

TABLE VIII  
CORPORATE LIQUIDITY AND FIRM-LEVEL CHARACTERISTICS IN 2006

|                               | Cash to assets ratio |                    |                    |                    |                    |
|-------------------------------|----------------------|--------------------|--------------------|--------------------|--------------------|
|                               | (1)                  | (2)                | (3)                | (4)                | (5)                |
| Cash flow volatility          | 0.47***<br>(0.10)    |                    |                    |                    | 0.14***<br>(0.04)  |
| Capital expenditure to assets |                      | -1.33***<br>(0.24) |                    |                    | -0.89***<br>(0.25) |
| Acquisition to assets         |                      |                    | -0.71***<br>(0.13) |                    | -0.53***<br>(0.06) |
| Debt to assets                |                      |                    |                    | -0.45***<br>(0.05) | -0.40***<br>(0.04) |
| Firm-level controls           | No                   | No                 | No                 | No                 | Yes                |
| Observations                  | 1,701                | 1,701              | 1,701              | 1,701              | 1,701              |

Notes. \* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ ; the standard errors are clustered by the two-digit SIC industry code. The firm-level controls are the two-digit SIC, firm size, market to book ratio, networking capital to assets, dividend dummy, and R&D to sales. The construction of the variables and the choice of control variables follow [Bates, Kahle, and Stulz \(2009\)](#) closely, as reported in [Online Appendix S4](#).

find that the firms that have more liquidity are likely to be more financially constrained relative to their counterparts before the financial panic. [Bates, Kahle, and Stulz \(2009\)](#) identify more than 10 factors that lead firms to hold more liquid assets. In particular, they find that more cash holding (or a strong liquidity position) is associated with less investment, borrowing, acquisitions, and unstable cash flow, which are characteristics that likely reflect constrained companies rather than unconstrained companies. [Table VIII](#) confirms that their results hold in 2006, consistent with the results in [Table VII](#). In [Online Appendix S7](#), by reporting the same relationships between 2006 corporate liquidity and 2008 firm-level characteristics, I provide suggestive evidence that such firms remained constrained in the middle of the financial crisis. In this replication analysis, I use the Compustat database, which is used in [Bates, Kahle, and Stulz \(2009\)](#) and [Gilchrist et al. \(2017\)](#).<sup>36</sup> This result, along with previous studies, emphasizes that the concern about using liquidity as a measure of financial constraint is not specific to the particular sample that I use but generally applies to different data and periods. More generally, this concern

36. I closely follow [Bates, Kahle, and Stulz \(2009\)](#) for cleaning the Compustat database. See [Online Appendix S4](#) for a more detailed discussion of the Compustat data used in this analysis.