

行政院國家科學委員會補助專題研究計畫成果報告

會計損益項目季別分析及其對市場反應之影響 - 台灣及美國銀行業比較研究

計畫類別： 個別型計畫 整合型計畫

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計畫主持人：劉啟群

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本成果報告包括以下應繳交之附件：

赴國外出差或研習心得報告一份

赴大陸地區出差或研習心得報告一份

出席國際學術會議心得報告及發表之論文各一份

國際合作研究計畫國外研究報告書一份

執行單位：國立台灣大學

中 華 民 國 89 年 10 月 31 日

中文題目會計損益項目季別分析及其對市場反應之影響 - 台灣及美國銀行業比較研究

英文題目 The interpretation of seasonal analysis of interim income items and its impact on the differential price response of quarterly reports: a comparative study of Taiwan and U.S. banking industry

中文摘要

關鍵詞：損益操弄、季別分析、市場反應、季報

本研究之目的係探討季別損益項目與管理者盈餘操弄動機之關聯性，並分析此關聯性如何影響市場投資者對會計資訊之反應。本研究首先建立模型分析管理者操弄盈餘動機與第4季損益操弄項目佔全年比例大小之關係，然後，利用此結果建立研究假說探討管理者操弄季別損益項目之行為及市場反應之差異。

英文摘要

The main purpose of this study is to investigate the seasonal phenomenon of interim income items and how managers' manipulated seasonal phenomenon of quarterly reports influence the investors' interpretation of accounting information. Liu(1999) shows that the income items in Taiwan banking industry exhibit seasonal differences. His results support the income-smoothing hypothesis that since managers attempt to impart a smooth trend to annual earnings number, managers usually make accounting end-of-year adjustments, including accrual items and timing of transactions. In other words, earnings in the fourth quarter are susceptible to greater management than those earnings in the other quarters because of managers' discretion available under GAAP.

計劃緣由與目的

Objectives and Background

The main purpose of this study is to investigate the seasonal phenomenon of interim income items and how managers' manipulated seasonal phenomenon of quarterly reports influence the investors' interpretation of accounting information. Liu(1999) shows that the income items in

Taiwan banking industry exhibit seasonal differences. His results support the income-smoothing hypothesis that since managers attempt to impart a smooth trend to annual earnings number, managers usually make accounting end-of-year adjustments, including accrual items and timing of transactions. In other words, earnings in the fourth quarter are susceptible to greater management than those earnings in the other quarters because of managers' discretion available under GAAP.

Prior literature has been found that the volatility of the fourth quarter's earnings exceed that of the other quarters (Liu, 1999; Givoly, 1974). This may imply that not all quarters' earnings are equally reliable. This evidence is consistent with either or both of the following hypotheses:

- (1) Natural random phenomenon: accounting fourth quarter adjustments randomly occur across different years.
- (2) Managers' earnings manipulation: managers have incentives to impart a smoother apparent trend to the annual income numbers.

Smoothing is defined as managers' intentional adjustment to reduce fluctuations in reported earnings. Smoothing involves the question of how managers choose different devices in diverse circumstances. The main smoothing devices investigated include accounting choice, single account accrual management, multi-account accrual management, and timing of transactions. Income smoothing study can be extended to answer the following related questions: (1) Do smoothing phenomenon exist? (2) How does smoothing practice affect the pattern of accounting numbers? (3) How do investors react to managers' incentives to smooth income? Many factors tend to complicate incomes smoothing studies. For example, a natural or uncontrolled co-movement between a smoothing device and earnings may exist, which make it difficult to determine whether the apparent smoothing effect of expense reduction is an inherent result of a shift in volume or an intentional adjustment to the earnings series.

We use the percentages of accrual items (i.e., incomes manipulated items) in the fourth quarter as a proxy for the degree of managers' accrual management. In other words, firms with larger percentages of accrual items in the fourth quarter imply on average the higher degree of managers' manipulation of incomes. We test the hypothesis that management of accruals reduces informativeness of earnings, thus the marginal price response to unexpected earnings decreases with the percentage of accrual items in the fourth quarter. That is, we predict that the information content of earnings in the fourth quarter for firms with smaller percentage of accrual items in the fourth quarter is likely to be greater because earnings management in these firms is likely to be less

intensive.

結果與討論

The main results of this paper are summarized as follows:

1. The first part of the paper proves in models capturing managers' incentives to smooth incomes that the fourth quarter ratios of interim income manipulation items are larger and more variable than those of the other three quarters. The results of these models are consistent with the hypothesis that managers tend to delay bad news until the announcement of the fourth quarter earnings (Mendenhall and Nichols).
2. The empirical results support the relation between the seasonal phenomenon of managers' earnings manipulation and investors' responses to quarterly reports. No study to date has provided empirical evidence on this issue, however. We contribute to the literature on the indirect relation between the degree of managers' income manipulation and the magnitude of the investors' responses to unexpected earnings in quarterly reports. On average, the percentages of income manipulation items are greater in the fourth quarter than in the other quarters of the fiscal year.
3. Managers' incentives to smooth income introduce more noises in earnings. That is, the more managers manipulate income, the more the noises are contained in earnings numbers. Kim and Verrecchia (1991) indicates that the price change at the time of announcement is proportional to both the unexpected portion of the announcement and its relative importance across the posterior beliefs of traders. The relative importance is increasing (decreasing) in the precision (the magnitude of noise) of the announcement. We use the percentage of accrual items in the fourth quarter as a proxy for the degree of managers' accrual management. We test the hypothesis that management of accruals reduces informativeness of earnings, thus the marginal price response to unexpected earnings decreases with the percentage of accrual items in the fourth quarter. We predict that the information content of earnings in the fourth quarter for firms with smaller percentage of accrual items in the fourth quarter is likely to be greater because accruals management in these firms is likely to be less intensive.
4. There are significantly differential marginal price responses to unexpected earnings for firms with either large or small percentages of income manipulation items. The earnings response coefficients for firms with larger percentages of income manipulation items in the fourth quarter are on average smaller than those earnings response coefficients for firms with smaller

percentages of income manipulation items.

計劃成果自我評估

本計劃之研究發現係一有趣之結果，但仍有部分敏感性分析需補強，盼於後續補充後可於學術期刊發表。

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赴國外出差心得報告

此次赴美國收集相關資料，並到 American Banker Association 訪問，總共至 Boston, New York and Washington 等地之圖書館、大學、書局、專業學會及銀行訪談與收集資訊，對此計畫之執行有莫大之幫助。此次赴美特別感謝 New York University Stephen Ryan 教授之安排及陪同訪問。