the same as the corresponding model in this Table with the additional variable *Acq Cashflow/Tgt Size* defined as the acquirer's cash flow (EBIDT minus interest expense minus taxes minus preferred and common dividends) divided by the market value of the target's common equity. The dependent variable in the second-stage OLS regressions below is *Premium*, the cumulative abnormal return over days -63 to +126 around the merger announcement using a market model estimated with the CRSP value-weighted market return over days -318 to -64. Institutional ownership is measured at the latest quarter-end prior to the merger announcement using the CDA/Spectrum 13F database, and institutional style preference (growth vs. value) is according to Abarbanell, Bushee, and Raedy (2003). *All_GrPro* is the aggregate ownership by all growth-oriented institutions of the target divided by the aggregate ownership of all institutional owners of the target. *All_GrProReturn* is the average holding period return of all growth-oriented institutions invested in the target in the quarter before the merger announcement interacted with the proportion of the target held by growth-oriented institutions. *TaxΔ* is the change in the capital gains tax rate from the baseline of 20%. The regressions in *Panel A* also include control variables *Target Return*, *All_Agg*, *Acq CAR(-1,+1)*, *Log(Acquirer P/B)*, *Log(Acquirer Scaled Size)*, *Log(Relative Acquirer Size)*, *Acquirer Leverage*, *Non-Diversifying*, *Toehold Dum*, year and industry dummies which we do not report below for brevity. The regressions in *Panel B* also include control variables *Target Return*, *All_Agg*, *Transient_Agg*, *Acq CAR(-1,+1)*, *Log(Acquirer Scaled Size)*, *Log(Relative Acquirer Size)*, *Acquirer Leverage*, *Non-Diversifying*, *Toehold Dum*, year and industry dummies which we do not report below for brevity. See Table IV for all control variable definitions. The statistical significance of Heckman's *Lambda* implies that sample selection is relevant. Heteroskedasticity-adjusted p-values are in parentheses beneath coefficients.

Panel A: Transient & Dedicated Investors								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Deals	All	All	All	All	Completed	Completed	Completed	Completed
<i>All_GrPro</i>	-0.5061*** [0.001]	-0.4443*** [0.002]	-0.5845*** [<0.001]	-0.5243*** [<0.001]	-0.5180*** [0.001]	-0.4557*** [0.002]	-0.5690*** [<0.001]	-0.5015*** [0.001]
<i>All_GrProReturn</i>	-0.1214*** [0.005]	-0.1117** [0.010]	-0.1135** [0.010]	-0.1095** [0.013]	-0.1349*** [0.003]	-0.1246*** [0.005]	-0.1292*** [0.005]	-0.1237*** [0.006]
<i>(All_GrPro)(TaxΔ)</i>	-3.4522 [0.241]	-3.7742 [0.199]	-4.0408 [0.174]	-4.0687 [0.169]	-3.8351 [0.224]	-3.9680 [0.203]	-4.3239 [0.173]	-4.2263 [0.178]
<i>Transient_Agg</i>		-0.9966*** [<0.001]		-0.6302** [0.036]		-0.9023*** [0.001]		-0.6756** [0.030]
<i>Dedicated_Agg</i>			1.2006*** [<0.001]	0.8992*** [0.004]			0.8492*** [0.004]	0.5156 [0.110]
<i>TaxΔ</i>	0.2326 [0.933]	1.1446 [0.678]	-1.9854 [0.492]	-0.8102 [0.778]	0.4869 [0.872]	1.2325 [0.678]	-1.0055 [0.746]	0.1648 [0.957]
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Heckman's <i>Lambda</i>	-0.4566*** [0.004]	-0.4698*** [0.003]	-0.5119*** [0.001]	-0.5025*** [0.001]	-0.5178*** [0.002]	-0.4997*** [0.002]	-0.5403*** [0.001]	-0.5154*** [0.001]
Observations	830	830	830	830	712	712	712	712

Panel B: Acquirer Valuation								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Deals	All	All	All	All	Completed	Completed	Completed	Completed
All_GrPro	-0.4907*** [0.001]	-0.4443*** [0.002]	-0.4682*** [0.001]	-0.4670*** [0.001]	-0.4903*** [0.002]	-0.4557*** [0.002]	-0.4767*** [0.001]	-0.4893*** [0.001]
All_GrProReturn	-0.1289*** [0.004]	-0.1117** [0.010]	-0.1117*** [0.009]	-0.1008** [0.020]	-0.1373*** [0.002]	-0.1246*** [0.005]	-0.1255*** [0.003]	-0.1166*** [0.008]
(All_GrPro)(TaxΔ)	-3.6032 [0.226]	-3.7742 [0.199]	-3.3383 [0.249]	-3.5026 [0.230]	-3.5813 [0.250]	-3.9680 [0.203]	-3.1735 [0.292]	-3.4327 [0.266]
Log(Acq P/B)		-0.1070*** [0.001]		-0.1155*** [<0.001]		-0.1026*** [0.006]		-0.1128*** [0.001]
Acquirer Return			-0.0190 [0.460]	0.0073 [0.773]			-0.0118 [0.662]	0.0020 [0.941]
TaxΔ	0.7820 [0.781]	1.1446 [0.678]	1.1712 [0.665]	1.0216 [0.707]	1.1105 [0.716]	1.2325 [0.678]	1.7129 [0.544]	1.1075 [0.700]
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Heckman's Lambda	-0.5032*** [0.004]	-0.4698*** [0.003]	-0.4308*** [0.005]	-0.4740*** [0.001]	-0.4784*** [0.008]	-0.4997*** [0.002]	-0.3795*** [0.009]	-0.4903*** [0.001]
Observations	830	830	830	830	712	712	712	712