

Internet Appendix for
Do Corporate Managers Learn from Short Sellers?

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Liu, McConnell, and Schrowang (2023) provide an empirical analysis of how the exemption of short-sale uptick tests due to the Regulation SHO pilot program affects managers' decision to abandon value-reducing acquisition attempts. This Internet Appendix contains robustness tests that accompany the results published in Liu, McConnell, and Schrowang (2021). The specific robustness tests provided for each table are described below. In the legend for each table in this appendix, the **underlined text in bold** indicates how the Internet Appendix table differs from the table reported in the paper.

Table SIA. IVa: Uses the list of 948 pilot stock that was later published by the SEC that accounts for business combinations, permanent delistings, and other corporate events instead of the initial list of 986 pilot stocks originally published by the SEC.

Table SIA. IVb: Uses a cutoff of -2% CAR to be considered a value-reducing acquisition attempt instead of 0%.

Table SIA. IVc: Includes only the first acquisition attempt by any acquirer.

Table SIA. IVd: Uses a probit model instead of a linear probability model.

Table SIA. IVe: Uses a tobit model instead of a linear probability model.

Table SIA. IVf: Including additional control variables.

Table SIA. IVa. The effect of SHO pilot program on acquisition abandonment and CAR

This table presents estimates of a triple difference analysis in a linear probability model of acquisition abandonment. The sample includes 756 value-reducing acquisition attempts by the Regulation SHO pilot and nonpilot firms announced over the period of January 1, 2002 through December 31, 2010. **The list of pilot firms used in this model is from the “Updated Lists of Pilot Securities” from the SEC which included 948 pilot firms.** The dependent variable is an indicator that is given the value of one for abandoned acquisition attempts and zero for completed attempts. An acquisition attempt is classified as pilot if the acquirer was designated as a pilot firm during the Regulation SHO pilot program and is designated as SHO or post-SHO based on the announcement date of the acquisition attempt. Variables are defined in Appendix A. All regressions control for year and industry fixed effects. The coefficient estimates of the constant, year, and industry dummies are omitted for brevity. Standard errors are clustered by industry, and t-statistics are reported in brackets. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

| | Dependent Variable: Abandonment (1,0) | |
|------------------------|---------------------------------------|----------------------|
| | (1) | (2) |
| CAR x Pilot x SHO | | -2.224*** [-2.64] |
| CAR x Pilot x Post-SHO | | -1.244 [-1.07] |
| CAR | -0.567** [-2.47] | -1.877*** [-4.89] |
| Pilot | | 0.003 [0.15] |
| SHO | | 0.037 [1.59] |
| Post-SHO | | 0.016 [0.52] |
| CAR x Pilot | | 0.916 [1.17] |
| CAR x SHO | | 2.076*** [4.75] |
| CAR x Post-SHO | | 2.162*** [4.86] |
| Pilot x SHO | | -0.045 [-1.90] |
| Pilot x Post-SHO | | 0.000 [0.01] |

Table SIA. IVa. Continued

| | Dependent Variable: Abandonment (1,0) | |
|------------------------|---------------------------------------|----------------------|
| | (1) | (2) |
| Defense Dummy | 0.594*** [8.85] | 0.619*** [9.60] |
| Compete Dummy | 0.329*** [3.54] | 0.332*** [3.42] |
| Hostile Dummy | 0.636*** [3.63] | 0.652*** [3.94] |
| Tender Offer Dummy | -0.030 [-0.47] | -0.038 [-0.54] |
| Lockup Dummy | -0.293 [-1.02] | -0.336 [-1.24] |
| Termination Fee Dummy | 0.008 [0.61] | 0.010 [0.87] |
| Stock Dummy | -0.006 [-0.93] | -0.005 [-0.92] |
| Ln(Market Cap) | -0.019** [-2.19] | -0.026*** [-3.51] |
| Same State HQ | 0.054*** [2.85] | 0.052** [2.54] |
| Definitive Agreement | 0.594*** [8.85] | 0.619*** [9.60] |
| Industry Fixed Effects | Yes | Yes |
| Year Fixed Effects | Yes | Yes |
| Observations | 700 | 700 |
| Adj. R ² | 0.2750 | 0.3117 |

Table SIA. IVb. The effect of SHO pilot program on acquisition abandonment and CAR

This table presents estimates of a triple difference analysis in a linear probability model of acquisition abandonment. The sample includes 756 value-reducing acquisition attempts by the Regulation SHO pilot and nonpilot firms announced over the period of January 1, 2002 through December 31, 2010. **Only acquisition attempts with a three-day CAR around the announcement window less than -2% are included.** The dependent variable is an indicator that is given the value of one for abandoned acquisition attempts and zero for completed attempts. An acquisition attempt is classified as pilot if the acquirer was designated as a pilot firm during the Regulation SHO pilot program and is designated as SHO or post-SHO based on the announcement date of the acquisition attempt. Variables are defined in Appendix A. All regressions control for year and industry fixed effects. The coefficient estimates of the constant, year, and industry dummies are omitted for brevity. Standard errors are clustered by industry, and t-statistics are reported in brackets. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

| | Dependent Variable: Abandonment (1,0) | |
|------------------------|---------------------------------------|----------------------|
| | (1) | (2) |
| CAR x Pilot x SHO | | -2.427** [-2.25] |
| CAR x Pilot x Post-SHO | | -1.133 [-1.27] |
| CAR | -0.493* [-1.65] | -1.850*** [-5.21] |
| Pilot | | -0.010 [-0.17] |
| SHO | | 0.045 [1.32] |
| Post-SHO | | 0.012 [0.27] |
| CAR x Pilot | | 0.770 [0.92] |
| CAR x SHO | | 2.203*** [4.83] |
| CAR x Post-SHO | | 2.446*** [7.23] |
| Pilot x SHO | | -0.053 [-0.62] |
| Pilot x Post-SHO | | -0.007 [-0.07] |

Table SIA. IVb. Continued

| | Dependent Variable: Abandonment (1,0) | |
|------------------------|---------------------------------------|----------------------|
| | (1) | (2) |
| Defense Dummy | 0.423** [2.43] | 0.445*** [2.77] |
| Compete Dummy | 0.389*** [4.07] | 0.397*** [3.65] |
| Hostile Dummy | 0.399 [1.18] | 0.417 [1.30] |
| Tender Offer Dummy | -0.044 [-0.80] | -0.052 [-0.79] |
| Lockup Dummy | -0.139 [-0.44] | -0.154 [-0.54] |
| Termination Fee Dummy | 0.026 [1.52] | 0.026 [1.35] |
| Stock Dummy | -0.008 [-0.71] | -0.007 [-0.71] |
| Ln(Market Cap) | -0.027** [-2.58] | -0.035*** [-4.50] |
| Same State HQ | 0.101*** [2.94] | 0.101** [2.51] |
| Definitive Agreement | 0.423** [2.43] | 0.445*** [2.77] |
| Industry Fixed Effects | Yes | Yes |
| Year Fixed Effects | Yes | Yes |
| Observations | 409 | 409 |
| Adj. R ² | 0.2446 | 0.2876 |

Table SIA. IVc. The effect of SHO pilot program on acquisition abandonment and CAR

This table presents estimates of a triple difference analysis in a linear probability model of acquisition abandonment. The sample includes 756 value-reducing acquisition attempts by the Regulation SHO pilot and nonpilot firms announced over the period of January 1, 2002 through December 31, 2010. **Only the first acquisition attempt by each acquirer in our sample is included.** The dependent variable is an indicator that is given the value of one for abandoned acquisition attempts and zero for completed attempts. An acquisition attempt is classified as pilot if the acquirer was designated as a pilot firm during the Regulation SHO pilot program and is designated as SHO or post-SHO based on the announcement date of the acquisition attempt. Variables are defined in Appendix A. All regressions control for year and industry fixed effects. The coefficient estimates of the constant, year, and industry dummies are omitted for brevity. Standard errors are clustered by industry, and t-statistics are reported in brackets. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

| | Dependent Variable: Abandonment (1,0) | |
|------------------------|---------------------------------------|---------------------|
| | (1) | (2) |
| CAR x Pilot x SHO | | -2.466* [-1.84] |
| CAR x Pilot x Post-SHO | | -0.374 [-0.24] |
| CAR | -0.543 [-1.37] | -1.664** [-2.51] |
| Pilot | | 0.023 [0.50] |
| SHO | | 0.058 [1.28] |
| Post-SHO | | 0.013 [0.18] |
| CAR x Pilot | | 0.670 [0.81] |
| CAR x SHO | | 1.815*** [2.82] |
| CAR x Post-SHO | | 1.851*** [3.24] |
| Pilot x SHO | | -0.071 [-1.12] |
| Pilot x Post-SHO | | 0.079 [1.21] |

Table SIA. IVc. Continued

| | Dependent Variable: Abandonment (1,0) | |
|------------------------|---------------------------------------|-------------------|
| | (1) | (2) |
| Defense Dummy | 0.497* [1.91] | 0.524** [2.18] |
| Compete Dummy | 0.297** [2.43] | 0.301** [2.20] |
| Hostile Dummy | 0.470* [1.66] | 0.475* [1.75] |
| Tender Offer Dummy | 0.003 [0.04] | -0.023 [-0.21] |
| Lockup Dummy | -0.201 [-0.43] | -0.225 [-0.49] |
| Termination Fee Dummy | -0.005 [-0.31] | -0.009 [-0.49] |
| Stock Dummy | -0.006 [-0.51] | -0.005 [-0.44] |
| Ln(Market Cap) | -0.012 [-0.61] | -0.019 [-1.21] |
| Same State HQ | 0.064** [2.20] | 0.059* [1.91] |
| Definitive Agreement | 0.497* [1.91] | 0.524** [2.18] |
| Industry Fixed Effects | Yes | Yes |
| Year Fixed Effects | Yes | Yes |
| Observations | 376 | 376 |
| Adj. R ² | .02438 | 0.2956 |

Table SIA. IVd. The effect of SHO pilot program on acquisition abandonment and CAR

This table presents estimates of a triple difference analysis in a **probit** model of acquisition abandonment. The sample includes 756 value-reducing acquisition attempts by the Regulation SHO pilot and nonpilot firms announced over the period of January 1, 2002 through December 31, 2010. The dependent variable is an indicator that is given the value of one for abandoned acquisition attempts and zero for completed attempts. An acquisition attempt is classified as pilot if the acquirer was designated as a pilot firm during the Regulation SHO pilot program and is designated as SHO or post-SHO based on the announcement date of the acquisition attempt. Variables are defined in Appendix A. All regressions control for year and industry fixed effects. The coefficient estimates of the constant, year, and industry dummies are omitted for brevity. Standard errors are clustered by industry, and t-statistics are reported in brackets. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

| | Dependent Variable: Abandonment (1,0) | |
|------------------------|---------------------------------------|----------------------|
| | (1) | (2) |
| CAR x Pilot x SHO | | -1.759*** [-3.54] |
| CAR x Pilot x Post-SHO | | -0.064 [-0.12] |
| CAR | -0.331*** [-2.97] | -0.678*** [-4.82] |
| Pilot | | -0.031 [-1.47] |
| SHO | | -0.017 [-0.55] |
| Post-SHO | | -0.256*** [-7.32] |
| CAR x Pilot | | 0.265 [1.52] |
| CAR x SHO | | 1.068*** [2.59] |
| CAR x Post-SHO | | 0.903*** [9.95] |
| Pilot x SHO | | -0.042 [-1.08] |
| Pilot x Post-SHO | | 0.060** [2.28] |

Table SIA. IVd. Continued

| | Dependent Variable: Abandonment (1,0) | |
|------------------------|---------------------------------------|----------------------|
| | (1) | (2) |
| Defense Dummy | 0.107*** [2.91] | 0.131*** [3.73] |
| Compete Dummy | 0.147*** [6.46] | 0.157*** [10.58] |
| Hostile Dummy | 0.202*** [2.81] | 0.217*** [3.30] |
| Tender Offer Dummy | -0.007 [-0.20] | -0.020 [-0.44] |
| Lockup Dummy | 0.003 [0.05] | -0.026 [-0.55] |
| Termination Fee Dummy | 0.018* [1.84] | 0.018* [1.66] |
| Stock Dummy | -0.007 [-0.77] | -0.007 [-0.73] |
| Ln(Market Cap) | -0.031** [-2.32] | -0.035*** [-3.49] |
| Same State HQ | 0.135*** [4.09] | 0.143*** [4.24] |
| Definitive Agreement | 0.107*** [2.91] | 0.131*** [3.73] |
| Industry Fixed Effects | Yes | Yes |
| Year Fixed Effects | Yes | Yes |
| Observations | 617 | 617 |
| Adj. R ² | 0.3825 | 0.4540 |

Table SIA. IVe. The effect of SHO pilot program on acquisition abandonment and CAR

This table presents estimates of a triple difference analysis in a **tobit** model of acquisition abandonment. The sample includes 756 value-reducing acquisition attempts by the Regulation SHO pilot and nonpilot firms announced over the period of January 1, 2002 through December 31, 2010. The dependent variable is an indicator that is given the value of one for abandoned acquisition attempts and zero for completed attempts. An acquisition attempt is classified as pilot if the acquirer was designated as a pilot firm during the Regulation SHO pilot program and is designated as SHO or post-SHO based on the announcement date of the acquisition attempt. Variables are defined in Appendix A. All regressions control for year and industry fixed effects. The coefficient estimates of the constant, year, and industry dummies are omitted for brevity. Standard errors are clustered by industry, and t-statistics are reported in brackets. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

| | Dependent Variable: Abandonment (1,0) | |
|------------------------|---------------------------------------|----------------------|
| | (1) | (2) |
| CAR x Pilot x SHO | | -2.091*** [-3.10] |
| CAR x Pilot x Post-SHO | | -0.897 [-1.18] |
| CAR | -0.590*** [-3.93] | -1.654*** [-5.38] |
| Pilot | | -0.001 [-0.03] |
| SHO | | 0.031 [0.79] |
| Post-SHO | | 0.008 [0.14] |
| CAR x Pilot | | 0.726* [1.67] |
| CAR x SHO | | 1.850*** [4.28] |
| CAR x Post-SHO | | 1.822*** [4.29] |
| Pilot x SHO | | -0.041 [-0.99] |
| Pilot x Post-SHO | | 0.006 [0.14] |

Table SIA. IVe. Continued

| | Dependent Variable: Abandonment (1,0) | |
|------------------------|---------------------------------------|---------------------|
| | (1) | (2) |
| Defense Dummy | 0.356*** [3.54] | 0.373*** [3.77] |
| Compete Dummy | 0.335*** [7.72] | 0.343*** [7.88] |
| Hostile Dummy | 0.517*** [6.17] | 0.533*** [6.46] |
| Tender Offer Dummy | -0.029 [-0.73] | -0.036 [-0.92] |
| Lockup Dummy | -0.129 [-0.95] | -0.164 [-1.23] |
| Termination Fee Dummy | 0.006 [0.35] | 0.006 [0.37] |
| Stock Dummy | -0.006 [-1.50] | -0.006 [-1.46] |
| Ln(Market Cap) | -0.023 [-1.53] | -0.030** [-1.97] |
| Same State HQ | 0.073** [2.28] | 0.069** [2.22] |
| Definitive Agreement | 0.356*** [3.54] | 0.373*** [3.77] |
| Industry Fixed Effects | Yes | Yes |
| Year Fixed Effects | Yes | Yes |
| Observations | 756 | 756 |
| Adj. R ² | 0.7437 | 0.8555 |

Table SIA. IVf. Analysis of acquisition abandonment on CAR and the SHO pilot program

This table presents estimates of a triple difference analysis in a linear probability model of acquisition abandonment. The sample includes 756 value-reducing acquisition attempts by the Regulation SHO pilot and nonpilot firms announced over the period of January 1, 2002 through December 31, 2010. **Additional control variables are included in this model.** The dependent variable is an indicator that is given the value of one for abandoned acquisition attempts and zero for completed attempts. An acquisition attempt is classified as pilot if the acquirer was designated as a pilot firm during the Regulation SHO pilot program and is designated as SHO or post-SHO based on the announcement date of the acquisition attempt. Variables are defined in Appendix A. All regressions control for year and industry fixed effects. The coefficient estimates of the constant, year, and industry dummies are omitted for brevity. Standard errors are clustered by industry, and t-statistics are reported in brackets. ***, **, and * indicate significance at 1%, 5%, and 10%, respectively.

| | Dependent Variable: Abandonment (1,0) | |
|------------------------|---------------------------------------|----------------------|
| | (1) | (2) |
| CAR x Pilot x SHO | | -1.660** [-2.25] |
| CAR x Pilot x Post-SHO | | -0.878 [-0.88] |
| CAR | -0.469** [-2.13] | -1.542*** [-5.82] |
| Pilot | | -0.006 [-0.33] |
| SHO | | 0.020 [0.76] |
| Post-SHO | | -0.027 [-0.75] |
| CAR x Pilot | | 0.616 [0.78] |
| CAR x SHO | | 1.834*** [5.90] |
| CAR x Post-SHO | | 1.840*** [5.29] |
| Pilot x SHO | | -0.028 [-1.06] |
| Pilot x Post-SHO | | 0.027 [0.69] |

Table SIA. IVf. Continued

| | Dependent Variable: Abandonment (1,0) | |
|----------------------------|---------------------------------------|----------------------|
| | (1) | (2) |
| Defense Dummy | 0.057 [0.50] | 0.079 [0.73] |
| Compete Dummy | 0.277*** [8.18] | 0.278*** [7.64] |
| Hostile Dummy | 0.082 [0.33] | 0.088 [0.37] |
| Tender Offer Dummy | 0.002 [0.03] | -0.003 [-0.04] |
| Lockup Dummy | 0.166 [0.59] | 0.124 [0.47] |
| Termination Fee Dummy | 0.015 [1.22] | 0.016 [1.32] |
| Stock Dummy | -0.007** [-2.32] | -0.007** [-2.31] |
| Ln(Market Cap) | -0.024*** [-2.81] | -0.031*** [-5.07] |
| Same State HQ | 0.082*** [6.43] | 0.078*** [5.99] |
| Definitive Agreement | -0.538*** [-3.46] | -0.546*** [-3.54] |
| Friendly Dummy | 0.010 [1.01] | 0.009 [1.01] |
| Relative Transaction Value | 0.021 [0.66] | 0.019 [0.74] |
| Industry Fixed Effects | Yes | Yes |
| Year Fixed Effects | Yes | Yes |
| Observations | 756 | 756 |
| Adj. R ² | 0.3636 | 0.3957 |