# Internet Appendix

## Local Business Cycles and Local Liquidity*

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TABLE A1

**Relation between State Quarterly Liquidity and Components of Economic Activity Index**

The table reports predictive linear regression estimates for the relation between the aggregate liquidity of stocks headquartered in the state and the components of the state-level economic activity index. The dependent variable is one of the state-quarter liquidity measures, *State Amihud Illiquidity* or *State Relative Spread*. The main independent variables are *State Inc Gr*, *State RelUnemp*, and *State hy*. The panel specifications also include *US Inc Gr*, *US RelUnemp*, *US hy*, *Term Spread*, and *Default Spread*, as well as state fixed effects, *State FE*.*State Amihud Illiquidity* and *State Relative Spread* are measured in quarter *t*, while all real macroeconomic predictors are measured in quarter $t-1$. Other US-level predictors (i.e., term spread and default spread) are measured in quarter $t-1$. Columns (1) and (3) report panel regression coefficient estimates and robust t-statistics in parentheses adjusted for heteroskedasticity and serial correlation. The fit measure is the within-panel adjusted-$R^2$. Columns (2) and (4) report time-series mean coefficients of Fama-MacBeth (1977) quarterly state-level cross-sectional regressions and Newey-West (1987) t-statistics in parentheses. The fit measure is the average cross-sectional adjusted-$R^2$. See Appendix for details on definitions of variables.

| | *State Amihud Illiquidity* | | *State Relative Spread* | |
|---|---|---|---|---|
| | *Panel* | *FM* | *Panel* | *FM* |
| | (1) | (2) | (3 | (4) |
| State Inc Gr | -0.249 | -0.392 | -0.388 | -0.120 |
| | (-4.87) | (-15.64) | (-4.21) | (-12.35) |
| State RelUnemp | 0.098 | 0.087 | 0.052 | 0.005 |
| | (2.03) | (3.01) | (0.97) | (0.33) |
| State hy | -0.357 | -0.078 | -0.488 | -0.074 |
| | (-6.26) | (-2.84) | (-14.19) | (-4.47) |
| US Inc Gr | -0.159 | | -0.055 | |
| | (-7.05) | | (-3.67) | |
| US RelUnemp | -0.186 | | -0.222 | |
| | (-3.54) | | (-4.00) | |
| US hy | -0.164 | | -0.346 | |
| | (-3.53) | | (-9.31) | |
| Term Spread | 0.235 | | 0.113 | |
| | (6.05) | | (4.09) | |
| Default Spread | -0.144 | | -0.092 | |
| | (-4.51) | | (-3.76) | |
| State FE | Yes | NA | Yes | NA |
| N [Avg N] | 5,747 | [49] | 5,090 | [48] |
| Adj $R^2$ [Avg $R^2$] | 24.2% | [4.9%] | 52.0% | [9.0%] |

TABLEA2

**Fama-MacBeth (1977) Estimates of the Relation between State Quarterly Liquidity and Economic Activityby Sub-Periods**

This table reports predictive linear regression estimates for the relation between the aggregate liquidity of stocks headquartered in the state and state-level real economic conditions for six sub-periods, from 1980 through 2008. The dependent variable is the state-quarter average liquidity measure based on *State Amihud Illiquidity* or *State Relative Spread*. The independent variable is the lagged state economic activity index, *State Econ Act*. The reported coefficients for each sub-period are time-series means of Fama-MacBeth (1977) quarterly state-level cross-sectional regressions estimates. Newey-West (1987) corrected t-statistics are in parentheses. The fit measure is the average cross-sectional adjusted-$R^2$. See Table 1 for further details on definitions of variables.

| *Time Period* | | *Amihud Illiquidity* | *Relative Spread* |
|---|---|---|---|
| *1980:Q1 to 1984:Q4* | State Econ Act | -0.948 | -0.282 |
| | | (-9.32) | (-6.16) |
| *1985:Q1 to 1989:Q4* | State Econ Act | -1.159 | -0.168 |
| | | (-19.91) | (-4.61) |
| *1990:Q1 to 1994:Q4* | State Econ Act | -0.349 | -0.250 |
| | | (-5.32) | (-7.68) |
| *1995:Q1 to 1999:Q4* | State Econ Act | -0.155 | -0.174 |
| | | (-3.15) | (-6.85) |
| *2000:Q1 to 2004:Q4* | State Econ Act | -0.329 | -0.175 |
| | | (-8.64) | (-5.47) |
| *2005:Q1 to 2008:Q4* | State Econ Act | -0.403 | -0.235 |
| | | (-8.30) | (-17.82) |

TABLE A3

**Relation between State Quarterly Liquidity and Economic ActivityUsing Alternative Liquidity Measures**

The table reports regression estimates for the relation between the aggregate liquidity of stocks headquartered in the state and state-level real economic conditions. The dependent variable is one of the alternative state-quarter liquidity measures, *State Corwin-Schultz Spread*, *State LOT*, or *State Turnover*. *State Corwin-Schultz Spread*is the natural logarithm of the value-weighted mean Corwin-Schultz (2012) spread of firms headquartered in the state. For each stock-quarter, the firm spread is the mean daily high-low spread based on equations (14) and (18) in Corwin and Schultz (2012). Negative daily spread estimates are set to zero. *State LOT* (1999) is the natural logarithm of the value-weighted mean LOT of firms headquartered in the state. For each stock-quarter, the firm LOT is the ratio of the number of zero daily returns to the total number of daily returns within a quarter for the stock. *State Turnover* is the natural logarithm of the value-weighted mean turnover of firms headquartered in the state. For each stock-quarter, the firm turnover is the ratio of quarter aggregate trading volume divided by the number of shares outstanding at the beginning of the quarter. The main independent variables are *State Econ Act*, *US Econ Act*,*Term Spread*, and *Default Spread*. *State Amihud Ind-Adj Illiquidity* and *State Relative Ind-Adj Spread* are measured in quarter *t*, while all predictors are measured in quarter $t-1$. Panel Areports summary statistics of the alternative state-quarter liquidity measures, *State Corwin-Schultz Spread*, *State LOT*, and *State Turnover*. In Panel B, columns (1), (3) and (5) report panel regression coefficient estimates and t-statistics in parentheses adjusted for heteroskedasticity and serial correlation. All specifications include state fixed effects, *State FE*. The fit measure is the within-panel adjusted-$R^2$. In Panel B columns (2), (4), and (6) report time-series mean coefficients of Fama-MacBeth (1977) quarterly state-level cross-sectional regressions and Newey-West (1987) t-statistics in parentheses. The fit measure is the average cross-sectional adjusted-$R^2$.

*Panel A: Summary statistics*

| Variable | Mean | St. Dev. | 5% | 25% | Median | 75% | 95% |
|---|---|---|---|---|---|---|---|
| State Corwin-Schultz Spread | -4.836 | 0.433 | -5.358 | -5.134 | -4.915 | -4.641 | -3.953 |
| State LOT | -2.702 | 1.257 | -4.952 | -3.746 | -2.231 | -1.766 | -1.25 |
| State Turnover | -1.701 | 0.723 | -2.853 | -2.108 | -1.724 | -1.229 | -0.552 |

*Panel B: Panel and Fama-MacBeth (1977) Regression Estimates*

| | *State CS Spread* | | *State LOT* | | *State Turnover* | |
|---|---|---|---|---|---|---|
| | *Panel* | *FM* | *Panel* | *FM* | *Panel* | *FM* |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| State Econ Act | -0.026 | -0.184 | -1.064 | -0.208 | 0.521 | 0.177 |
| | (-2.23) | (-8.21) | (-11.98) | (-10.96) | (9.22) | (11.12) |
| US Econ Act | -0.054 | | -0.249 | | 0.127 | |
| | (-2.71) | | (-5.54) | | (4.34) | |
| Term Spread | -0.031 | | -0.105 | | 0.071 | |
| | (-5.03) | | (-6.53) | | (6.55) | |
| Default Spread | 0.061 | | -0.572 | | 0.190 | |
| | (5.83) | | (-20.24) | | (10.66) | |
| State FE | Yes | NA | Yes | NA | Yes | NA |
| N [Avg N] | 5,789 | [45] | 5,785 | [50] | 5,747 | [49] |
| Adj $R^2$[AvgAdj $R^2$] | 4.7% | [2.3%] | 33.3% | [3.6%] | 26.3% | [1.8%] |

TABLE A4

**Relation between State Quarterly Liquidity and Economic ActivityUsing Industry-Adjusted Liquidity**

The table reports predictive linear regression estimates for the relation between the aggregate industry-adjusted liquidity of stocks headquartered in the state and state-level real economic conditions. The dependent variable is one of the industry-adjusted state-quarter liquidity measures, *State Amihud Ind-Adj Illiquidity* or *State Relative Ind-Adj Spread*. Industry-adjusted state-quarter liquidity is the value-weighted mean industry-adjusted liquidity of firms headquartered in the state during the quarter. Firm industry-adjusted liquidity is the natural logarithm of the stock-quarter liquidity minus the mean of the same variable across firms with the same 2-digit SIC code. The main independent variables are *State Econ Act*, *US Econ Act*,*Term Spread*, and *Default Spread*. *State Amihud Ind-Adj Illiquidity* and *State Relative Ind-Adj Spread* are measured in quarter *t*, while all predictors are measured in quarter $t-1$. Panel Areports mean, median, and standard deviation of the state-quarter industry-adjusted liquidity measures, *State Amihud Ind-Adj Illiquidity* or *State Relative Ind-Adj Spread*.In Panle B, columns (1) and (3) report panel regression coefficient estimates and t-statistics in parentheses adjusted for heteroskedasticity and serial correlation. All specifications include state fixed effects, *State FE*. The fit measure is the within-panel adjusted-$R^2$. In Panel B, columns (2) and (4) report time-series mean coefficients of Fama-MacBeth (1977) quarterly state-level cross-sectional regressions and Newey-West (1987) t-statistics in parentheses. The fit measure is the average cross-sectional adjusted-$R^2$.

*Panel A: Summary Statistics of State-Quarter Industry-Adjusted Liquidity*

| | Mean | St. Dev. | Median |
|---|---|---|---|
| *State Ind-Adj Amihud Illiquidity* | -3.583 | 2.036 | -3.767 |
| *State Ind-Adj Relative Spread* | -0.873 | 0.555 | -0.898 |

*Panel B: Panel and Fama-MacBeth (1977) Regression Estimates*

| | *State IndAdj Amihud Illiquidity* | | *State IndAdj Relative Spread* | |
|---|---|---|---|---|
| | *Panel* | *FM* | *Panel* | *FM* |
| | (1) | (2) | (3) | (4) |
| State Econ Act | -0.344 | -1.077 | -0.308 | -0.225 |
| | (-3.02) | (-12.24) | (-9.66) | (-15.43) |
| US Econ Act | -0.265 | | 0.117 | |
| | (-3.69) | | (3.89) | |
| Term Spread | -0.410 | | -0.088 | |
| | (-13.37) | | (-5.52) | |
| Default Spread | 0.061 | | 0.027 | |
| | (1.49) | | (1.46) | |
| State FE | Yes | NA | Yes | NA |
| N [Avg N] | 5,746 | [50] | 5,083 | [48] |
| Adj $R^2$ | 13.6% | [6.6%] | 9.2% | [4.6%] |

TABLE A5

**Relation between State Quarterly Liquidity and Economic Activity: Panel Estimates Excluding Large States and One-firm States**

The table reports panel regression estimates for the relation between the aggregate liquidity of stocks headquartered in the state and the state economic activity excluding the states of Arkansas, California, New York, Texas, and Washington. The dependent variable is one of the state-quarter liquidity measures, *State Amihud Illiquidity* or *State Relative Spread*. The main independent variables are *State Inc Gr*, *State RelUnemp*, *State hy*, and *State Econ Act*. All specifications also include *US Inc Gr*, *US RelUnemp*, *US hy*, *US Econ Act*, *Term Spread*, and *Default Spread*, as well as state fixed effects, *State FE*.*State Amihud Illiquidity* and *State Relative Spread* are measured in quarter *t*, while all real predictors are measured in quarter *t – 2*, and term and default spreads are measured in quarter *t – 1*. Robust t-statistics in parentheses adjusted for heteroskedasticity and serial correlation. The fit measure is the within-panel adjusted-$R^2$. See Appendix for details on definitions of variables.

| | *State Amihud Illiquidity* | | *State Relative Spread* | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| State Inc Gr | -0.475 | | -0.924 | |
| | (-3.48) | | (-4.44) | |
| State RelUnemp | 0.074 | | 0.007 | |
| | (1.41) | | (0.13) | |
| State hy | -0.324 | | -0.447 | |
| | (-5.17) | | (-11.02) | |
| State Econ Act | | -0.684 | | -1.172 |
| | | (-6.13) | | (-12.28) |
| US Inc Gr | -0.151 | | -0.036 | |
| | (-6.01) | | (-2.16) | |
| US RelUnemp | -0.176 | | -0.183 | |
| | (-3.06) | | (-3.14) | |
| US hy | -0.175 | | -0.359 | |
| | (-3.58) | | (-9.93) | |
| US Econ Act | | -0.093 | | -0.158 |
| | | (-1.13) | | (-1.95) |
| Term Spread | 0.221 | 0.145 | 0.079 | -0.112 |
| | (5.25) | (3.98) | (2.36) | (-4.78) |
| Default Spread | -0.140 | -0.316 | -0.107 | -0.320 |
| | (-4.17) | (-7.76) | (-4.22) | (-11.18) |
| State FE | Yes | Yes | Yes | Yes |
| N | 5,178 | 5,178 | 4,576 | 4,576 |
| Adj $R^2$ | 22.5% | 13.8% | 54.6% | 26.1% |

TABLE A6

**Relation between U.S. Census Division Quarterly Liquidity and Economic Activity: Panel Estimates**

This table reports predictive linear regression estimates for the relation between the aggregate liquidity of stocks headquartered in each of the four U.S. Census Divisions and region-level real economic conditions. The dependent variable is one of the division-quarter liquidity measures, *Region Amihud Illiquidity* or *Region Relative Spread*. The main independent variable is *Region Econ Act*. Other independent variables are *US Econ Act*,*Term Spread*, and *Default Spread*. *Region Amihud Illiquidity* and *Region Relative Spread* are measured in quarter *t*, while all predictors are measured in quarter $t-1$. All specifications include division fixed effects, *Region FE*. Robust t-statistics in parentheses are adjusted for heteroskedasticity and serial correlation. The fit measure is the within-panel adjusted-$R^2$.

| | (1) | (2) | (3) |
|---|---|---|---|
| | *Region Amihud Illiquidity* | | |
| Region Econ Act | -0.316 | -0.304 | -0.244 |
| | (-0.36) | (-0.37) | (-0.42) |
| N | 460 | 460 | 460 |
| Adj $R^2$ | 0.5% | 2.4% | 22.1% |
| | *Region Relative Spread* | | |
| Region Econ Act | 0.082 | 0.128 | 0.147 |
| | (0.07) | (0.12) | (0.15) |
| N | 420 | 420 | 420 |
| Adj $R^2$ | -0.2% | 3.5% | 9.1% |
| US Econ Act | No | Yes | Yes |
| Term Spread | No | No | Yes |
| Default Spread | No | No | Yes |
| Region FE | Yes | Yes | Yes |

TABLE A7

**Relation between MSAAnnual Liquidity and Economic Activity Using Alternative Liquidity Measures**

The table reports regression estimates for the relation between the aggregate liquidity of stocks headquartered in the state and state-level real economic conditions. The dependent variable is one of the alternative state-year liquidity measures, *State Corwin-Schultz Spread*, *State LOT*, or *State Turnover*. *State Corwin-Schultz Spread*is the natural logarithm of the value-weighted mean Corwin-Schultz (2012) spread of firms headquartered in the state. For each stock-year, the firm spread is the mean daily high-low spread based on equations (14) and (18) in Corwin and Schultz (2012). Negative daily spread estimates are set to zero. *State LOT* (1999) is the natural logarithm of the value-weighted mean LOT of firms headquartered in the state. For each stock-year, the firm LOT is the ratio of the number of zero daily returns to the total number of daily returns within a year for the stock. *State Turnover* is the natural logarithm of the value-weighted mean turnover of firms headquartered in the state. For each stock-year, the firm turnover is the ratio of quarter aggregate trading volume divided by the number of shares outstanding at the beginning of the year. The main independent variables are *State Econ Act*, *US Econ Act*,*Term Spread*, and *Default Spread*. *State Amihud Ind-Adj Illiquidity* and *State Relative Ind-Adj Spread* are measured in year*t*, while all predictors are measured in year $t-1$. Columns (1), (3) and (5) report panel regression coefficient estimates and t-statistics in parentheses adjusted for heteroskedasticity and serial correlation. All panel specifications include state fixed effects, *State FE*. The fit measure is the within-panel adjusted-$R^2$. Columns (2), (4), and (6) report time-series mean coefficients of Fama-MacBeth (1977) yearly state-level cross-sectional regressions and Newey-West (1987) t-statistics in parentheses. The fit measure is the average cross-sectional adjusted-$R^2$.

| | *MSA CS Spread* | | *MSA LOT* | | *MSA Turnover* | |
|---|---|---|---|---|---|---|
| | *Panel* | *FM* | *Panel* | *FM* | *Panel* | *FM* |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| MSA Econ Act | -0.113 | -0.185 | -0.113 | -0.340 | 0.145 | 0.168 |
| | (-3.94) | (-2.28) | (-2.14) | (-3.10) | (2.18) | (2.64) |
| US Econ Act | -0.397 | | -1.306 | | 0.452 | |
| | (-16.96) | | (-42.91) | | (12.48) | |
| Term Spread | -0.073 | | 0.043 | | -0.058 | |
| | (-7.87) | | (3.18) | | (-4.72) | |
| Default Spread | -0.034 | | -0.543 | | 0.094 | |
| | (-2.74) | | (-34.51) | | (5.35) | |
| MSA FE | Yes | NA | Yes | NA | Yes | NA |
| N [Avg N] | 4,783 | [208] | 4,771 | [207] | 4,793 | [208] |
| Adj $R^2$[AvgAdj $R^2$] | 13.3% | [6.0%] | 42.1% | [9.5%] | 10.8% | [2.1%] |

TABLE A8

**Relation between State Quarterly Liquidity and Economic Activityby Firm Localness Controlling for State Portfolio Firm Size and Stock Returns**

The table reports predictive panel linear regression estimates similar to Table 5 in the main text when the model is expanded to include additional control variables: lagged liquidity and lagged mean market capitalization of the state portfolio, as well as its lagged, contemporaneous, and one-quarter-ahead value-weighted stock return.

*Panel A: Firm Localness based on Size*

| | Small | Large | P-value Difference | Small | Large | P-value Difference |
|---|---|---|---|---|---|---|
| | State Amihud Illiquidity | | | State Relative Spread | | |
| State Econ Act | -0.532 | -0.495 | [0.11] | -0.565 | -0.547 | [0.16] |
| | (-4.13) | (-3.49) | | (-3.69) | (-3.51) | |
| US Econ Act | -0.187 | -0.167 | [0.07] | -0.390 | -0.446 | [0.03] |
| | (-4.23) | (-2.52) | | (-11.29) | (-8.42) | |
| Term Spread | 0.230 | -0.107 | [0.00] | -0.068 | -0.237 | [0.00] |
| | (10.68) | (-2.35) | | (-4.24) | (-8.47) | |
| Default Spread | -0.155 | -0.121 | [0.94] | -0.196 | -0.077 | [0.00] |
| | (-5.22) | (-2.82) | | (-9.24) | (-2.68) | |
| State Market Cap | -0.925 | -1.734 | [0.00] | -1.075 | -1.336 | [0.00] |
| | (-10.74) | (-12.70) | | (-16.90) | (-14.29) | |
| State Return Index$_{t-1}$ | -1.330 | 0.487 | [0.00] | -0.197 | -0.082 | [0.70] |
| | (-9.34) | (4.69) | | (-3.51) | (-0.99) | |
| State Return Index$_{t}$ | -2.026 | -1.836 | [0.07] | -1.058 | -1.245 | [0.12] |
| | (-14.25) | (-14.77) | | (-11.79) | (-14.85) | |
| State Return Index$_{t+1}$ | 0.227 | 0.303 | [0.00] | -0.072 | -0.168 | [0.53] |
| | (1.47) | (2.38) | | (-1.23) | (-2.03) | |
| State FE | Yes | Yes | | Yes | Yes | |
| N | 5,723 | 5,002 | | 5,059 | 4,070 | |
| Adj $R^2$ | 42.2% | 62.0% | | 70.5% | 66.8% | |

TABLE A8 (Continued)

**Relation between State Quarterly Liquidity and Economic Activity by Firm Localness**

**Controlling for State Portfolio Firm Size and Stock Returns**

*Panel B: Firm Localness based on S&P500 Affiliation*

| | Non-S&P500 | S&P500 | P-value Difference | Non-S&P500 | S&P500 | P-value Difference |
|---|---|---|---|---|---|---|
| | State Amihud Illiquidity | | | State Relative Spread | | |
| State Econ Act | -0.328 | -0.276 | [0.09] | -0.247 | -0.208 | [0.12] |
| | (-2.14) | (-1.99) | | (-3.00) | (-1.88) | |
| US Econ Act | -0.124 | -0.004 | [0.06] | -0.321 | -0.511 | [0.00] |
| | (-2.76) | (-0.07) | | (-8.36) | (-7.15) | |
| Term Spread | 0.264 | -0.124 | [0.00] | -0.079 | -0.282 | [0.00] |
| | (9.69) | (-2.69) | | (-5.14) | (-7.98) | |
| Default Spread | -0.152 | 0.013 | [0.00] | -0.168 | -0.046 | [0.00] |
| | (-5.94) | (0.31) | | (-8.33) | (-1.22) | |
| State Market Cap | -1.033 | -1.933 | [0.00] | -1.203 | -1.444 | [0.00] |
| | (-18.01) | (-15.74) | | (-18.72) | (-11.46) | |
| State Return Index$_{t-1}$ | -1.306 | 0.447 | [0.00] | -0.192 | 0.085 | [0.14] |
| | (-10.15) | (4.00) | | (-3.80) | (0.82) | |
| State Return Index$_{t}$ | -1.616 | -1.271 | [0.01] | -1.003 | -1.096 | [0.76] |
| | (-17.47) | (-11.99) | | (-13.33) | (-9.71) | |
| State Return Index$_{t+1}$ | -0.421 | 0.202 | [0.00] | -0.169 | -0.212 | [0.35] |
| | (-3.99) | (1.75) | | (-2.65) | (-1.95) | |
| State FE | Yes | Yes | | Yes | Yes | |
| N | 5,736 | 4,444 | | 5,083 | 3,096 | |
| Adj $R^2$ | 46.8% | 67.0% | | 74.3% | 68.0% | |

TABLE A9

**Relation between State Quarterly Liquidity and Economic ActivityControlling for Exogenous Variation in Liquidity, State Portfolio Firm Size and Stock Returns**

The table reports predictive panel linear regression estimates similar to Table 6 in the main text when the model is expanded to include additional control variables: lagged liquidity and lagged mean market capitalization of the state portfolio, as well as its lagged, contemporaneous, and one-quarter-ahead value-weighted stock return.

| | State Amihud Illiquidity | | | State Relative Spread | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Rural Dummy | 0.363 | 0.361 | 0.283 | 0.139 | 0.138 | 0.270 |
| | (16.49) | (16.27) | (5.84) | (11.47) | (11.44) | (11.01) |
| PreDecimal Dummy | | | 0.165 | | | 0.910 |
| | | | (1.17) | | | (9.60) |
| Rural×PreDecimal | | | 0.194 | | | 0.176 |
| | | | (2.16) | | | (6.20) |
| State Econ Act | -0.122 | -0.117 | -0.153 | -0.132 | -0.127 | -0.099 |
| | (-6.09) | (-5.76) | (-4.67) | (-11.78) | (-11.16) | (-6.03) |
| State Econ×Rural | | -0.227 | -0.192 | | -0.129 | -0.186 |
| | | (-2.61) | (-2.01) | | (-3.26) | (-4.37) |
| State Econ×PreDecimal | | | 0.052 | | | 0.025 |
| | | | (1.25) | | | (1.11) |
| State Econ×Rural×PreDecimal | | | -0.164 | | | -0.182 |
| | | | (-1.62) | | | (-3.51) |
| US Econ Act | 0.009 | 0.010 | 0.015 | -0.110 | -0.109 | -0.144 |
| | (0.15) | (0.16) | (0.26) | (-3.50) | (-3.48) | (-4.66) |
| Term Spread | 0.057 | 0.056 | 0.049 | -0.128 | -0.129 | -0.032 |
| | (1.71) | (1.68) | (1.42) | (-5.33) | (-5.35) | (-1.35) |
| Default Spread | 0.034 | 0.034 | 0.034 | 0.002 | 0.002 | 0.016 |
| | (1.22) | (1.20) | (1.21) | (0.12) | (0.11) | (0.82) |
| State Market Cap | -1.389 | -1.387 | -1.386 | -0.357 | -0.355 | -0.356 |
| | (-71.96) | (-70.72) | (-70.58) | (-32.96) | (-32.71) | (-33.33) |
| State Return Index$_{t-1}$ | -0.590 | -0.591 | -0.593 | -0.387 | -0.388 | -0.325 |
| | (-5.12) | (-5.13) | (-5.14) | (-5.67) | (-5.67) | (-4.83) |
| State Return Index$_{t}$ | -1.178 | -1.177 | -1.178 | -0.798 | -0.797 | -0.758 |
| | (-10.34) | (-10.33) | (-10.35) | (-11.39) | (-11.36) | (-11.06) |
| State Return Index$_{t+1}$ | 0.225 | 0.225 | 0.230 | 0.036 | 0.036 | -0.022 |
| | (1.98) | (1.98) | (2.02) | (0.51) | (0.51) | (-0.32) |
| State FE | Yes | Yes | Yes | Yes | Yes | Yes |
| N | 5,747 | 5,747 | 5,747 | 5,090 | 5,090 | 5,090 |
| Adj $R^2$ | 71.7% | 71.7% | 71.7% | 87.3% | 87.3% | 87.7% |

TABLE A10

**Relation between State Quarterly Liquidity and Economic Activity, Conditional on Local Capital Market Conditions and Controlling for State Portfolio Firm Size, Stock Returns, and Lagged Liquidity**

The table reports predictive panel linear regression estimates similar to Table 8 in the main text when the model is expanded to include additional control variables: lagged liquidity and lagged mean market capitalization of the state portfolio, as well as its lagged, contemporaneous, and one-quarter-ahead value-weighted stock return.

| | *Panel Estimates* | | | |
|---|---|---|---|---|
| | *State Amihud Illiquidity* | | *State Relative Spread* | |
| | (1) | (2) | (3) | (4) |
| State Econ Act | -0.100 | -0.138 | 0.090 | 0.099 |
| | (-0.98) | (-1.99) | (0.51) | (1.00) |
| State Fund Constraint (SF) | 0.009 | | 0.117 | |
| | (0.20) | | (2.73) | |
| State Opacity (SO) | 0.414 | 0.256 | 1.420 | 0.988 |
| | (4.99) | (3.37) | (11.65) | (10.97) |
| State Local IO (SL) | 0.095 | 0.075 | 0.098 | 0.165 |
| | (1.10) | (0.92) | (0.90) | (2.34) |
| State Rel Local Trade (SR) | -0.051 | -0.049 | 0.016 | 0.027 |
| | (-1.79) | (-1.55) | (0.53) | (0.98) |
| State Econ Act×SF | -0.103 | | -0.124 | |
| | (-2.64) | | (-1.87) | |
| State Econ Act×SO | -0.073 | -0.165 | -0.167 | -0.062 |
| | (-1.00) | (-1.85) | (-1.12) | (-0.64) |
| State Econ Act×SL | -0.091 | -0.152 | -0.201 | -0.346 |
| | (-1.98) | (-2.14) | (-2.02) | (-2.52) |
| State Econ Act×SR | -0.183 | -0.154 | -0.120 | -0.290 |
| | (-2.01) | (-2.57) | (-1.99) | (-3.81) |
| State Market Cap | -0.699 | -0.823 | -0.547 | -0.718 |
| | (-10.47) | (-15.28) | (-5.44) | (-14.49) |
| State Return Index$_{t-1}$ | -1.448 | -1.148 | -0.072 | -0.164 |
| | (-8.57) | (-10.00) | (-0.46) | (-2.49) |
| State Return Index$_{t}$ | 0.261 | 3.095 | 24.593 | 1.603 |
| | (0.02) | (1.45) | (1.25) | (1.39) |
| State Return Index$_{t+1}$ | -0.081 | -2.978 | -24.564 | -1.571 |
| | (-0.01) | (-1.40) | (-1.25) | (-1.38) |
| N [Avg N] | 949 | 4,502 | 949 | 4,472 |
| Adj $R^2$ [Avg $R^2$] | 63.4% | 56.2% | 75.2% | 70.4% |
| US Econ Act | Yes | Yes | Yes | Yes |
| US Econ Act×Dummies | Yes | Yes | Yes | Yes |
| Term & Default Spreads | Yes | Yes | Yes | Yes |
| State FE | Yes | Yes | Yes | Yes |