Over-investment of free cash flow

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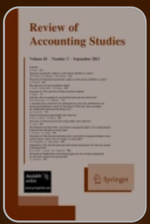

Review of Accounting Studies

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1. Prior work in finance and economics examining the relation between cash flow and investment expenditure has tended to use either balance sheet measures of the stock of cash and cash equivalents (e.g., Harford, 1999) or earnings based measures as a proxy for cash flow (e.g., Lang, Stulz, & Walkling, 1991; Opler & Titman, 1993). It is well known that earnings and cash flows are not equivalent measures (e.g., Sloan, 1996). This paper seeks to measure free cash flow directly using information from the statement of cash flows as opposed to noisy combinations from the income statement and balance sheet.

2. Depreciation and amortization is likely to be a reasonable estimate for maintenance investment (of the capital expenditure variety) for firms whose depreciation schedule closely maps with the use of the asset. However, this is not likely to be the case for all firms. Likewise, depreciation and amortization is not likely to be a good approximation of maintenance investment for R&D.

abnormal earnings. This is largely due to the lower persistence of the transitory items that are included in measures of comprehensive or bottom line income (e.g., Dechow et al., 1999).

5. Specifically, the framework is flexible enough to allow inter-temporal and cross-sectional variation of these last two parameters. However, for my purposes I assume a constant discount rate of 12 percent and the persistence parameter of 0.62 as reported in Dechow et al. (1999). I have re-performed all analyses using (i) industry specific earnings persistence parameters, and (ii) firm specific cost of capital estimates from the CAPM model. The key inference that over-investment is concentrated in firms with positive free cash flow is unaffected by these alternative estimation approaches.

the relation based on the strength of governance structures (see Section 4) all speaks to an economic result and not merely a spurious correlation.

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