## Appendix

Unless otherwise noted, data are from the Compustat's Fundamentals Annual data on wrds. Names in parentheses are wrds variable names.

| Variable Name | Definition |
|---|---|
| Age | Number of years since CRSP listing (Source: CRSP) |
| **Valuation** | |
| Market Cap/GDP | Market Cap divided by GDP (series GDPA from the U.S. Bureau of Economic Analysis) |
| Tobin's $q$ | Book value of assets (at) minus book value of common equity (ceq) plus the market value of common equity (csho*prcc_f) |
| Market cap (000s) | Price times shares outstanding (prc*shrout) from CRSP, in 2015 dollars |
| Small firms | Percent of listed firms with market capitalization < $100M |
| Revenue Herfindahl | For each 3-digit NAICS in each year, the square of the revenues (revt) of each firm divided by the revenues of all firms in the same NAIC industry, summed over all firms in the same industry |
| **Investment** | |
| Capital Expenditures/Assets | Capital expenditures (capx) / lagged assets |
| R&D/Assets | R&D (xrd) / lagged assets. If R&D is missing, it is set equal to 0. |
| Fixed Assets/Assets | Fixed assets (ppent) divided by assets |
| Inventory/Assets | Inventory (invt) divided by assets |
| Cash/Assets | Cash and marketable securities (che) divided by assets |
| **Profitability** | |
| Operating cash flow/assets | Operating income before depreciation (oibdp) minus interest (xint) minus taxes (txt), divided by lagged assets |
| Loss firms | Percent of firms with net income (ni) less than zero |
| R&D-adjusted operating cash flow/assets | CF/assets plus RD/assets |
| Return on assets (ROA) | Earnings before extraordinary items divided by assets (ib/at) |
| **Financing** | |
| Book leverage | Long term debt (dltt) plus debt in current liabilities (dlc), divided by assets (at) |
| Market leverage | Long term debt (dltt) plus debt in current liabilities (dlc), divided by total assets (at) minus book equity (ceq) plus the market value of common equity (csho*prcc_f) |
| Net Leverage | Long-term debt (dltt) plus debt in current liabilities (dlc) minus cash (che), divided by assets (at) |
| Negative net leverage firms | Percent of firms with negative net leverage |
| Interest/Assets | Interest expense (xint) divided by lagged assets |
| No debt firms | Percent of firms with no long term debt (dltt) or debt in current liabilities (dlc) |
| Net equity issuance | Sales of equity (sstk) minus purchases of equity (prstkc), divided by lagged assets |
| **Ownership** | |
| Institutional ownership | Percent of shares outstanding held by institutions (Source: Thomson Financial 13f data) |
| Blockholder | Percent of firms with an institutional owner who holds 10 percent or more of outstanding shares (Source: Thomson Financial 13f data) |

**Payout Policy**

| | |
|---|---|
| Dividend paying firms | Percent of firms that pay dividends (dvc > 0) |
| Dividends/Assets | Annual cash dividends on ordinary stock (dvc) , divided by lagged assets |
| Repurchases/Assets | Purchase of stock (prstkc) minus any decrease in preferred stock (pstk), divided by lagged assets |
| Total payout/Assets | Dvc + prstkc, divided by lagged assets |
| Total payout/ Net income | dvc + prstkc divided by net income (ni) |