EARNINGS MANAGEMENT COMPARISON: IFRS VS. CHINA GAAP

Ying Wang, College of Business, Montana State University-Billings, Billings, MT 59101, 406-657-2273
ywang@msubillings.edu
Michael Campbell, College of Business, Montana State University-Billings, Billings, MT 59101, 406-657-1651,
mcampbell@msubillings.edu

ABSTRACT

This paper uses china publicly listed companies data from 1998-2009 to compare earnings management indicators before and after IFRS. Our results tend to support the contention that IFRS discourages earnings smoothing compared with China GAAP but encourages earnings aggressiveness. However, the evidence is rather weak. While we did not find strong evidence that implementation of IFRS reduced earnings management in Chinese companies, neither did we find that it increased earnings management.

INTRODUCTION

According to the IASB, over 100 countries have adopted the international accounting standards officially known as International Financial Reporting Standards or IFRS. The United States is scheduled to decide sometime in 2011 about whether to incorporate IFRS into the financial reporting system for U.S. issuers. With the possibility of global adoption of IFRS imminent, this seems an opportune time to investigate whether IFRS actually improves the quality of accounting information and provides benefits to investors. Various researchers have approached this topic from several different angles, e.g., IFRS's impact on earnings management; the relationship between IFRS and information asymmetry [8]; how IFRS affects the cost of equity capital [2] [7]; whether IFRS improves market liquidity [3]; and how IFRS affects Tobin's q, which measures effects beyond the cost of capital and market liquidity [3].

This paper focuses on the potential influence of IFRS on earnings management practices using Chinese domestically listed companies. China mandated IFRS conversion for publicly traded companies starting 1/1/2007. China's approach is a principles-based approach to translate the new rules into its own code, the Chinese Accounting Standards System. The revisions bring Chinese standards closer to the IFRS benchmark of internationally recognized quality, but the new standards will not be word-for-word translations of IFRS, though they will be founded on similar principles. A few differences are highlighted below:

- The application of fair value will be tailored for a country where the government retains significant influence and free markets have not fully developed.
- Related party disclosure requirements will be modified to reflect the context of state-ownership. State enterprises will be exempt from the "related-party" disclosure provisions because of the dominance of government enterprises.
- There will be no ability to reverse impairment charges.

China's approach of moving substantially to IFRS, but maintaining some differences, is consistent with that of some other countries. Of course, this practice has the potential to reduce the comparability of financial statements prepared according to "IFRS", but by companies in different countries.
This paper will address whether the conversion of Chinese GAAP to Chinese IFRS improves the quality of accounting information by discouraging earnings management.

RELATED PREVIOUS RESEARCH

Clements et al. [1] analyzed cultural diversity and country size to attempt to determine why some countries have adopted IFRS and others have not. They found that cultural differences did not seem to play a role, but that larger countries have been less likely to adopt IFRS, possibly because they already have well-developed financial reporting systems and are reluctant to incur the substantial costs of changing to IFRS.

The convergence process of Chinese GAAP to IFRS is analyzed by Peng and Smith [10]. They conclude that significant steps toward convergence occurred through the issuance of four successive Chinese GAAPs: 1992, 1998, 2001 and 2006. They present a particularly interesting table which shows the level of convergence as of each date. The levels of convergence vary from 20% in 1992 to 77% in 2006, which was implemented as of 1/1/2007.

Leuz et al. [9] uses accounting data from 1990-1999 for over 8,000 firms from 31 countries and compares earnings management and investor protection internationally. They find that earnings management appears to be lower in economies with large stock markets, dispersed ownership, strong investor rights, and strong legal enforcement. Leuz et al. [9] has been cited extensively for the innovative measurement mechanism they developed to assess the level of earnings management. Our research has adopted their earnings management measurement method. The method is described in detail in the research methods section.

Leuz coauthored with Daske et al. in 2008 to investigate the economic consequences of implementing IFRS [3]. They conclude that, on average, market liquidity increases around the time of the introduction of IFRS. They also document a decrease in firms' cost of capital and an increase in equity valuations if they allow for the possibility that the effects occur prior to the official adoption date. However, these effects occur only in countries in which firms have a strong incentive to operate transparently and in which legal enforcement mechanisms are strong. Their research did not specifically address the relationship between earnings management and IFRS, which is the focus of our paper.

RESEARCH METHODS

Data Collection

We recruited students fluent in Chinese to manually collect data from sina.com.cn. Data were collected from a total of 1329 publicly listed companies, and 11,947 company years. We included all industries in our data collection. We then grouped our observations into China GAAP observations (1998-2006) and IFRS observations (2007- 2009).

Earnings Management Measures

Earnings management has been the subject of extensive accounting research. Healy and Wahlen [6] defined earnings management as the alteration of a firm's financial reports by insiders in order either to mislead some stakeholders or to influence contractual outcomes that are dependent on numbers in the financial reports. Leuz et al. [9] adopted this definition as do we.

Measuring the degree of earnings management has presented challenges, and researchers have devised various methods. In this study, we will use the methods developed by Leuz et al. [9], which were based on previous work by Dechow et al. [5], Healy and Whalen [6] and Dechow and Skinner [4].

Earnings management is generally understood to mean attempts by company insiders to protect their positions and benefits by manipulating the financial information provided to outsiders. This often takes

the form of income smoothing or income manipulation. Thus, we will first classify earnings management methods into earnings smoothing (EM1 and EM2) and earnings aggressiveness (EM3).
Insiders can "smooth", i.e., reduce the variability of reported earnings, by altering the accruals of revenues and expenses.
The operational definition of accruals is:
Accruals= (ΔCA-ΔCash)-(ΔCL-ΔSTD-ΔTP)-Dep (1)
Where:
ΔCA = change in total current asset;
ΔCash = change in cash/cash equivalents;
ΔCL = change in total current liabilities;
ΔSTD = change in short-term debt included in current liabilities;
ΔTP = change in income taxes payable;
Dep = depreciation and amortization expense.

We then calculate cash flow from operations:
Cash flow from operations = Operating earnings - Accruals (2)
EM1 captures the degree to which insiders use their discretion to alter accruals, thus to reduce the variability of operating earnings:
EM1=SD(Operating earnings)/SD(Cash flow from operations) (3)
Where: SD represents standard deviation. Cash flow from operations is defined in equation (2).
A low value of this measure is indicative of insiders using their discretion to smooth reported earnings. The higher EM1 implies firms are less prone to manage earnings. The implicit assumption is that over time there will be a similar fluctuation in operating earnings calculated on the accrual basis of accounting versus the cash flow from operations. When the fluctuation of operating earnings is small in comparison to the fluctuation of cash flow from operations, it is likely that management has used discretionary accruals to smooth reported operating earnings.

EM2 is based on the contemporaneous correlation between the change in accruals and the change in cash flow from operations. This measure is based on the idea that insiders may attempt to hide reductions in cash flow by manipulating the accruals.
EM2=Spearman(*ΔAccruals, ΔCash flow from operations)* (4)
Where: Spearman is the Spearman correlation coefficient, which is used to measure the correlation between two variables. A perfect Spearman correlation would be +1 if the variables are positively correlated or −1 if the variables are negatively correlated. A Spearman value of 0 indicates no correlation.

The insiders may use their discretion to report accounting accruals that offset economic shocks to the firm's operating cash flow that would otherwise affect reported earnings. A negative correlation implies the use of discretionary accounting accruals to offset undesirable cash flow shocks, hence, earnings management. Therefore, the higher the EM2, the less is the tendency to manage earnings.
EM3 is related to earnings aggressiveness, which represents the insiders that use their reporting discretion to misstate the firm's actual economic performance. The assumption is that accruals for firms that wish to manipulate their reported earnings will be large compared to the cash flow from operations. Thus, EM3 compares the absolute value of accruals with the absolute value of cash flow from operations using the following formula:
EM3 = | Accruals|/|Cash flow from operations| (5)
The larger EM3 are indicative of large-scale use of discretion to manipulate reported accounting earnings.

Once EM1, EM2, and EM3 are computed, we then compare the three earnings management measures as computed for China GAAP and IFRS observations.

CONCLUSION AND FUTURE RESEARCH

Different researchers have attempted to document benefits of IFRS in different ways, with varying success. Daske et al. (2008) found that adoption of IFRS is associated with increased market liquidity, but the impact varied across countries. Results for two other measures, change in cost of capital and firm value, were mixed. Li (2010) found evidence of a decrease in cost of capital after adoption of IFRS, but only in countries with strong enforcement mechanisms in place. Both studies tend to suggest that benefits of IFRS will be country specific

Our results tend to support the contention that IFRS discourages earnings smoothing compared with China GAAP but encourages earnings aggressiveness. However, the evidence is rather weak. When we take into consideration that the effects of Chinese IFRS on earnings management occur prior to the official adoption date, then the evidence does not support that IFRS discourages earnings smoothing, because EM1 and EM2 conflict with each other.

Whether implementation of IFRS has reduced earnings management is inconclusive. Follow up study is needed.

While we did not find strong evidence that implementation of IFRS reduced earnings management in Chinese companies, neither did we find that it increased earnings management. Given some of the anticipated benefits of implementing IFRS world-wide, such as greater comparability of financial reporting and the need to teach, learn, and apply only one basic set of accounting rules, the fact that IFRS did not increase the incidence of earnings management is a positive finding and supports the adoption of IFRS by additional countries.

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