



## Discussion of “Accruals, Cash Flows and Equity Values”

RICHARD G. SLOAN

*School of Business Administration, University of Michigan, Ann Arbor, MI 48109-1234, USA*

Accruals are at the very heart of accounting and are the subject of constant debate among investment professionals. Some academics and practitioners advocate ‘backing out’ accruals in evaluating corporate performance, encouraging investors to focus on cash flows rather than earnings. Yet most investors still clearly embrace the earnings number with its accruals intact, as evidenced by Wall Street’s continued fixation on quarterly EPS results. The paper by Beaver, Barth, Hand and Landsman (1999, BBHL hereafter) therefore clearly focuses on an important and contentious topic. The major conclusion reached by BBHL is that investors should condition on both the cash flow and accrual components of earnings when forecasting fundamentals and determining firm value. Using a valuation framework developed in Ohlson (1999), the authors also show that stock prices act as if investors at least partially incorporate information in the accrual and cash flows components of earnings.

My main concern with the paper of BBHL is that its incremental contribution does not become clear. Relative to previous research, BBHL’s use of the Ohlson valuation framework enables them to more explicitly articulate the links between current cash flows and accruals, future fundamentals and firm value. However, at the end of the day, our understanding of the properties of cash flows and accruals and the extent to which these properties are reflected in stock prices is not enhanced much beyond previous research. I expand on my concerns below, and finish with a call for more research in this area, along with some general suggestions concerning the focus of such research.

### 1. Forecasting Properties of Cash Flows and Accruals

Previous research has evaluated the forecasting properties of cash flows and accruals with respect to future earnings (e.g., Sloan, 1996). Working within Ohlson’s valuation framework, BBHL examines the forecasting properties of cash flows and accruals with respect to future abnormal earnings. Since future realizations of both earnings and abnormal earnings are undoubtedly ‘value relevant,’ both of the above approaches offer useful insights. However, a clear advantage of BBHL’s use of abnormal earnings is that Ohlson’s model allows them to explicate and test the link between future abnormal earnings and firm value.

Perhaps the most disappointing feature of BBHL is that it makes no attempt to formulate and test hypotheses about the relative information content of cash flows and accruals. Instead, the authors argue that the information content of these variables is ‘difficult to

predict,' and so simply test the null hypothesis that these variables have no information content. In my (possibly biased) opinion, some of the most exciting research in this area takes on the admittedly difficult task of predicting the relative information content of cash flows and accruals. For example, Dechow (1994) hypothesizes that if accruals correctly employ accountants' matching principle, then the cash flow and accrual components of earnings should have similar forecasting properties, such that no information should be lost in aggregating these two components of earnings. Sloan (1996) challenges this hypothesis, suggesting that accruals may be less informative than cash flows because they are less reliable and thus more susceptible to estimation error and managerial manipulation. In support of this hypothesis, Sloan shows that accruals are, on average, less informative than cash flows in forecasting future earnings. Recent papers by Dechow, Kothari and Watts (1998), Dechow, Sabino and Sloan (1998), Fairfield and Yohn (1999) and Xie (1998) offer further insights into the forecasting properties of accruals versus cash flows.

## **2. Valuation of Accruals and Cash Flows**

The most innovative feature of BBHL is the use of Ohlson's (1999) valuation framework, which is basically an extension of the valuation model developed in Ohlson (1995). The extension allows current abnormal earnings to be separated into two components that have different forecasting properties with respect to future abnormal earnings. Ohlson develops this extension of his original model for the purpose of developing a formal definition of transitory earnings. Yet the extension is readily generalizable to the case in which abnormal earnings consists of two non-transitory components with different forecasting properties. The advantage of using Ohlson's framework is that it provides an explicit link between the forecasting properties of cash flows and accruals and their implications for firm value.

While Ohlson's framework allows BBHL to construct more structured valuation tests, its use by BBHL is problematic for two reasons. First, the framework is probably best suited to the purpose for which Ohlson designed it—incorporating transitory items. In contrast, cash flows and accruals are both clearly non-transitory. The second problem is that the model's information dynamics are clearly an oversimplification of reality, as are BBHL's assumptions about the cost of capital. As a result, the pricing tests conducted by BBHL are joint tests of the model specification and market efficiency, making it difficult to reach conclusions about whether the market correctly prices accruals. I expand on these concerns below.

First, with respect to transitory items, much attention has been given to the low explanatory power of earnings with respect to prices. Some portion of this low explanatory power is undoubtedly attributable to the many transitory items that are incorporated in earnings. Ohlson provides a parsimonious framework for identifying and incorporating transitory items into earnings-based valuation models. My concern with BBHL's use of Ohlson's framework is that the authors' conclusion—that it is important to condition on the cash flow and accrual components of earnings in forecasting abnormal earnings and value—is probably something of an overstatement. It is clear from Table 2 of BBHL that the differences in the time-series properties of the cash flow and accrual components of earnings are not always large and are quite unstable across industries. I suspect that there are

other components of earnings that are more reliably transitory and would therefore be relatively more important as conditioning variables. Obvious candidates include special items and non-operating income. Given the large number of possible decompositions of earnings involving transitory items, I'm not convinced that BBHL's cash flow and accrual decomposition is a particularly important one from a forecasting perspective.

This brings me to my second concern with the valuation tests. While the forecasting properties of accruals and cash flows may be relatively similar, it may still be of interest to know whether the market correctly anticipates and prices any subtle but systematic differences. This pricing issue takes on particular significance when one considers that managers have some discretion over accruals. Unfortunately, the joint nature of BBHL's tests do not allow for strong inferences about market efficiency. The results in Table 5 clearly reject the hypothesis that the valuation coefficients are equal to their predicted values. However, we do not know the extent to which the lack of equality is due to mis-specifications in the valuation model versus market inefficiency. On the one hand, the model's information dynamics are restrictive, and BBHL must make restrictive assumptions about the cost of capital in order to implement the model. On the other hand, prior research by Sloan (1996) suggests that investors do not efficiently price information in the cash flows and accrual component of earnings. To the extent that BBHL are interested in testing model specification, it would be more effective to employ a research design that benchmarks the BBHL specification against alternative specifications. To the extent that the BBHL are interested in testing market efficiency, it would be more effective to employ a research design that uses information in cash flows and accruals to predict short window abnormal returns.

### 3. Future Research

BBHL is one of many papers to have investigated the valuation of the accrual and cash flow components of earnings. The distinguishing feature of BBHL is that its pricing tests incorporate a carefully specified valuation model. However, there are still many opportunities for future research in this important area. I finish by identifying what I see as the most promising opportunities. There is much work to be done on identifying the determinants of the forecasting properties of accruals versus cash flows. For example:

- To what extent does earnings management impact the forecasting properties of accruals versus cash flows?
- To what extent does estimation error in accruals impact the forecasting properties of accruals versus cash flows?
- To what extent does the fact that accruals often relate to future cash flows, in conjunction with the fact that many of these accruals are not adjusted for the time value of money, impact the forecasting properties of accruals versus cash flows?
- To what extent does the fact that accruals are positively correlated with firm growth impact the forecasting properties of accruals versus cash flows?

Once we understand more about the determinants of the forecasting properties of cash flows and accruals, it will be possible to conduct more powerful tests of the extent to which these properties are reflected in stock prices. Of particular interest is the question of whether managers can use their discretion over accruals to manipulate their firms' stock prices.

### Acknowledgments

I am grateful for the comments of Patricia Dechow.

### References

- Barth, M. E., W. H. Beaver, J. R. M. Hand, and W. R. Landsman. (1999). "Accruals, Cash Flows and Equity Values." *Review of Accounting Studies* (this issue).
- Dechow, P. M. (1994). "Accounting Earnings and Cash Flows as Measures of Firm Performance: The Role of Accounting Accruals." *Journal of Accounting and Economics* 18, 3–42.
- Dechow, P. M., S. P. Kothari, and R. L. Watts. (1998). "The Relation Between Earnings and Cash Flows." *Journal of Accounting and Economics* 25, 133–168.
- Dechow, P. N., J. Sabino, and R. G. Sloan. (1998). "Implications of Nondiscretionary Accruals for Earnings Management and Market-Based Research." Working paper, University of Michigan.
- Fairfield, P. M., and T. L. Yohn. (1999). "Are Cash Earnings Better Than Accrued Earnings?" Working paper, Georgetown University.
- Ohlson, J. A. (1999). "On Transitory Earnings." *Review of Accounting Studies* (this issue).
- Sloan, R. G. (1996). "Do Stock Prices Fully Reflect Information in Accruals and Cash Flows about Future Earnings." *The Accounting Review* 71, 289–315.
- Xie, H. (1998). "Are Discretionary Accruals Mispriced: A Re-Examination." Working paper, University of Arizona.