ADVANCES IN INTERNATIONAL ACCOUNTING

Volume 14

J. Timothy Sale

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ADVANCES IN INTERNATIONAL ACCOUNTING

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THE DEVELOPMENT OF SEGMENT REPORTING IN JAPAN: ACHIEVING INTERNATIONAL HARMONIZATION THROUGH A PROCESS OF NATIONAL CONSENSUS

Chikako Ozu and Sidney J. Gray

ABSTRACT

The objective of this paper is to explore the process by which Japanese accounting has moved towards international harmonization in respect of its segment reporting requirements. The segment reporting issue offers an interesting case because, despite the strong opposition of companies in Japan, the new legislation came into existence relatively quickly and was sequentially developed by the regulators through a consensus building process. The most important influence in this process was the Ministry of Finance (MOF) which directed the sequence of events leading to the introduction of the segment disclosure standards, with the Business Accounting Deliberation Council (BADC) serving as a channel of communication with various non-governmental parties involved. It is also noteworthy that segment reporting appears to have been seen as an essential element in the completion of the group accounting legislation in Japan – which has been the subject of growing international pressure.

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INTRODUCTION

The objective of this paper is to explore the process by which Japanese accounting has moved towards international harmonization in respect of its segment reporting requirements. Additionally, while some earlier research on Japanese segment disclosure and comparative segment disclosures exists in the Japanese language (e.g. Hirose (1996), Kosuga (1996), Kozuma (1996)), Yamaji et al. (1994), a study in English of the Japanese approach to regulation is likely to be of interest both to accounting standard setters internationally and to others interested in standard setting processes. The segment reporting issue offers an interesting case because, despite the strong opposition of companies in Japan, the new legislation came into existence relatively quickly and was sequentially developed by the regulators through a consensus building process.

In order to examine this issue, the paper reviews the legal background to the development of segment reporting in Japan, the opinions of preparers and users on the proposed legislation, the politics of regulation by the Ministry of Finance (MOF) and the evolving pattern of regulation and professional guidance. The paper concludes with some overall insights into the standard setting process in Japan with specific reference to the segment reporting issue.

LEGAL BACKGROUND TO SEGMENT REPORTING IN JAPAN

Legal Requirements and Voluntary Disclosure Practices

Segmental reporting in Japan, prior to 1986, was governed by several different regulations that often varied in scope and applicability. The main regulations in this area were present in the Commercial Code and Securities Law and are discussed below.

Prior to 1986, the Commercial Code required a company to report its principal lines of business, location of businesses and factories. If a company carried on more than two lines of business, it was required to describe the nature of the businesses and the results of the sales according to those classes. Despite these requirements, most companies disclosed only the sales in each line of business; none of them reported operating profit and loss (BADC Interim Report, 1986, p. 278).

The Securities Law permitted companies to disclose sales and cost of sales in the individual financial statements when a company conducted more than

two lines of business. Also in the consolidated financial statements it was permitted to report the revenue and expense items according to lines of business. However, this remained optional.

In the annual securities report, which is filed under the Securities Law, there were items to be reported called "actual results on production and sales" and "important facts on the situation of the group". Although these items were aimed at providing information similar to segment information, they were too limited to show the whole picture of the group.

It is also interesting to note that some companies following the regulations of the U.S. Securities and Exchange Commission (SEC) as a result of their U.S. listing, voluntarily disclosed segment information also in Japan in the notes to their consolidated financial statements in Japan.

The Process Towards the New Legislation

The regulatory framework in Japan and its treatment of the segment reporting issue is outlined in Fig. 1.

In 1986, the Business Accounting Deliberation Council (BADC), the consultative body to the government on accounting standards, published an interim report entitled "Financial information disclosure under the Securities Law", which followed the research carried out by officials in the Securities Bureau of the MOF during the period 1985–1986. This report stated that segment information relating to revenue and expense items was not required to be disclosed, even though the operations of Japanese companies had become more international and diversified. The report added that very few Japanese companies voluntarily disclosed profits data by line of business, even though it was permitted in the Securities Law.

The report also stated opinions expressed within the BADC both for and against the introduction of the reporting of segment profits data into the Japanese legislation. Those in favour pointed out the usefulness of segmental information to predict future profits and risks, and mentioned the international harmonization movement in this field. Those against were concerned with the possible impact on corporate structures across the country, the impact on competitiveness and trading in overseas countries, and the cost of producing the information. The dissenters insisted that careful consideration be given to this matter. Consequently, the BADC reached agreement that further research was necessary in order to better understand the realities.

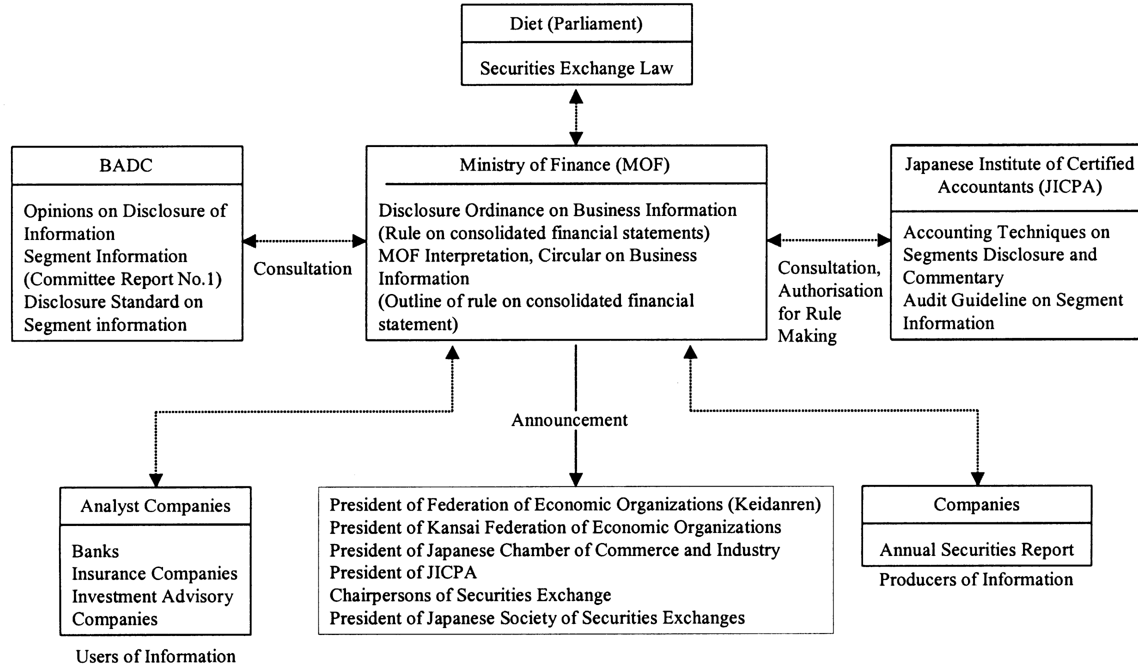

Fig. 1. Segment Reporting and the Regulatory Framework in Japan.

OPINIONS OF PREPARERS AND USERS OF SEGMENT REPORTS

A questionnaire survey was carried out by the Ministry of Finance in June 1987 covering both the preparers (683 companies out of 1,208 companies which submit consolidated financial statements) and users (229 analyst companies out of 376 companies, e.g. financial institutions, insurance companies, stock brokers, investment advisory companies and research institutions) (Fujita, 1987, pp. 48–49; Yanagi, 1988a, pp. 85–105).

The survey included two types of questions:

(1) an investigation of the actual situation, and
(2) an opinion survey using a structured questionnaire.

The questionnaires were sent to Chief Executive Officers of the organisations surveyed.

The response rate was respectively 91.1% and 95.6%, for the preparers and users groups respectively. Accordingly, the results can be regarded as authoritative enough to represent the reactions of both groups of interested parties.

Segmental Reporting Practice

The first part of the survey examined extant segment reporting practice. To the preparers, questions were asked concerning the current situation with respect to diversification, internal management and segment reporting to overseas parties. Likewise, the users were queried on their use of segment information, purpose and extent of information gathering.

The results indicated that the average number of subsidiaries consolidated across the sample companies was 9.8 companies. Only 15% of the companies listed their consolidated subsidiaries. When following the Japanese Standard Industrial Classification (JSIC), the numbers of business divisions shown on individual financial statement was 1.8 to 3.1 divisions. By contrast, for internal management purposes, companies reported 5.9 divisions. For internal control purposes, 89.9% of companies divided their business into more than two segments.

The results related to internal management showed that 90.7% of companies were aware of segment turnover on an individual accounts basis, but only 35.4% on a consolidated accounts basis. Similarly, 79.6% of companies were aware of operating profit on an individual accounts basis, but only 17.8% on a consolidated accounts basis.

The implication here is that most Japanese companies prepare segment information mainly on an individual accounts basis for internal management purposes. Therefore, the external classification basis like JSIC is not always relevant in order to reveal the diversification of the business.

As might be expected, the information needs from the user side are rather high. Interestingly, stock brokers and investment advisory companies wish to have more information than institutional investors such as banks and insurance companies which may have access to internal information more readily due to Keiretsu ties.

Users highly depend on the disclosure document under the Securities Law and on the final accounts for segmental information. Some analysts get additional information by interviewing companies in order to supplement published reports. Naturally, most of the analyst companies use the segment information on an individual accounts basis.

Opinion Survey on the Proposed Legislation

The second part of the survey elicited views on the potential legislation relating to segment information. Exactly the same questions were asked of both the preparers and users allowing for easy identification of disparities between the two parties.

Approval and Disapproval of the Proposed Legislation

As expected, the survey results indicated that a majority of the preparers group opposed additional segmental reporting requirements while the users overwhelmingly supported it. The main reasons forwarded by the preparers for their opposition to additional requirements were:

(1) the usefulness of the segment information is doubtful, because individual financial statements already give the segment information of each member of the company group. The earnings performance of both parent company and listed subsidiaries are presented in individual financial statements;
(2) the segment information reveals commercially valuable or other sensitive information. As a result, it puts the companies at a competitive disadvantage in overseas markets as well as at a disadvantage in overseas trading;
(3) producing the information results in more administrative costs;
(4) since the line of business disclosure divides turnover and gross profit of the company along product lines, it focuses on the short run performance of management and makes management more speculative. Therefore, it encourages myopic behaviour on the part of managers.

CONSENSUS POLITICS, SEGMENT DISCLOSURE PRINCIPLES AND THE MOF RULING

Reflecting the questionnaire survey and the related discussion, the segment opinion and standard were both issued by the BADC in 1988. The standard states that the reportable segment information is to be sales and operating profit and loss by each business segment (along the lines of groups of products), geographical segment by parent/subsidiary location (domestic/overseas location), plus the sales turnover of overseas operations.

In developing the segment disclosure standards, disagreements existed over reportable segments, segment identification, namely, the application of the JSIC, and the scope of geographical segments. For example, a report by Arai (1988, p. 18) argues that the "identification of group segments causes difficult problems in practice. Applying one particular classification base like JSIC is too uniform, which leads to quite different pictures of the business". The MOF expressed a similar opinion, but added that the segmentation method based on internal management is appropriate from a cost/benefit point of view (Yanagi, 1988b, p. 32).

On the question of geographical segments, companies were strongly opposed to the standard. According to Arai (1988, p. 20), the companies were very nervous about the undesirable influences that segment disclosure may bring, especially suspicion of dumping practices and the increasing of transfer pricing taxation. It was regarded as too demanding for companies to bring both business segments and geographical segments to an international level of disclosure at the same time. Another view from the user side was that "during the discussion, the company side always assumed a passive attitude on the disclosure of operational results by overseas location, or rather, they were negative and even hostile to showing the operational result by business segment to the public. Although the argument in support of this passive opinion on the profit and loss disclosure by areas/locations did not seem persuasive enough, the only consensus that could be reached with the company side was disclosure by line of business. However, despite their conservative attitude, certain changes in the way of thinking about segment reporting were perceived". (Hattori, 1988, p. 78).

Accordingly, at this stage, the BADC compromised with companies concerning geographical segments. In the end, the operating profit and loss by geographical area was not required to be reported. Later, such disclosure became compulsory with the amendment of the Disclosure Ordinance in the Securities Law in March, 1993, which was effective as from 1 April 1997 in consolidated financial statements.

Also, concerning the comparability issue, the user side seems to have been involved in the process, and agreed that ensuring comparability between companies is difficult because companies have a variety of approaches to their operations. The users also agreed that it would be important to have comparability of the information over time.

As the BADC's accounting standard was not a law, the MOF promulgated an Ordinance in 1993 concerning Corporate Disclosure and Disclosure of Segments under the Securities Law (MOF Ruling), which has undoubted primary influence on the information to be disclosed.

The differences between the two sides has been a difficult problem to resolve. The Regulation concerning Consolidated Financial Statements (in the Securities Law) concluded in article 39-3 that "the information should be reported to reflect appropriately the diversification of the business, considering the similarities of the variety and nature of products, the way of production and the sales markets".

Article 39-3 provides materiality standards, which each company has to follow:

(a) Sales and operating profit or loss by business segment are determined and presented separately, if a segment's sales exceed 10% of total sales or its operating profit exceeds 10% of total operating profit.
(b) A segment by domestic and overseas location is determined by following the above provisions, and disclosure is required of sales and operating profit or loss by location (domestic or overseas) of parent and subsidiaries.
(c) Overseas sales are to be disclosed, if they exceed 10% of consolidated sales.

From the practitioner side, the Japanese Institute of Certified Public Accountants (hereafter JICPA) provided accounting guidelines consistent with the MOF principles. Without any more new ideas being generated from the practice side, steps were taken towards the diffusion of segment reporting through the accounting guidelines elaborated by JICPA.

JICPA published, in April 1995, "Accounting Techniques on Segment Information: Disclosure and Commentary" (hereafter "Accounting Techniques") (its interim report was published in January 1990) and, in November 1993, "Audit Guideline on Segment Information" which are both considered to play an important role in establishing the rules and diffuse segment accounting into practice. Usually, the BADC (and MOF) is the only rule-making body in Japan. However, on this occasion, JICPA was authorized as a rule-making body too, and as a response to the consultation by MOF, JICPA provided the practicable rules. In fact, "Accounting Techniques" became the first committee report of the Institute. Both "Accounting techniques" and the "Auditing guideline" are

applied in practice, when companies file a registration statement or submit a periodic annual securities report to MOF. Before public inspection, the MOF checks whether these reports are drawn up in accordance with the rules and method of preparation explained in the accounting techniques. Table 1 shows the relationships making up the regulatory framework in Japan in respect of the segment reporting legislation.

Before the BADC's interim report and publication of the segment reporting standard, segment reporting was not widely practised, except in public utilities. The Appendix and Table 1 show the process of introducing segment reporting under the Securities Law in Japan. The legal framework was slowly but steadily expanded and the level of the reporting requirements increased at each stage.

From 1 April 1997, operating profit and loss, and assets data for both business and geographical segments (together with overseas sales) must be disclosed. This means that Japanese segment reporting should be by no means inferior to other IASC member countries.

By tracing carefully the published reports written by the MOF it seems also that IAS no. 14 and SFAS no. 14 in the USA were both studied in order to

Table 1. Segment Reporting under the Securities Law.

Disclosure Items	Effective as from April 1			
	1993	1994	1995	1997
Business Segments				
Turnover	X	X	X	X
Operating profit	X	X	X	X
Assets			X	X
Depreciation			X	X
Capital Expenditure			X	X
Geographical Segments				
Turnover	X	X	X	X
Operating profit		X	X	X
Assets			X	X
Japan	X	X	X	X
Overseas	X	X	X	X
Country/Region				X

X = required to be disclosed.
Note: As from 1 April 1993, segment information has had to be reported in the notes to the consolidated accounts and, therefore, has to be audited.

appraise the international situation and the importance of identifiable assets and the cost allocation method (for example, see Hiramatsu, 1993, pp. 28–29).

The MOF would appear to have been pursuing a clear and sequenced program in order to attain international accounting harmonization. To further their purpose, the MOF enabled the BADC to create segment disclosure standards expeditiously, then, afterwards, issued notices including core items such as segment assets and the materiality standard, in the Ministerial Ordinance.

CONCLUDING REMARKS

Segment reporting has not had a strong tradition in Japan. However, the current legislation has brought about the introduction of international standards into Japanese accounting. On the whole, there is no doubt a convergence towards a more or less Anglo-American framework. So, in the light of this, it is interesting to understand how the regulatory procedures have been designed to ensure consensus decision making between regulator and regulated.

The step-by-step strategy taken by the MOF may appear to be a slow response from an outsider's view, when compared to the speed of development in many other IASC member countries. However, the diffusion process is discreet rather than sluggish, subject to consultation between interested parties and influenced by the underlying economic strength of companies. As the regulatory authority has learned more about the desires of companies, it has shown itself more willing to take note of them. According to this logic, we could say that mediation is apparently a function of the BADC.

Another factor to be considered is international political pressure. There is an important element to consider here regarding the legislation related to group accounts. The main example is the Japan-U.S. Structural Impediments Initiative in 1989, whose principal aim was to correct the international trade imbalance. Amongst the issues that the U.S. side asked Japan to improve were the Keiretsu relationships. This is because the Keiretsu relationships made it difficult for overseas companies to join the Japanese market, since there exist long and stable transaction customs inside the groups, consistent with the vertical or horizontal relationships of each member company.

In the final report of the Initiative published in 1990, the following four issues were highlighted:

(1) disclosure of related party transactions;
(2) the incorporation of group accounts into the annual securities accounts;
(3) disclosure of segment information; and
(4) the disclosure of turnover based on principal clients.

The segmental issue had also been dealt with in the MOF-SEC regular conference (Round Table, 1987, pp. 40–41). Taking notice of this bargaining, the MOF may have chosen this way to co-operate with international political harmonization, even though they recognise that the nature of groups and the importance of consolidated financial statements in Japan are different compared to the U.S.

Yamaji et al. (1994, pp. 166–167) suggest the possibility that international pressure was used to persuade the producers of the segment information, i.e. the companies, to co-operate. It is possible, however, to make a different inference, following Takatera and Daigo (1986, p. 197), who say that 'the truth of the matter is that Japanese accounting policy makers, who were and still are honest spokesmen for powerful large corporations, accepted international pressures only when they resulted in insignificant adverse effects on corporations or when they might even produce favourable effects'.

Finally, it seems fair to say that the growing internationalisation of capital markets has provided a favourable opportunity in Japan to reform a somewhat antiquated corporate regulatory system in a way that better serves investor needs.

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APPENDIX

A Chronological Outline of the Development of Segment Reporting in Japan

1986 (October): Segment reporting was called for as one of the items to be re-examined in the Interim Report on "Financial Information Disclosure under Securities Law" dealing with disclosure in consolidated financial statements, a proposal on the statement of cash flow conditions (net changes in cash, cash equivalents and short-term securities to cash flows), segment information and quarterly reporting.

1986 (October): "A Proposal on Business Disclosure" published by the Japanese Society of Securities Analysts.

1987 (June): Implementation of the questionnaire survey on segment information by the BADC (Ministry of Finance). The questionnaire survey was completed by both producers (683 companies) and users (229 analyst companies).

1988 (May): Publication of "Opinions on Disclosure of Segment Information" and "Disclosure Standard on Segment Information" by the BADC. In the "Opinion", it was stated that the standards is effective as from 1 April, 1990 and the information should be disclosed in the consolidated financial statements or in the notes and that it should be audited. However, until the accounting techniques are developed, the segment information can be disclosed outside of the consolidated financial statements.

1988 (September): The amendment of the "Ordinance Concerning Corporate Disclosure" by MOF and its official notice on "Segment Information Disclosure Under Securities Law" by Securities Bureau, MOF.

1989 (November): Publication of "Interim Report on Accounting Techniques on Segment Information Disclosure" by JICPA.

1993 (March): Publication of "Revised Ordinance concerning Corporate Disclosure", known as MOF 1993 Ordinance no. 23. This revised Ordinance added the article 15-2 to the "Regulation on Consolidated Financial Statements", which states that segment turnover, operating profit and loss, assets, depreciation expense and capital expenditure have to be reported in the notes.

1993 (November): Publication of "Audit Guideline on Segment Information", known as audit committee report no. 53 JICPA. The report was effective on 1 December 1993 and was applied to the auditing of consolidated financial statements as of 1 April 1993.

1995 (March): The amendment of "Regulation on Consolidated Financial Statements". The "Regulation" prescribed in article 39-3 states the materiality standard and form of disclosure.

1995 (May): Publication of "Accounting Techniques on Segment Information Disclosure and Commentary", known as Accounting Legislation Committee Report No. 1 by JICPA.

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DISCRETIONARY CAPITALIZATION OF R&D: EVIDENCE ON THE USEFULNESS IN AN AUSTRALIAN AND CANADIAN CONTEXT

Dean T. Smith, Majella Percy and Gordon D. Richardson

ABSTRACT

This study addresses the discretionary capitalization of R&D costs in Australia and Canada. We demonstrate, for both samples, that the discretionary capitalization of development costs (hereafter capitalized D) by the manager results in balance sheet and income numbers that are more highly associated with market value, relative to the corresponding "as-if" numbers generated by expensing GAAP. Moreover, we show that a dollar worth of capitalized D is worth more than a dollar worth of expensed R&D, for the same firm. This points to a corroboration role for capitalization. As a caveat, our results hold only when the samples are partitioned on the materiality of capitalized D. Our results point to a potentially useful signalling role for discretionary capitalization, in Australian and Canadian capital markets. However, while the manager's capitalized D is associated with firm value, it has at best a modest advantage over what the analyst can do, using the researcher-created capitalized R&D. Thus,

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the regulatory policy debate must consider the small incremental benefits from allowing discretionary capitalization compared to the costs associated with earnings management when discretion is allowed.

INTRODUCTION

Australian and Canadian GAAPs allow managers to capitalize development costs (hereafter capitalized D), providing certain criteria have been met. This differs from GAAP in the United States. Statement of Financial Accounting Standard (SFAS) No. 2 requires firms to expense all research and development (hereafter R&D) expenditures as incurred, except those relating to certain software costs that are covered under SFAS No. 86. There is no scope, under U.S. standards, for the capitalization of any non-software related R&D.

This study addresses the discretionary capitalization of R&D costs using samples of Australian and Canadian firms. While some of the issues explored in this paper have been addressed in the U.S. setting (Aboody & Lev, 1998), the U.K. setting (Oswald, 1999) and the Australian setting (Abrahams & Sidhu, 1998; Ahmed & Falk, 2000), this study is unique in employing a two sample setting to explore the value relevance of capitalized development costs. With a relatively small sample size for both Australia and Canada, uncertainty arises as to the power of the tests in either setting. The use of two independent samples permits stronger inferences for results that are robust across both samples.

Two initial research questions are posed. We invoke an information signalling argument to support the hypotheses that: (1) capitalized development costs are positively associated with firm value; and (2) firms that capitalize development costs will have a higher valuation coefficient per dollar of capitalized development costs relative to a dollar of expensed research and development costs. The null version of both hypotheses is implied by managerial opportunism. We observe that capitalized development costs are valued by the market and that the valuation coefficient of a dollar of capitalized D exceeds that for a dollar of expensed R&D. This study should be useful to the ongoing debate on allowing managers choice in the capitalization of intangibles. The positive association between market value and capitalized development costs tells regulators that, despite the potential for manipulation, the market values the asset placed on the balance sheet by the manager. Our study adds to a growing body of literature pointing to the value relevance of capitalized development costs when discretion exists.

We pose a third research question as to whether the manager's capitalized D has any advantage over what the analyst can do, i.e. using the researcher-

created capitalized R&D. We observe that, while the manager's capitalized D is associated with firm value, it has at best a modest advantage over what the analyst can do. Thus, the regulatory policy debate must consider the small incremental benefits from allowing discretionary capitalization compared to the costs associated with earnings management when discretion is allowed.

INSTITUTIONAL BACKGROUND

Australian, Canadian, and IASC GAAP require the capitalization and subsequent amortization of development expenditures provided that certain recovery conditions are met. The conditions vary slightly but are broadly captured by paragraph 17 of the International Accounting Standard 9 (IASC 9)[1]: the product or process is clearly defined, the technical feasibility and the existence of a market can be demonstrated, and adequate resources exist to complete the project. Any development costs not meeting such recovery criteria and all research costs must be expensed. The decision to capitalize development costs is de facto discretionary, because auditors will typically not challenge a manager who asserts that the criteria are not met.

The scope for discretionary capitalization in the above jurisdictions provides an interesting opportunity for research, in contrast to the U.S. where all non-software related R&D is required by SFAS No. 2 to be expensed.[2] SFAS No. 86 requires the capitalization of software development costs meeting stringent recovery criteria. The expensing of all non-software related R&D is justified by the FASB based on the assertions that: (1) (SFAS No. 2, para. 20) ". . . it is unlikely that the ability to predict return on an investment and the variability of that return would be enhanced by capitalization"; and (2) (SFAS No. 2, para. 22) ". . . no set of conditions that might be established for capitalization of costs could achieve comparability among enterprises". Clearly, the FASB is sceptical about the value relevance of capitalized development costs and the scope for earnings manipulation. Research evidence on the value relevance would appear to be timely, as regulators around the globe are currently examining the topic of the reporting of intangibles.

LITERATURE REVIEW

In the U.S., several studies have examined the empirical association between current R&D outlays and resulting future benefits. Lev and Sougiannis (1996) estimate the R&D capital of a large sample of public companies using Almon lag technology. They adjust the reported earnings and book values on capital-

ized R&D and find that such adjustments are significantly associated with share price and returns. This association indicates that investors place a value on the R&D assets synthetically created by the researchers. Chambers, Jennings and Thompson (1998) use a "one-size-fits-all" accounting rule under which R&D costs are capitalized and amortised over the same period by all firms. Again, they find that the R&D asset created by researchers is value-relevant. Chan, Lakonishok and Sougiannis (2000) also employ a "one-size-fits-all" approach and find that their measure of unbooked R&D capital is associated with future excess returns. Sougiannis (1994) presents evidence that R&D expenditures are indirectly (through earnings) and directly valuation relevant, though the latter evidence is mixed.

More recently, researchers have explored the valuation relevance of R&D outlays capitalized by the manager. In the U.S., Aboody and Lev (1998) establish the value-relevance of capitalized software development costs. Similarly, for a sample of Australian capitalizers, Abrahams and Sidhu (1998) and Ahmed and Falk (2000) both establish the valuation relevance of capitalized development costs. No similar research studies exist in a Canadian setting. In contrast, for a sample of U.K. capitalizers, Oswald (1999) finds no differences in the value relevance of capitalizer versus adjusted (i.e. expenser GAAP) financial data. Thus the research evidence to date on the valuation relevance of capitalized D is mixed. Our study differs from prior and concurrent Australian evidence both in the research questions posed, the methodology employed and with respect to the examination of valuation relevance in two countries.

In a simulation study involving R&D in the pharmaceutical industry, Healy, Myers and Howe (1999) examine a version of discretionary capitalization, the successful efforts method, that allows the manager more scope to impound her private information in accruals, relative to our setting. The successful efforts method allows the manager to capitalize all R&D and only the outlays associated with unsuccessful projects are written off. Healy et al. show that the successful efforts method has a clear value relevance advantage over book values and earnings employing either the immediate expensing method or a "one-size-fits-all" full cost method. They also show that the advantage declines with earnings management. Their full cost method is similar to our researcher-created capitalized R&D. The data available to empirical researchers does not permit the successful efforts method for R&D to be explored. However, the results of Healy et al. imply that the modest advantage we document for the manager's capitalized D over researcher-created capitalized R&D would be enhanced if the manager were permitted to use a successful efforts version of discretionary capitalization.

HYPOTHESIS DEVELOPMENT

Holthausen (1990) and Holthausen and Leftwich (1983) note that one rationale for accounting choices is information signalling, particularly when managers have a comparative advantage in providing information about the firm's future cash flows. Healy and Palepu (1993) further develop the arguments that disclosure strategies, including accounting method choice, provide a potentially important means for corporate managers to impart their superior information to investors. We argue that the selection of an R&D capitalization accounting policy is one mechanism used by managers to communicate their superior information about future firm prospects.

A common theme in voluntary disclosure models in economics and finance is that, for a firm to voluntarily disclose its inside information (capitalize development costs), any benefits of capitalization must exceed associated costs, and any signalling action undertaken by the entrepreneur must be costly so as to preclude false signalling. The capitalization of R&D can be costly for several reasons. First, audit costs reduce the possibility of false signalling. Both Australian and Canadian GAAP invoke what in effect is a beyond any reasonable doubt test for capitalization. If the audit effort required to satisfy an auditor regarding recovery is inversely related to R&D project quality, it is costly for firms with low quality projects to mimic firms with high quality projects, thereby enhancing the credibility of capitalized D. Second, the costs to the firm associated with legal suits and regulatory sanction are likely to vary inversely with project quality. Finally, information about future benefits conveyed to competitors through capitalization gives rise to proprietary costs, and the benefits to signalling must exceed such costs.

While explaining the choice to capitalize versus expense is beyond the scope of this study, previous research findings (Aboody & Lev, 1998; Oswald, 1999) suggest that the costs of capitalization exceed the benefits, for larger firms (i.e. Microsoft). For large firms, capitalization may reduce reported earnings, such firms are less reliant on the market for external financing, and a large analyst following reduces information asymmetry. We assume that, for our sample of capitalizers, the expected benefits do exceed associated costs given the discretionary nature of the decision to capitalize. This leads to the following hypothesis (in alternate form):

H1: Capitalized development costs are positively associated with firm value.

For a capitalizer, two possibilities exist for R&D outlays that are immediately expensed. The net present value of recoveries does not exceed the capitalized cost or, alternatively, it may be too hard to quantify the expected recoveries

given the early stage of the project. In either case, the recovery prospects of expensed R&D outlays would, for a given capitalizer, be perceived by the market to be inferior relative to the recovery prospects of capitalized development costs. Such a prediction uses the firm as its own control and leads to our corroboration hypothesis, stated in alternate form as follows:

H2: Firms that capitalize development costs will have a higher valuation coefficient per $1 of capitalized development costs relative to $1 of expensed research and development costs.

Given the presence of costly signalling, it is reasonable to assume that the manager will only capitalize D if doing so adds information to the market beyond what the analyst or researcher can obtain using simple capitalization algorithms. This motivates our third hypothesis (again, in alternate form):

H3: Reported book values and earnings using discretionary capitalization are more highly associated with firm value than are book values and earnings obtained using simple capitalization algorithms.

The null of all three hypotheses is implied by managerial opportunism. Earnings management to satisfy bonus or debt covenant pressures could lead to what is referred to above as false signalling. If the costs of false signalling are sufficiently low, then we would not expect to observe the valuation relevance of capitalized development costs predicted in our three hypotheses. Thus, the presence of signalling costs is a maintained assumption in our study.

EMPIRICAL MODEL

Our empirical valuation model is based on the Ohlson (1995) and Feltham and Ohlson (1995) framework, which provide theoretical support for a specification relating accounting book value and earnings to market value. The basic intuition of the Feltham-Ohlson framework is that a correction to the valuation model is required for accounting conservatism. Since expensing R&D is a classic example of conservatism, the coefficient on capitalized D is predicted by their model to be positive. Indeed, the theoretical coefficient on a measure of R&D capital that is marked-to-market should be unity.[3]

Our initial tests of *H1* are based on comparing the relative explanatory power, for market value, of capitalization vs. expensing GAAP. Such tests are performed on Australian and Canadian capitalizers, and require estimation of the following two equations (equation (1) uses reported numbers employing capitalization GAAP):

$$MV_{it} = a_0 + a_1\ CLBV_{it} + a_2\ ABNI_{it} + a_3\ NUMSHR_{it} + e_{it} \quad (1)$$

$$MV_{it} = b_0 + b_1\ ADJCLBV_{it} + b_2\ ADJABNI_{it} + b_3\ NUMSHR_{it} + u_{it} \quad (2)$$

where:

MV_{it} = firm market value of common equity three months after fiscal year-end

$CLBV_{it}$ = reported book value of equity less preferred stock

$ADJCLBV_{it}$ = "as-if" expensing book value of common equity = book value of common equity less deferred development costs

$ABNI_{it}$ = abnormal net income = net income – [10% × opening book value of common equity]

$ADJABNI_{it}$ = "as-if" expensing abnormal income = (net income + current period amortization of deferred development costs – current period outlays on development costs that were capitalized) – (10% × opening ADJCLBV)[4]

$NUMSHR_{it}$ = the number of common shares outstanding (scale proxy)[5]

Our second tests of *H1* are based on testing for the incremental explanatory power of capitalized development costs and the corresponding adjustment in the income statement. The empirical model, which aggregates to Eq. (1), is as follows:

$$MV_{it} = c_0 + c_1\ ADJCLBV_{it} + c_2\ D_{it} + c_3\ ADJABNI_{it} + c_4\ ADJ_{it} + c_5\ NUMSHR_{it} + \mu_{it} \quad (3)$$

where:

D_{it} = closing deferred development costs (the balance sheet asset)

ADJ_{it} = the income statement adjustment from expensing to capitalization GAAP = current period expenditures on development costs that were capitalized – current period amortization of deferred development costs – (10% × opening deferred development costs). The last component allows abnormal income to be computed using capitalization GAAP opening book values and

all other variables are as defined above.

In Eq. (3), the coefficients c_2 and c_4 are predicted to be positive by *H1*.

Our tests of *H2* are based on the following empirical model, which is a disaggregated version of Eq. (1):

$$MV_{it} = d_0 + d_1\ ADJCLBV_{it} + d_2\ OPD_{it} + d_3\ DEF_{it} + d_4\ ABNI^*_{it} + d_5\ AMORT_{it} + d_6\ CYEXP_{it} + d_7\ NUMSHR_{it} + \gamma_{it} \qquad (4)$$

where:
OPD_{it} = opening book value of deferred development costs
DEF_{it} = current year additions to the capitalized development asset
$ABNI^*_{it}$ = abnormal net income before any effects of R&D
$AMORT_{it}$ = current period amortization of opening deferred development asset
$CYEXP_{it}$ = current period outlays on R&D that were not capitalized
all other variables are as defined above.

In Eq. (4), ADJCLBV is "as-if" book value using expensing GAAP and (ADJCLBV + OPD + DEF − AMORT) is reported book value using capitalization GAAP; further, (ABNI* − CYEXP) is reported abnormal income using capitalization GAAP before the amortization of the opening deferred development asset. In a disaggregated equation such as (4), the variable AMORT appears only once, yet, it would have to be included twice to literally reconcile (i.e. aggregate back up to) Eq. (1). Equation (4) suffices for our tests of *H2*, which predict that d_3 will exceed d_6. This is tested using a linear restriction in the estimation of Eq. (4).

In order to test *H3*, we use the "one-size-fits-all" capitalization rule employed by Chan, Lakonishok and Souginannis (2000). Their approach employs the current and four lagged R&D outlays and adopts a 20% straight-line amortization rate in order to measure unbooked R&D capital.[6]

Using the researcher-created capitalized R&D computed as described above, we compare the relative R^2 for capitalizers of reported numbers (i.e. employing capitalization GAAP for D) versus researcher created capitalized R&D. To conduct this comparison, we compare the R^2 of Eq. (1) with the corresponding R^2 of the following equation:

$$MV_{it} = g_0 + g_1\ SYNCLBV_{it} + g_2\ SYNABNI_{it} + g_3\ NUMSHR_{it} + \Pi_{it} \qquad (5)$$

where:
$SYNCLBV_{it}$ = "as-if" book value of common equity capitalising all R&D employing a "one-size-fits-all" 20% amortization rate (book value of common equity less deferred development costs plus the researcher-created R&D asset)
$SYNABNI_{it}$ = "as-if" abnormal net income corresponding to the above "one-size-fits-all" method ('as-if" expensing net income plus R&D outlays minus R&D amortization using 20% minus 10% * opening SYNCLBV), and
all other variables are as defined above.

Some caveats should be considered in interpreting model results. First, the effects of other information are included in our model error terms, yet are important theoretically in a Feltham and Ohlson (1995) context.[7] Second, the researcher cannot observe the stock price that would have prevailed had capitalizers used expensing GAAP, nor is it possible to infer incremental information content from the association tests that we employ. We interpret our "as-if" approach in the following way. We observe stock price after capitalized D is disclosed to the market and test whether capitalized D is associated with information used by investors to value our sample firms. If (under the null to *H1*), the market attaches no value to capitalized D, there should be no difference in valuation model fit between capitalization and expenser GAAP numbers.

SAMPLE DATA, DESCRIPTIVE STATISTICS AND LOGISTIC REGRESSION ANALYSIS

Australian Sample

In order to obtain our sample of Australian capitalizers, we searched the 1993 Australian Stock Exchange (ASX) CD-ROM in order to identify firms that had a discussion of R&D and then obtained the annual reports. These procedures resulted in the identification of 252 firm-year observations, for the period 1992–1997, generated by 63 capitalizer firms. A capitalizer is defined as a firm that capitalizes all or part of their R&D expenditures in any of the years 1992–1997.

A similar search procedure resulted in the identification of 245 expenser firm-year observations, for the same time period, generated by 45 expenser firms.[8] We collected data on expensers in order to estimate a logistic regression model exploring the choice to capitalize. Thus, it is apparent from our search that the choice to capitalize is not uncommon in Australia.

Canadian Sample

A similar search strategy, using the 1995 Canadian Financial Infobase and annual reports, resulted in the identification of 99 firm-year observations, for the period 1991–1997, generated by 29 capitalizer firms. A similar search procedure resulted in the identification of 215 expenser firm-year observations, generated by 48 firms.[9] An interesting feature of our Canadian sample is that the propensity to capitalize is considerably lower than in Australia, yet the GAAP allowing capitalization is qualitatively similar in both countries. We

conjecture that proximity to the U.S., where expensing GAAP predominates, explains this pattern.

Descriptive Statistics

As we will discuss further in the empirical results section, we need to partition on the materiality of development costs (top 50% based on materiality, defined as the ratio of capitalized D to market capitalization) in order to obtain strong results in support of *H1* and *H2*. Aboody and Lev (1998) show that their main results for U.S. software capitalizers are improved for the top 25% based on the materiality of capitalized D. In order to inform the reader as to differences across the full and partitioned capitalizer samples, we report descriptive statistics for selected variables in Table 1. As the data has skewness for some of the variables, we report medians.

For Australian capitalizers, Table 1 indicates that, as expected, the ratio of capitalized D to market capitalization is greater for the partitioned sample (median = 5.84%) compared to the full sample (median = 2.14%). Further, the

Table 1. Impact of Switching to Expensing GAAP for Full Sample and Top 50% Materiality Portion for Australian and Canadian Capitalizers.

	Australia		Canada	
	000's Aus $		000's Can $	
	Full	Top 50%*	Full	Top 50%*
	n = 252	*n* = 126	*n* = 99	*n* = 50
	Median	Median	Median	Median
Market capitalization	38,610	18,737	55,906	49,580
Capitalized development costs	651	1,289	2,125	5,378
Capitalized development costs/market capitalization	2.14%	5.84%	2.79%	5.76%
Reported book value of equity (shareholders' equity less book value of preferred shares)	28,518	15,459	34,442	33,979
Capitalized develop. costs/reported equity (book value)	2.56%	8.20%	7.96%	12.34%
R&D Intensity (current year investment in R&D/sales)	1.22%	3.31%	9.16%	10.10%
Reported net income after tax (before extraordinary items)	1,276	396	542	575
Net income adjustment to expensing GAAP (amortization less current year build up)	−21	−160	−492	−1,198

* Materiality of capitalized D to market capitalization.

median ratio of capitalized D to the reported book value of common equity is 8.20% (2.56%) for the partitioned (full) sample. Thus, the balance sheet impact of switching to expensing GAAP is potentially more material, for the partitioned sample, enhancing the power of the tests. A similar pattern is indicated for the potential materiality of net income adjustments to expensing GAAP. For the partitioned (full) capitalizer sample, the median net income adjustment to expensing GAAP is −$160,000 (−$21,000), while the median reported net income before extraordinary items is $396,000 ($1,276,000), respectively, with all amounts being Australian dollars. Thus, the switch to expensing GAAP has more dramatic impacts for the partitioned sample, as one would expect.

Table 1 indicates similar patterns for the Canadian capitalizers. The median ratio of capitalized D to market capitalization for the partitioned (full) sample is 5.76% (2.79%), while the median ratio of capitalized D to reported book value of common equity is 12.34% (7.96%), respectively. For the partitioned (full) capitalizer sample, the median net income adjustment to expensing GAAP is −$1,198,000 (−$492,000), while the median reported net income before extraordinary items is $575,000 ($542,000), respectively, with all amounts being in Canadian dollars. Thus, it is again apparent that the switch to expensing GAAP has more dramatic impacts for the partitioned sample.

Table 2 compares the industry composition, age and incidence of loss years across Australian and Canadian capitalizers. Regarding industry, 14.29% (0%) of the Australian (Canadian) capitalizers come from the mining sector. Further, 31.75% (55.17%) come from the services sector, respectively. Thus, industry composition differs somewhat across the two capitalizer-samples. Regarding age, the median number of years since incorporation is 12 (10) for Australian (Canadian) capitalizers, indicating similar age. Finally, the percentage of total firm-year observations that reported loss years is 32.14% (43.43%) for Australian (Canadian) capitalizers, indicating a greater propensity for reported losses (i.e. before considering the adjustment to expenser GAAP) among Canadian capitalizers. These differences will be referred to when interpreting our empirical results.

A Comparison of Capitalizers and Expensers

Since capitalizers self-select, it is of interest to understand selection factors. Our selection of variables and the predicted signs of association are based on similar logistic regression models explaining the choice to capitalize R&D (Daley & Vigeland, 1983; Shehata, 1991; Aboody & Lev, 1998; Percy, 2000). Panel A of Table 3 contains the results of a logistic regression analysis for the

Table 2. Industry Composition, Age and Percentage Loss Years for Australian and Canadian Capitalizers.

	Australia		Canada	
	Firms	%	Firms	%
Mining	9	14.29		
Manufacturing:				
Furniture & Fixtures			1	3.45
Chemicals and Allied Products	3	4.76	1	3.45
Rubber and Miscellaneous Plastics Products	4	6.35	1	3.45
Stone, Clay, Glass and Concrete Projects	1	1.59		
Fabricated Metals	1	1.59		
Industrial & Commercial Machinery & Computer Equip.	9	14.29	4	13.79
Electronic and Other Electrical Equipment	1	1.59	3	10.34
Transportation Equipment			1	3.45
Measuring Equipment	1	1.59	1	3.45
Transportation and Communications	11	17.46		
Finance, Insurance, and Real Estate	3	4.76	1	3.45
Services:				
Other Services	8	12.70		
Business Services (Software)	3	4.76	12	41.38
Engineering, Acctg, Research & Management Services	9	14.29	4	13.79
Total	63	100.00	29	100.00
Median Number of Years Since Incorporation to First Appearance in Sample		10		12
Percentage of Total Firm-Year Observations That Reported Loss Years		32.14		43.43

Australian sample, where the dependent variable represents the probability of being a capitalizer. Consistent with prior studies, the model indicates capitalizers are smaller, have higher betas and have higher growth prospects as proxied by the market to book ratio.[10,11] Contrary to our predictions of a positive association, based on Daley and Vigeland (1983) and Shehata (1991), the association between leverage and the propensity to capitalize is negative.[12]

Panel B of Table 3 contains a similar analysis for the Canadian sample. The model indicates that, once again, capitalizers are smaller, have higher betas and growth prospects and less leverage. As a supplement to the logistic regression analysis, the median market capitalization for Australian expensers is $100.6 million, compared to $38.6 ($18.7) million for the full (partitioned) sample of Australian capitalizers. The corresponding medians for the Canadian sample are $241.8, $55.9 and $49.6 million, respectively.

Table 3. Results of Logistic Regression Analysis.

Panel A: Australian Sample ($n = 497$ firm-years)

Variable Name	Estimated Coefficient	Asymptotic Standard Error	Asymptotic T-Ratio	Prediction
Ln (MV)	−0.391	0.052	−7.489***	–
Earn	0.015	0.078	0.197	–
Lev	−0.456	0.187	−2.440*	+
Ratio	0.110	0.059	1.866*	+
R&D Int	−0.361	0.358	−1.009	+
Beta	0.633	0.194	3.268**	+
Constant	6.764	0.920	7.349***	

Likelihood ratio test = 84.62***

Percentage of right predictions = 68.60%

Panel B: Canadian Sample ($n = 314$ firm-years)

Variable Name	Estimated Coefficient	Standard Error	Asymptotic T−Ratio	Prediction
Ln (MV)	−0.355	0.086	−4.114***	–
Earn	0.031	0.298	0.105	–
Lev	−0.549	0.210	−2.617**	+
Ratio	0.040	0.019	2.137*	+
R&D Int	−0.187	0.333	−0.562	+
Beta	0.670	0.199	3.376***	+
X-List	−0.086	0.398	−0.216	–
Constant	2.843	1.020	2.788***	

Likelihood ratio test = 58.14***

Percentage of right predictions = 71.98%

Ln (MV) = natural log of market value.
Earn = net income converted for capitalizers to full expensing/sales.
Lev = long-term debt/book value of equity minus deferred development costs for capitalizers.
Ratio = market to book value.
R&D Int = current period expenditure on R&D/sales.
Beta = firm's systematic risk.
X-List = 1 if firm is cross-listed on U.S. stock exchange, 0 otherwise.

Significance levels (one-tail): ***< 0.01, **< 0.05, *< 0.10.

Clearly, capitalizers are smaller firms and less likely to be in steady state, a pattern observed by Oswald (1999) for U.K. capitalizers. Thus, capitalization can have significant impacts on the balance sheet and reported earnings, for such firms. For larger firms in steady state, on-line earnings rob D of any information content. Following this line of reasoning, it is not surprising that we obtain stronger results for our capitalizers when we partition on the materiality of D.

EMPIRICAL RESULTS

Relative and Incremental Information Content Tests of H1 for Australian Capitalizers

Table 4 contains the results of tests of *H1* for the full sample of Australian capitalizers while Table 5 contains corresponding results for the top 50% partition based on the materiality of capitalized D. Our main results involve pooled OLS regressions. As a robustness check, we report in a later section GLS results, on the reduced sample with panel properties. Panel A of Table 4 reports estimates of Eqs (1) and (2) for the full sample of Australian capitalizers. There is little difference in the model R^2 (96.9% vs. 96.8%) across capitalizer and "as-if" expenser GAAP, for the full sample.[13] The Vuong test for a difference in R^2 (Dechow 1994) is not significant. Panel B of Table 4 reports estimates of equation (3) for the same sample. The valuation coefficient on capitalized D is 1.74, which is significant at the 0.01 level. However, the valuation coefficient on the corresponding net income adjustment to capitalizer GAAP is not significant. Thus, for the full sample, *H1* is only weakly supported. While it appears that capitalized development costs are associated with firm value, there is little difference in the explanatory power for firm value across the two accounting regimes.

Panel A of Table 5 reports estimates of Eqs (1) and (2) for the Australian top 50% partition. There is now a more discernible separation in model R^2 (90.7% vs. 86.8%, in favour of capitalizer GAAP) and the Vuong test indicates that the difference in model explanatory power is significant at the 0.001 level. Panel B of Table 5 reports estimates of equation (3) for the Australian top 50% partition. This time the estimates of both c_2 and c_4 are positive (1.354 and 3.641, respectively) and significant (at the 0.01 and 0.05 levels, respectively), as predicted by *H1*. Thus, for the top 50% partition, the results are consistent with *H1*: capitalized D is valuation relevant, and capitalizer GAAP explains market value better than expenser GAAP. Oswald (1999)

Table 4. Relative and Incremental Information Content Tests Australian Capitalizers: Full Sample ($n = 252$).[a]

Panel A: Comparison of Alternative GAAP

Equation 1: $MV = a_0 + a_1 \, CLBV + a_2 \, ABNI + a_3 \, NUMSHR + e$

		a_0	a_1	a_2	a_3	Adj. R^2
Current GAAP	Coefficient[b]	−0.206	1.998	3.870	0.259	0.969
D Capitalized	White's *t*-statistic	(−2.371)**	(16.180)***	(4.870)***	(1.628)	

Equation 2: $MV = b_0 + b_1 \, ADJCLBV + b_2 \, ADJABNI + b_3 \, NUMSHR + u$

		b_0	b_1	b_2	b_3	Adj. R^2
"As-if" GAAP	Coefficient	−0.165	1.944	3.683	0.441	0.968
All R&D expensed	White's *t*-statistic	(−1.927)*	(15.160)***	(4.699)***	(2.733)***	

Ratio of Adj $R^2 = 1.001$ Vuong's Z statistic = 1.218 $p = 0.112$

Panel B: Incremental Analysis

Equation 3: $MV = c_0 + c_1 \, ADJCLBV + c_2 \, D + c_3 \, ADJABNI + c_4 \, ADJ + c_5 \, NUMSHR + e$

	c^0	c_1	c_2	c_3	c_4	c_5	Adj. R^2
Coefficient	−0.183	1.991	1.740	3.828	−0.056	0.308	0.969
White's *t*-statistic	(−2.001)**	(15.760)***	(3.200)***	(4.841)***	(−0.018)	(1.973)**	

MV = Firm market value of common equity three months after fiscal year end; CLBV = Reported book value of equity less preferred stock; ABNI = Abnormal net income = net income − (10% × opening book value of common equity); NUMSHR = Number of common shares outstanding (scale proxy); ADJCLBV = "As-if" expensing BV of common equity = BV of common equity less deferred development costs; ADJABNI = "As-if" expensing abnormal income = (Net income + current period amortization of deferred development costs-current period outlays on development costs that were capitalized) − (10% × opening ADJCLBV); D = Closing deferred development costs (balance sheet asset); ADJ = adjustment from expensing GAAP to capitalization GAAP = current period expenditures on development costs capitalized-current period amortization of deferred development costs − (10% × opening deferred development costs).

[a] Raw data with scale proxy, the number of common shares outstanding (NUMSHR), as independent variable.
[b] For the sake of presentation, a_0, b_0 and c_0 are divided by 10^6. Significance levels (two-tailed): ***< 0.01, **< 0.05, *< 0.10.

Table 5. Australian Capitalizers: Relative and Incremental Information Content Tests – Top 50% Based on Materiality.[a] (Top 126 Firm-Year Observations (50%) Sorted by Capitalized Development Costs/Market Capitalization.)

Panel A: Comparison of Alternative GAAP

Equation 1: $MV = a_0 + a_1\ CLBV + a_2\ ABNI + a_3\ NUMSHR + e$

		a_0	a_1	a_2	a_3	Adj. R^2
Current GAAP	Coefficient[b]	−0.69	1.207	0.820	0.274	0.907
D Capitalized	White's *t*-statistic	(−1.771)*	(8.080)***	(1.601)	(4.176)***	

Equation 2: $MV = b_0 + b_1\ ADJCLBV + b_2\ ADJABNI + b_3\ NUMSHR + u$

		b_0	b_1	b_2	b_3	Adj. R^2
"As-if" GAAP	Coefficient	0.113	1.118	0.427	0.571	0.868
All R&D expensed	White's *t*-statistic	(−2.228)**	(4.674)***	(1.015)	(2.959)***	

Ratio of Adj R^2 = 1.045 Vuong's Z statistic = 3.081 $p = 0.001$

Panel B: Incremental Analysis

Equation 3: $MV = c_0 + c_1\ ADJCLBV + c_2\ D + c_3\ ADJABNI + c_4\ ADJ + c_5\ NUMSHR + e$

	c^0	c_1	c_2	c_3	c_4	c_5	Adj. R^2
Coefficient	−0.066	1.080	1.354	0.531	3.641	0.239	0.915
White's *t*-statistic	(−1.604)*	(6.065)***	(6.821)***	(1.043)	(2.620)**	(3.031)***	

MV = Firm market value of common equity three months after fiscal year end; CLBV = Reported book value of equity less preferred stock; ABNI = Abnormal net income = net income – (10% × opening book value of common equity); NUMSHR = Number of common shares outstanding (scale proxy); ADJCLBV = "As-if" expensing BVof common equity = BV of common equity less deferred development costs; ADJABNI = "As-if" expensing abnormal income = (Net income + current period amortization of deferred development costs-current period outlays on development costs that were capitalized) – (10% × opening ADJCLBV); D = Closing deferred development costs (balance sheet asset); ADJ = adjustment from expensing GAAP to capitalization GAAP = current period expenditures on development costs capitalized-current period amortization of deferred development costs – (10% × opening deferred development costs).

[a] Raw data with scale proxy, the number of common shares outstanding (NUMSHR), as independent variable.

[b] For the sake of presentation, a_0, b_0 and c_0 are divided by 10^6. Significance levels (two-tailed): ***< 0.01, **< 0.05, *< 0.10.

does not partition his U.K. sample, which may explain why he does not observe the latter result for his sample of U.K. capitalizers.[14]

Relative and Incremental Information Content Tests of H1 for Canadian Capitalizers

Table 6 and 7 contain the corresponding tests of *H1* for the Canadian full and top 50% partition, respectively. The patterns are somewhat similar to the above. For the full sample, Panel A of Table 6 indicates that there is no statistically significant separation in R^2 (79.1% vs. 78.8%) across the two GAAP regimes; in Panel B of Table 6, the valuation coefficient on capitalized D, c_2, is again positive (17.816) and significant (at the 0.05 level), while the estimated valuation coefficient on the net income adjustment (c_4) is again insignificant. Thus, once again, for the full Canadian sample, H1 is only weakly supported.

Stronger inferences in support of *H1* are apparent in Table 7. In Panel A, there is once again a more discernible separation in model R^2 (59.9% vs. 54.4%, in favour of capitalizer GAAP) and the Vuong test indicates that the difference in explanatory power is significant. In Panel B of Table 7, the incremental information content tests are mixed. While the valuation coefficient on capitalizer D, c_2, is again positive (27.157) and (at the 0.01 level) significant, the valuation coefficient the net income adjustment is now negative (−35.749) and significant (at the 0.05 level).[15] We are at a loss to explain the net income adjustment result, one which is not robust across both the Australian and Canadian sample of capitalizers. Overall, for *H1*, the Canadian top 50% partition results are consistent with *H1*: capitalized D is valuation relevant, and capitalizer GAAP explains market value better than expenser GAAP.

The model R^2s for the Canadian capitalizers in Tables 6 and 7 are lower than for Australian capitalizers in Tables 4 and 5. Differences in industry composition and frequency of loss years (Table 2) may be partially responsible for the difference in model R^2. In sensitivity tests (not reported), we dropped loss firm-years from the Canadian sample. While the power of the model drops and meaningful statistical tests are no longer possible for this reduced subset, the model R^2s do improve when loss years are deleted. For the full sample, the model R^2 in Panel A of Table 6 increases to 84.0 and 84.3%, respectively, for the current GAAP and "as-if" expenser GAAP models. For the top 50% partition, the corresponding model R^2 in Panel A of Table 7 increases to 69.6 and 65.5%, respectively.

Table 6. Relative and Incremental Information Content Tests Canadian Capitalizers: Full Sample ($n = 99$).[a]

Panel A: Comparison of Alternative GAAP

Equation 1: $MV = a_0 + a_1\ CLBV + a_2\ ABNI + a_3\ NUMSHR + e$

		a_0	a_1	a_2	a_3	Adj. R^2
Current GAAP	Coefficient[b]	−0.429	1.818	4.1883	38.275	0.791
D Capitalized	White's *t*-statistic	(−3.867)***	(1.559)	(1.315)	(3.101)***	

Equation 2: $MV = b_0 + b_1\ ADJCLBV + b_2\ ADJABNI + b_3\ NUMSHR + u$

		b_0	b_1	b_2	b_3	Adj. R^2
"As-if" GAAP	Coefficient	−0.442	2.409	3.657	39.028	0.788
All R&D expensed	White's *t*-statistic	(−3.794)***	(1.483)	(1.153)	(3.197)***	

Ratio of Adj $R^2 = 1.004$ Vuong's Z statistic = 0.810 $p = 0.209$

Panel B: Incremental Analysis

Equation 3: $MV = c_0 + c_1\ ADJCLBV + c_2\ D + c_3\ ADJABNI + c_4\ ADJ + c_5\ NUMSHR + e$

	c^0	c_1	c_2	c_3	c_4	c_5	Adj. R^2
Coefficient	−0.400	2.410	17.816	3.594	−28.386	35.122	0.817
White's *t*-statistic	(−3.498)***	(2.323)**	(2.104)**	(1.186)*	(−1.781)	(2.703)***	

MV = Firm market value of common equity three months after fiscal year end; CLBV = Reported book value of equity less preferred stock; ABNI = Abnormal net income = net income − (10% × opening book value of common equity); NUMSHR = Number of common shares outstanding (scale proxy); ADJCLBV = "As-if" expensing BVof common equity = BV of common equity less deferred development costs; ADJABNI = "As-if" expensing abnormal income = (Net income + current period amortization of deferred development costs-current period outlays on development costs that were capitalized) − (10% × opening ADJCLBV); D = Closing deferred development costs (balance sheet asset); ADJ = adjustment from expensing GAAP to capitalization GAAP = current period expenditures on development costs capitalized-current period amortization of deferred development costs − (10% × opening deferred development costs).

[a] Raw data with scale proxy, the number of common shares outstanding (NUMSHR), as independent variable.

[b] For the sake of presentation, a_0, b_0 and c_0 are divided by 10^6. Significance levels (two-tailed): ***< 0.01, **< 0.05, *< 0.10.

Table 7. Canadian Capitalizers: Relative and Incremental Information Content Tests – Top 50% Based on Materiality.[a] (Top 50 Firm-Year Observations (50%) Sorted by Capitalized Development Costs/Market Capitalization.)

Panel A: Comparison of Alternative GAAP

Equation 1: $MV = a_0 + a_1\ CLBV + a_2\ ABNI + a_3\ NUMSHR + e$

		a_0	a_1	a_2	a_3	Adj. R^2
Current GAAP	Coefficient[b]	−0.285	5.921	1.872	16.305	0.599
D Capitalized	White's *t*-statistic	(-3.193)***	(3.266)***	(0.386)	(3.009)***	

Equation 2: $MV = b_0 + b_1\ ADJCLBV + b_2\ ADJABNI + b_3\ NUMSHR + u$

		b_0	b_1	b_2	b_3	Adj. R^2
"As-if" GAAP	Coefficient	−0.292	6.440	0.345	16.961	0.544
All R&D expensed	White's *t*-statistic	(-3.093)***	(3.501)***	(0.052)	(3.263)***	

Ratio of Adj $R^2 = 1.101$ Vuong's Z statistic = 2.651 $p = 0.004$

Panel B: Incremental Analysis

Equation 3: $MV = c_0 + c_1\ ADJCLBV + c_2\ D + c_3\ ADJABNI + c_4\ ADJ + c_5\ NUMSHR + e$

	c^0	c_1	c_2	c_3	c_4	c_5	Adj. R^2
Coefficient	−0.198	3.095	27.157	8.447	-35.749	15.411	0.687
White's *t*-statistic	(-3.099)***	(2.421)**	(3.098)***	(2.090)**	(-2.560)**	(4.124)***	

MV = Firm market value of common equity three months after fiscal year end; CLBV = Reported book value of equity less preferred stock; ABNI = Abnormal net income = net income – (10% × opening book value of common equity); NUMSHR = Number of common shares outstanding (scale proxy); ADJCLBV = "As-if" expensing BVof common equity = BV of common equity less deferred development costs; ADJABNI = "As-if" expensing abnormal income = (Net income + current period amortization of deferred development costs-current period outlays on development costs that were capitalized) – (10% × opening ADJCLBV); D = Closing deferred development costs (balance sheet asset); ADJ = adjustment from expensing GAAP to capitalization GAAP = current period expenditures on development costs capitalized-current period amortization of deferred development costs – (10% × opening deferred development costs).

[a] Raw data with scale proxy, the number of common shares outstanding (NUMSHR), as independent variable.

[b] For the sake of presentation, a_0, b_0 and c_0 are divided by 10^6. Significance levels (two-tailed): ***< 0.01, **< 0.05, *< 0.10.

Incremental Information Content Tests of H2

For the sake of brevity, only the results for the top 50% partition are reported in Table 8 (Australia) and Table 9 (Canada). The results for the full sample, which are not reported and do not support *H2*, will be discussed briefly for comparison purposes. Table 8 reports the estimation of Eq. (4) for the Australian top 50% partition. The first four rows estimate more aggregated versions of Eq. (4) and indicate that our main inferences regarding the valuation relevance of capitalized D are not sensitive to using the Ohlson (1995) framework vs. a simpler specification (see Barth, 1994) relating market value to the book value of equity. *H2* predicts that d_3 (the valuation coefficient on a dollar of capitalized D) will exceed d_6 (the coefficient on a dollar of expensed R&D, for the same firm). For the Australian top 50% partition, this prediction is upheld: the estimate of d_3, 4.736 exceeds the corresponding estimate of d_6, −3.494. The latter coefficient is insignificant, while the former coefficient differs significantly from zero at the 0.01 level. An F-test of the linear restriction that $d_3 = d_6$ is rejected at the 0.01 level. Thus, the results are quite consistent with *H2*, for the Australian top 50% partition: capitalization appears to play an important corroboration role, in that a dollar of capitalized D is valued more highly by the market than a dollar of expensed R&D, for the same firm. For the full sample of Australian capitalizers, however, the results (not reported) do not support *H2*: the empirical estimate of d_3 and d_6 for the full sample are insignificant, as is the F-test on the linear restriction.

The corresponding results for Canadian top 50% partition appear in Table 9. Again, there is similarity of results across the Australian and Canadian samples when the top 50% partition is examined: the estimate of d_3 for the Canadian top 50% partition, 22.381 exceeds the corresponding estimate of d_6, −7.746 (the latter coefficient is not reliably different from zero). Once again, an F-test of the linear restriction that $d_3 = d_6$ is rejected, this time at the 0.007 level. For the full sample of Canadian capitalizers, as before, the results (not reported) do not support *H2*: the empirical estimates of d_3 and d_6 for the Canadian full sample are once again insignificant, as is the F-test on the linear restriction.

Overall, the results for both samples support the corroboration hypothesis, once the samples are partitioned on the materiality of capitalized D. From a valuation perspective, the results for *H1* and *H2* taken together point to a useful information signalling role for discretionary capitalization in settings (e.g. Australia, Canada) where this discretion is permitted.

Robustness Checks

Our initial robustness check analyses cases in which firms recognise impairments of their R&D capital. Such impairments can be highly informative

Table 8. Australian Capitalizers: Tests of *H2* for Top 50% Based on Materiality of D ($n = 126$).[a]

	CONSTANT	CLBV	ADJCLBV	D	OPD	DEF	ABNI	ABNI*	AMORT	CYEXP	NUMSHR	Adj R^2
Coefficients[b]	−0.383	1.196									0.131	0.894
White's *t*-statistic	(−1.002)	(7.750)***									(1.680)*	
Coefficients	−0.413		1.203	1.122							0.143	0.894
White's *t*-statistic	(−1.027)		(7.382)***	(6.660)***							(2.035)**	
Coefficients	−0.641		1.200	1.168			0.699				0.269	0.905
White's *t*-statistic	(−1.579)		(8.097)***	(6.519)***			(1.880)**				(3.521)***	
Coefficients	−0.810		1.099		0.902	4.165	0.463				0.234	0.914
White's *t*-statistic	(−2.010)**		(6.825)***		(4.276)***	(3.091)***	(1.267)				(2.950)***	
Equation 4: $MV = d_0 + d_1 ADJCLBV + d_2 OPD + d_3 DEF + d_4 ABNI^* + d_5 AMORT + d_6 CYEXP + d_7 NUMSHR + \gamma$												
Coefficients	−0.519		1.065		0.986	4.736		0.423	−3.256	−3.494	0.255	0.915
White's *t*-statistic	(−1.437)		(6.537)***		(4.561)***	(3.422)***		(1.070)	(-0.999)	(-0.949)	(2.874)**	

F test = 19.712 $p < 0.001$ with 1 and 118 d.f.

F test is on d_3 (coefficient on DEF) – d_6 (coefficient on CYEXP) = 0; CLBV = Reported book value of common equity less preferred stock; ADJCLBV = Book value of common equity less deferred development costs; D = Closing deferred development costs (balance sheet asset); OPD = Opening book value of deferred development costs; DEF = Current year additions to the capitalized development costs; ABNI = Abnormal net income = net income – (10% of opening book value of common equity); ABNI* = Abnormal net income before any effects of R&D; AMORT = Current period amortization of opening deferred development costs; CYEXP = Current year outlays on R&D that were not capitalized; NUMSHR = Number of common shares outstanding (scale proxy).

[a] = Raw data with scale proxy, number of shares outstanding (NUMSHR), as independent variable.

[b] = For the sake of presentation, the estimated constants are divided by 10^7. Significance levels (two-tailed): ***< 0.01, **< 0.05, *< 0.10.

Table 9. Canadian Capitalizers: Tests of *H2* for Top 50 % Based on Materiality of D ($n = 50$).

	CONSTANT	CLBV	ADJCLBV	D	OPD	DEF	ABNI	ABNI*	AMORT	CYEXP	NUMSHR	Adj R^2
Coefficients[b]	−2.483	3.846									17.036	0.499
White's *t*-statistic	(−2.746)***	(4.434)***									(2.666)**	
Coefficients	−2.326		2.496	14.827							16.294	0.580
White's *t*-statistic	(−2.369)**		(1.922)**	(2.198)**							(2.425)**	
Coefficients	−2.162		1.502	17.215			3.187				17.998	0.583
White's *t*-statistic	(−2.643)**		(1.254)	(2.313)**			(0.800)				(2.463)**	
Coefficients	−1.722		2.629		61.171	29.286	6.546				16.277	0.696
White's *t*-statistic	(−2.614)**		(2.080)**		(4.596)***	(1.929)**	(1.841)**				(2.938)***	
Equation 4: $MV = d_0 + d_1\,ADJCLBV + d_2\,OPD + d_3\,DEF + d_4\,ABNI^* + d_5\,AMORT + d_6\,CYEXP + d_7\,NUMSHR + \gamma$												
Coefficients	−1.477		1.0345		56.595	22.381		9.692	−8.728	−7.746	11.954	0.755
White's *t*-statistic	(−2.870)***		(0.751)		(4.730)***	(1.884)**		(2.646)**	(−0.659)	(−1.322)	(2.873)***	

F test = 8.125 $p < 0.007$ with 1 and 42 d.f.

F test is on d_3 (coefficient on DEF) – d_6 (coefficient on CYEXP) = 0; CLBV = Reported book value of common equity less preferred stock; ADJCLBV = Book value of common equity less deferred development costs; D = Closing deferred development costs (balance sheet asset); OPD = Opening book value of deferred development costs; DEF = Current year additions to the capitalized development costs; ABNI = Abnormal net income = net income – (10% of opening book value of common equity); ABNI* = Abnormal net income before any effects of R&D; AMORT = Current period amortization of opening deferred development costs; CYEXP = Current year outlays on R&D that were not capitalized; NUMSHR = Number of common shares outstanding (scale proxy).

[a] = Raw data with scale proxy, number of shares outstanding (NUMSHR), as independent variable.

[b] = For the sake of presentation, the estimated constants are divided by 10^7. Significance levels (two-tailed): ***< 0.01, **< 0.05, *< 0.10.

because they go against the incentives of management to report higher R&D capital.[16] To explore this issue for our Australian sample, we augment Eq. (3) to include a slope-shift indicator variable that assumes a value of 1 for the 45 firm-year observations where a write-off of capitalized D has occurred and a value of 0 for all other cases. This slope-shift variable is multiplied by D and ADJ in Eq. (3) in order to explore whether valuation relevance increases when impairment is recognised. Neither estimated slope-shift coefficient is statistically significant. We thus fail to reject the null of equal valuation relevance across write-offs and all other firm-years. Data limitations preclude exploring this issue for the Canadian sample.

Our second robustness check examines the sensitivity of our pooled OLS results to the estimation of a fixed effects regression model that allows for time and industry varying intercepts. For the Australian sample, we estimated Eq. (3) modified to include five calendar indicator variables (1993–1997), leaving the effects of 1992 in the overall intercept and four industry indicator variables (mining, transportation/communications, financial and services), leaving the effects of the manufacturing sector in the overall intercept. For the Canadian sample, the calendar indicator variables were created in the same fashion but only one industry indicator variable was included (services) leaving the effects of all other sectors in the overall intercept. For the top 50% Australian partition, the key results in Panel B of Table 5 remain unchanged: the estimated coefficients for D and ADJ are 1.358 and 3.204, both significant at the 0.01 level. One industry coefficient (mining) is significant, but the remaining estimated time and industry coefficients are insignificant.[17]

Next, we examine the robustness of our results to GLS variations of pooled OLS. As sample firms produce more than one observation in the pooled sample, there is a concern about auto-correlation in model disturbance terms. To examine the sensitivity of our results to departures from OLS assumptions, we identify a subset of 30 Australian capitalizers that have panel data features, that is, 6 years of continuous data availability.[18] For the resulting 50% partition (i.e. 90 pooled firm years), we run the Kmenta (1986) GLS procedure that corrects for autocorrelation and heteroscedasticity. Briefly, our results (not reported) are as follows. For *H1*, the incremental and relative information content tests are upheld using the top 50% partition and GLS: when estimating Eq. (3) using GLS, the empirical estimates of c_2 and c_4 are positive (0.839 and 2.040, respectively) and significant (at the 0.01 level). When estimating Eqs (1) and (2) using GLS, the model R^2 are 70.8% vs. 47.5%, for the capitalizer versus expenser GAAP models. Thus, a large separation in R^2 is apparent. For *H2*, the incremental information content tests are again upheld when Eq. (4) is estimated using the top 50% partition and GLS: the estimates of d_3 and d_6 are 4.905 and

−0.192, with the former but not the latter coefficient being reliably different from zero at the 0.01 level. Further, an F-test of the linear restriction that $d_3 = d_6$ is reliably rejected, at the 0.01 level.[19] We conclude that our main empirical inferences, for the Australian sample at least, are not sensitive to the use of pooled OLS vs. GLS.

Our final robustness check addresses the question as to whether a dollar of current year R&D outlays is directly valued by the market, unconditional on whether some of the R&D is corroborated through capitalization. We repeat the test for expensers, for comparison purposes, as the results of Sougiannis (1994) for U.S. expensers is mixed with regards to a direct valuation role for current period R&D expense. To explore this issue, we modify Eq. (4) for capitalizers as follows:

$$MV_{it} = f_0 + f_1\ ADJCLBV^*_{it} + f_2\ ABNI^{**}_{it} + f_3\ CI_{it} + f_4\ NUMSHR_{it} + \delta_{it} \quad (6)$$

where: $ADJCLBV^*_{it}$ = reported book value of common equity less DEF, where DEF is current year additions to the capitalized development asset. DEF is included in CI.

$ABNI^{**}_{it}$ = abnormal net income (ABNI as defined for Eq. (1)) plus current years outlays that were not capitalized (CYEXP as defined for equation (4)). CYEXP is included in CI.

CI_{it} = total current period outlays for R&D = (DEF + CYEXP) and NUMSHR is defined earlier.

For expensers, the corresponding model is as follows:

$$MV_{it} = g_0 + g_1\ CLBV_{it} + g_2\ ABNI^*_{it} + g_3\ CYEXP_{it} + g_4\ NUMSHR_{it} + \zeta_{it} \quad (7)$$

where: CLBV*it = reported book value of common equity less preferred stock, for an expenser,

ABNIit* = abnormal net income before any effects of R&D and CYEXP and NUMSHR are as defined earlier.

For capitalizers, the results for the estimation of Eq. (6) (not reported in a table) are as follows. For the Australian top 50% partition and using pooled OLS (n = 126 firm-year observations), the empirical estimate of f_3 is 2.264, significant at the 0.10 level. When CI is disaggregated into its two components (DEF, CYEXP) and Eq. (6) is re-estimated, the previous results reported for *H2* in Table 7 emerge: the coefficient on DEF is 4.238 (significant at the 0.01 level), while the coefficient on CYEXP is −3.770 (unreliably different from zero). For

the Canadian top 50% partition (n = 50 firm-year observations), the empirical estimate of f_3 is 18.19 (significant at the 0.01 level). When the corresponding DEF and CYEXP components are estimated separately, the coefficients on DEF and CYEXP are 40.583 and 9.990, respectively, both significant at the 0.01 level. Thus, for Australian and Canadian capitalizers, a dollar of R&D outlays is valued, but more so for capitalized D than for expensed R&D.

Turning to Australian expensers, and using the full sample of 245 firm-year observations, the pooled OLS estimate of g_3 in Eq. (7) is 10.228 (significant at the 0.10 level). When GLS is employed on a panel of 33 Australian expensers with 6 years of continuous data availability (n = 198 firm-year observations), the pooled GLS estimate of g_3 is 5.40 (significant at the 0.01 level). Thus, for Australian expenses, we unambiguously conclude that a dollar of R&D outlays is directly valued by the market. Finally, turning to the full sample of 215 Canadian firm-year expensing observations, the pooled estimate of g_3 is 26.139 (significant at the 0.01 level). When GLS is employed in a panel of 20 Canadian expensers with 6 years of continuous data availability (n = 120 firm-year observations), the pooled GLS estimate of g_3 is 3.25 (significant at the 0.01 level). This coefficient estimate appears to be more reasonable, relative to its OLS counterpart. We can once again unambiguously conclude that for Canadian expensers a dollar of R&D outlays is directly valued by the market. These results complement the corresponding results of Sougiannis (1994), for U.S. expensers, which are mixed as to whether (for expensers) a dollar of current period R&D outlays is directly valued by the market.

EXTENSIONS

We now turn to the final research question addressed by this study, namely, whether the reported book values and earnings using discretionary capitalization are more highly associated with firm value than are the corresponding book value and earnings using simple capitalization algorithms. The results of this "horse race" appear in Table 10. We employ OLS and Australian data, as data limitations prevent exploring the issue for Canadian capitalizers. Table 10, Panel A contains the result for the full sample of 160 firm-year observations for Australian firms that capitalize D and have data for the current and four lagged years (generated by 38 firms). As indicated, the R^2 for Eq. (1) vs. Eq. (5) are quite close: 97.4% vs. 96.2%. A Vuong test of a difference in R^2 is not significant.

We next partition the sample on the basis of the materiality of D, and focus on the top 50% in Panel B of Table 10. Some separation in R^2 becomes apparent, with a modest edge to the Eq. (1) model (R^2 = 92.4%) over the Eq. (5) model

Table 10. Relative Information Content Tests Manager's Capitalized D vs. Researcher-Created Capitalized R&D Australian Capitalizers.[a]

Panel A: Full Sample ($n = 160$)						
Equation 1: $MV = a_0 + a_1$ CLBV $+ a_2$ ABNI $+ a_3$ NUMSHR $+ e$						
		a_0	a_1	a_2	a_3	Adj. R^2
Current GAAP	Coefficient[b]	−0.171	2.013	3.361	0.195	0.974
Manager's Reported D	White's *t*-statistic	(−2.472)**	(18.960)***	(5.663)***	(1.325)	
Equation 5: $MV = g_0 + g_1$ SYNCLBV $+ g_2$ SYNABNI $+ g_3$ NUMSHR $+ \Pi$						
		g_0	g_1	g_2	g_3	Adj. R^2
"As-if" GAAP	Coefficient	−0.126	1.872	1.351	0.034	0.962
Researcher-Created R&D	White's *t*-statistic	(−1.101)*	(10.830)***	(2.280)**	(0.212)	
Ratio of Adj $R^2 = 1.012$ Vuong's Z statistic = 1.438 $p = 0.150$						
Panel B: Top 50% Based on Materiality of D ($n = 80$)						
Equation 1: $MV = a_0 + a_1$ CLBV $+ a_2$ ABNI $+ a_3$ NUMSHR $+ e$						
		a_0	a_1	a_2	a_3	Adj. R^2
Current GAAP	Coefficient[b]	0.214	0.847	0.284	0.295	0.924
Manager's Reported D	White's *t*-statistic	(0.675)	(9.725)***	(0.882)	(2.862)**	
Equation 5: $MV = g_0 + g_1$ SYNCLBV $+ g_2$ SYNABNI $+ g_3$ NUMSHR $+ \Pi$						

Table 10. Continued.

		g_0	g_1	g_2	g_3	Adj. R^2
"As-if" GAAP	Coefficient	−0.265	0.716	0.427	0.527	0.899
Researcher-Created R&D	White's *t*-statistic	(−0.735)	(5.482)***	(1.473)	(3.031)***	

Ratio of Adj $R^2 = 1.028$ Vuong's Z statistic = 1.450 $p = 0.147$

MV = Firm market value of common equity three months after fiscal year end;
CLBV = Reported book value of equity less preferred stock;
ABNI = Abnormal net income = net income – (10% × opening book value of common equity);
NUMSHR = Number of common shares outstanding (scale proxy);
SYNCLBV = "As-if" book value of common equity capitalising all R&D employing a "one-size-fits-all" 20% amortization rate = book value of common equity less deferred development costs plus the researcher-created R&D asset;
SYNABNI = "As-if" abnormal net income corresponding to the above "one-size-fits-all" method = "as-if" expensing net income plus R&D outlays minus R&D amortization using 20% minus (10% × opening SYNCLBV).

[a] Raw data with scale proxy, the number of common shares outstanding (NUMSHR), as independent variable.
[b] For the sake of presentation, a_0, b_0 and c_0 are divided by 10^6. Significance levels (two-tailed): ***< 0.01, **< 0.05, *< 0.10.

(R^2 = 89.9%). However, the Vuong test for a difference in R^2 is insignificant (Vuong Z statistic = 1.45, significant at the 0.15 level, two-tailed) using conventional measures of significance.[20] We conclude that, while the manager's actual capitalized D is associated with firm value, it has at best a modest advantage over what the analyst can do, using the researcher-created synthetic capitalized R&D.

CONCLUSION

The possibility of earning management is a concern to U.S. standard setters and helps to explain the continued requirement of SFAS No. 2 for the full expensing of current R&D outlays. As Lev and Sougiannis (1996, p. 108) state ". . . U.S. standard-setters are concerned with the reliability and objectivity of estimates required for R&D capitalization, and with associated audit risk. The spectre of providing managers with additional opportunities for earning management must also weigh heavily on regulators."

We demonstrate, for a sample of Australian and Canadian capitalizers, that the discretionary capitalization of development costs by managers does result in balance sheet and income statement numbers that are more highly associated with market value than "as-if" expensing GAAP numbers. As a caveat, this result only holds when our samples are partitioned on the materiality of capitalized development costs relative to market capitalization. Moreover, we show (again, only for the materiality partitioned samples) that discretionary capitalization appears to play an important corroborative role for capital markets: a dollar worth of capitalized D is worth more than a dollar worth of expensed R&D, for the same firm. These results point to a potentially useful signalling role for discretionary capitalization, in Australian and Canadian capital markets, despite the potential for managerial opportunism created by allowing the discretion to capitalize.

The final research question we explore is whether the manager's capitalized D has any advantage over what the analyst can do, i.e. using the researcher-created capitalized R&D. We demonstrate that, while the manager's capitalized D is associated with firm value, it has at best a modest advantage over what the analyst can do. Specifically, after partitioning the sample on the basis of the materiality of D, book value and abnormal earnings actually reported by firms that capitalize D explain 92.4% of the variation in market value, compared to a corresponding 89.9% metric for researcher-created capitalized R&D. Thus, the dilemma for policy makers in the regulatory arena is whether the modest incremental benefits in terms of information provided to capital markets (by allowing discretionary capitalization) are justified given the incremental costs associated with earnings management when discretion is allowed.

NOTES

1. IASC 9 was in effect during the period of our sample. Recently, IASC 38 has superseded IASC 9, effective July 1, 1999, though the criteria for capitalization of development costs are similar to IASC 9.

2. In Australia, the accounting standard, AASB1011: Accounting for Research and Development Costs, permits selective capitalization of both research and development expenditures. "Research and development" is addressed as a single unit, with all R&D costs required to be capitalized if they, together with R&D costs already deferred, are expected beyond any reasonable doubt to be recoverable. AASB1011 suggests that basic research costs are normally charged to the P&L when incurred, because there usually is not a relationship between these activities and resulting future benefits and that applied research activities may be associated, occasionally, with identifiable projects and, as such, a discernible relationship can exist between these projects and probable future benefits. The dividing line between R and D is arbitrary. For the purpose of this study, we refer to capitalized R&D in Australia as capitalized D, as such outlays (like their Canadian counterparts) meet the recovery criteria.

3. We thank the reviewers for this point. The measures of capitalized D and the researcher-created R&D asset (see Table 9) used in this study measure economic R&D capital with error. Thus, the estimated coefficient on either measure will deviate from the theoretical prediction of unity. It suffices for the purposes of our study to reject a null of zero value-relevance for such measures.

4. The results reported in this study are qualitatively unchanged when a cost of capital in the range of 9 to 13% is employed.

5. Barth and Kallapur (1996) find that including a scale proxy as an independent variable is more effective than deflation for the purposes of mitigating heteroscedasticity related coefficient bias. Following Barth and Clinch (1998), this study uses number of common shares outstanding as the scale proxy and reports inferences based on White (1980) standard errors. Preliminary tests (unreported) using alternative scale proxies (total assets, sales) did not provide consistently plausible results across models, whereas number of common shares provided plausible results that were consistent between model specifications. However, robustness checks (available upon request) indicate that our main inferences are not sensitive to scaling choices or the method of deflation.

6. Chan, Lakonishok and Souginannis (2000) justify a 20% amortization rate based on its proximity to the one used (15%) by the National Bureau of Economic Research. Chambers, Jennings and Thompson (1998) also employ a 20% straight-line amortization rate as one of several models they examine. While they observe slightly better results when the current and five lagged R&D outlays are used (implying a 16 2/3 % straight-line amortization rate), we use only four lagged R&D outlays due to data constraints.

7. For practical reasons, no attempt is made in this study to include proxies for other information in our models. We are unaware of omitted variables that could potentially bias our inferences. As a robustness check, we did explore an alternative source of conservatism for our Canadian sample. Of the 29 Canadian firms in the sample, 15 (14) report depreciation on an accelerated (straight line) basis. Including a depreciation policy dummy in our estimation of equation (3) does not alter our main inferences. Similar tests were not possible for our Australian sample, as the vast majority of sample firms used the straight line method.

8. The 497 (252 + 245) Australian firm-year observations is after deletion of 14 firm-year observations identified as outliers (R-student values greater than ± 3) in our preliminary model estimation.

9. The 314 (99 + 215) Canadian firm-year observations is after deletion of 10 firm-year observations identified as outliers (R-student values greater than ± 3) in our preliminary model estimation.

10. As a caution, the degrees of freedom in Table 2 are overstated to the extent that we pool multiple observations for the same firm, an approach also used by Aboody and Lev (1998).

11. In Table 2, the market-to-book ratio is based on reported rather than adjusted book values, for capitalizers, as market values are only available for reported book values.

12. Smith and Watts (1992) report that firms with a larger ratio of intangible growth opportunities to total assets have lower levels of debt. Our finding that capitalizers have higher market to book ratios and lower leverage is consistent with the assets-in-place argument of Smith and Watts (1992).

13. The high R^2's are due to the inclusion of the scale proxy as an independent variable. When all variables in the model are divided by the scale proxy, the R^2's of the estimated models in Panel A of Table 3 are 67.9% and 66.9 % for the capitalizer and expenser GAAP models, respectively.

14. For the equation (3) model reported in panel B of Table 4, an F-test of the linear restriction that $c_1 = c_2$ could not be rejected at the 0.10 level. Thus a dollar of "as-if" expensing book value is valued the same as a dollar of intangible capital as represented by D. Due to the small Canadian sample, a similar F-test was not performed for the results reported in Panel B of Table 6. We view the Australian results to be more reliable on this issue, due to the larger sample.

15. The valuation coefficients for capitalized D appear to be rather high, relative to the corresponding empirical estimates for the Australian sample. As a caution, we remind the reader that the Canadian top 50% partition, consisting of 50 pooled observations, is a small sample, relative to 126 pooled observations for the corresponding Australian sample.

16. We thank the reviewers for suggesting the first two robustness checks explored in the section on robustness checks.

17. None of the key results reported in Tables 3 to 8 are affected by the inclusion of year-end calendar and industry indicator variables. We prefer reporting our models without controlling for fixed effects, for the sake of enhanced degrees of freedom and parsimony.

18. Unfortunately, the Canadian capitalizer sample is too small for GLS estimation. However, our Australian results for *H1* and *H2* are not sensitive to the use of OLS. We simply do not know whether this conclusion applies to the Canadian sample.

19. The GLS results are somewhat more plausible that the OLS results reported in Table 7 for the AMORT and CYEXP variables in Eq. (4). With respect to AMORT, the GLS estimate of d_5 in Eq. (4), −5.633, is significant at the 0.05 level. The corresponding OLS coefficient estimate is insignificant in Table 7. With respect to CYEXP, the GLS estimated coefficient of −0.192 is insignificant and less negative than the corresponding estimate, −3.494, reported in Table 7. Thus, the market assigns a value of zero to expensed R&D outlays of the current period, for capitalizers, consistent with our corroboration hypothesis. The estimated valuation coefficient of a dollar of current

period R&D outlays should be lower bounded at zero, as is the case with any other current period investment.

20. In additional tests (not reported) we test the null of zero value relevance for the researcher-created R&D asset, using a specification similar to equation (3). For the full (top 50% partition) sample of 160 firm-year observations (80 firm-year observations) the estimated valuation coefficient per dollar of researcher-created R&D asset is 4.203 (2.213). For both the full and partitioned samples the estimates are significantly different from zero. However, the magnitudes exceed their theoretical prediction of unity, presumably because we measure economic R&D capital with error.

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LOBBYING OF THE INTERNATIONAL ACCOUNTING STANDARDS COMMITTEE: THE CASE OF CONSTRUCTION CONTRACTS

Robert K. Larson and Karen L. Brown

ABSTRACT

Many cultural, political, economic and other environmental factors have been suggested as impediments to the efforts of the International Accounting Standards Committee (IASC) to harmonize international accounting standards. We investigate the relationship between lobbyists' position, and: (1) their home countries' financial accounting standards; and (2) their home countries' tax rules. The factors are tested both separately and jointly to increase our understanding of lobbying and obstacles to harmonization. Long-term construction contracts are used as our case study. Construction contracts were traditionally accounted for by either the completed contract method (CCM) or the percentage of completion method (PCM). Originally, the IASC's Standards (IASs) allowed both CCM and PCM. Thus, most countries' accounting standards complied with IASs. However, the IASC's Comparability Project, beginning with Exposure Draft (ED) 32, proposed to eliminate CCM. Thirty-nine comment letters submitted on ED 32 contained specific references to long-term construction contracts. Although almost 60% opposed the complete

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elimination of CCM, the IASC eliminated it. However, in many ways, the IASC co-opted lobbyists by allowing the Zero Profit Method, which may effectively result in the same timing of profit recognition as CCM. Support is found for a strong link between respondents' lobbying position and both their home country's accounting standards and tax laws. Each factor may hinder the harmonization process. A high positive correlation also exists between the accounting standards and tax laws of lobbyists' countries. Beyond the possible importance of the tax and financial reporting linkage affecting harmonization, the issue of multicollinearity should signal caution when interpreting the results of lobbying studies that simultaneously include highly correlated variables in the same model.

INTRODUCTION

The International Accounting Standards Committee (IASC) was established in 1973 to promote the global harmonization of accounting standards. The IASC has gained significant recognition in recent years and today is recognized as the leader in harmonizing international accounting and reporting standards (Choi et al., 1999; Kelly, 1999; Morris & Ward, 1999).

However, the IASC has met some resistance in its efforts to harmonize international accounting and reporting requirements. The IASC has been criticized for providing standards that were too broad, thus allowing so many alternatives that it was easy for many countries to comply with IASs without having to change any of their existing financial accounting standards. While some argue that multiple methods may be consistent with improving financial statement comparability internationally (McLeay et al., 1999), many more believe that the IASs' many accounting alternatives, as well as the often minimal disclosures, are detrimental to harmonization and create standards at the level of the lowest common denominator (Wallace, 1990; Meek & Saudagaran, 1990).[1] The Comparability Project, beginning in 1989 with Exposure Draft (ED) 32, started a major movement by the IASC to address these and other problems (Saudagaran & Meek, 1997).

Many cultural, political, economic and other environmental factors have been suggested as impediments to the harmonization of international accounting standards. If the IASC is ultimately to prevail in its harmonization endeavors, then the forces influencing its work need to be better understood. The need for testing theories in international accounting research has been repeatedly mentioned both generally (Wallace & Gernon, 1991; Falk, 1994; Gernon & Wallace, 1995), and in regards to the IASC (Kenny & Larson, 1993). Therefore, this study empirically tests theories and hypothesized factors, both separately and jointly.

The study's objective is to investigate the lobbying of the IASC in order to test the influence of national tax and accounting standards on lobbyists' positions and ultimately on IASs themselves. While some empirical support exists of separate relationships between lobbyists' positions and their home countries' tax or accounting standards, we empirically test their separate and combined effect.

The hypothesized factors are tested utilizing the issue of long-term construction contracts. Originally, the IASC allowed a free choice of either the completed contract method (CCM) or the percentage of completion method (PCM). Then, most countries' accounting rules complied with IASs. However, ED 32 proposed eliminating many previously allowed alternatives, including CCM.

Thirty-nine comment letters submitted concerning ED 32 contained specific reference to long-term construction contracts. Although 59% opposed the complete elimination of CCM, the IASC eliminated it. However, the IASC may have co-opted lobbyists by allowing use of the Zero Profit Method (ZPM), which may effectively result in the same timing of profit recognition as CCM.

Support is found for a strong link between respondents' lobbying positions and both their home countries' accounting standards and tax laws. As the literature suggests, each factor may slow the harmonization process. However, the analysis also found a high correlation between lobbyists' countries' accounting standards and tax laws, which suggests caution in citing any one particular variable as the cause for positions which may impede harmonization. Overall, the paper supports the concept of the "market for excuses" to justify existing practices (Watts & Zimmerman, 1979).

BACKGROUND AND LITERATURE REVIEW

The International Accounting Standards Committee and Harmonization

The IASC membership now includes 143 professional accountancy bodies in 104 countries (IASC, 2000a). The IASC's standards (IASs) are used in a large number of countries and are accepted on most major stock exchanges outside of North America, including those in London, Frankfurt, Zurich, Hong Kong, Tokyo and Amsterdam (IASC, 2000b, c). Currently, the IASC is waiting to see whether IASs are deemed to be sufficiently comprehensive and of high enough quality so that the International Organization of Securities Commissions (IOSCO) and individual securities commissions, such as the U.S. Securities and Exchange Commission (SEC), will endorse and accept them for use (Turner & Godwin, 1999; Pownall & Schipper, 1999; Harris & Muller, 1999; Zeff, 1998; Levitt, 1998).[2]

Hypothesized Factors

Many cultural, political, economic and other environmental factors are suggested as impediments to the harmonization of international accounting, just as these same factors are suggested to explain the differences in accounting and financial reporting between countries (Choi et al., 1999; Nobes, 1998; Nobes & Parker, 1998; Radebaugh & Gray, 1997). Only a few empirical studies relating to the lobbying of the IASC have examined these suggested factors individually, such as culture (MacArthur, 1996) or taxes (Guenther & Hussein, 1995).

One area not adequately examined is whether respondents to IASC EDs specifically attempt to support their existing domestic financial accounting standards. Kenny and Larson (1993) empirically examined through content and other analyses all responses and respondents to IASC ED 35, accounting for joint ventures. They related responses to institutional theory and traditional lobbying theories (i.e. accounting choice/positive accounting theory). One part of their analysis grouped respondents from the U.S. and U.K. together. They noted that this group opposed changes that conflicted with home country standards, but they did not individually test the position of each lobbyer against the respondent's country's financial reporting standards.

Thus, an issue raised as an impediment to harmonization is simply resistance to change (Wyatt, 1997). Different terms have been used to describe various aspects of this problem, including nationalism (Samuels & Piper, 1985; Wolk & Heaston, 1992; Saudagaran & Meek, 1997; Nobes & Parker, 1998), emotionalism (Wyatt, 1997) and most prominently, culture (Gray, 1988).

MacArthur (1996) examined IASC ED 32 comment letters from corporations using content analysis. He found support for the hypothesis that corporate responses reflect the cultural influences of the home country as suggested by Hofstede (1980) and Gray (1988). So while there may be some question as to whether culture is an intervening or moderating variable (Fechner & Kilgore, 1994), MacArthur (1996) found culture as applied through Gray's model to have explanatory power in corporate responses to ED 32. While MacArthur closely examined corporate responses for cultural influences, he did not directly test home country accounting practice with a firm's lobbying position.

Inter-Relationships of Hypothesized Variables

Certain factors hypothesized to influence accounting harmonization have been closely linked. For example, Salter and Doupnik (1992) found that the type of legal system that a country uses is often closely associated with the classification of that country's accounting system. This presents problems when trying to determine cause and effect, to decide whether a factor is a moderating or intervening variable, or to investigate what variables are relevant or redundant

(Nobes, 1998). Indeed, several models have included numerous variables in various configurations to explain the development of accounting. Most have not been empirically tested, and those tested often used regression rather than path analysis as these models suggest. This issue of multicollinearity has been recently noted, but not fully addressed.

An example of possible multicollinearity is the relationship between financial and tax reporting. Many countries have tied financial reporting to their tax laws (Nobes & Parker, 1998; Lamb et al., 1998; Lamb, 1996; Porcano & Tran, 1998). Generally speaking, this has been the case in most continental European countries, but not in most Anglo-Saxon countries (Eberhartinger, 1999; Hoogendoorn, 1996; OECD, 1987). This has significant implications for accounting harmonization. "One of the biggest impediments to uniform international accounting standards is the requirement in many countries that financial reporting standards conform to tax regulations" (Guenther & Hussein, 1995, 132).

Accounting for Long-Term Construction Contracts

Accounting for long-term construction contracts requires a decision of when to recognize revenues and expenses. Traditionally, two accounting methods have been used: CCM and PCM. So, when is it appropriate to use PCM or CCM? This question is important, because depending upon whether CCM or PCM is used, a company's reported financial results "can vary greatly" (Trotman, 1982).

International Diversity

Internationally, wide diversity in accounting for construction contracts has existed for many years (Price Waterhouse (PW), 1979, 1991; Trotman, 1982; Gray et al., 1984; Coopers & Lybrand (CL), 1991, 1993; FEE (Federation des Experts Comptables Europeens), 1992). PW (1979) reported that PCM was the required or predominant practice in 43 countries whereas CCM was the predominant practice in 19 countries. More recently, FEE (1992) surveyed European construction companies and found that 55% used PCM and 32% used CCM. CCM was especially popular in France and Germany. Similarly, Salter et al.'s (1996) survey of actual corporate practices in 27 countries done in 1992 found that two-thirds used PCM.

In many countries, if CCM is used for tax purposes, then CCM also must be used for financial reporting purposes (Lamb et al., 1998). Tan (1996) claims that a key reason Singapore refused to eliminate CCM is that country's requirement that tax and financial reporting methods must match. In Singapore, eliminating CCM would have had a major tax effect.

U.S. Standards

The U.S. allows use of both PCM and CCM for long-term construction contracts (Accounting Research Bulletin (ARB) 45, SOP 81-1). PCM requires recognition of a portion of the contract price (and profits) based on the percentage of the contract that has been completed. PCM requires estimates of contract costs and the extent of progress toward completion. Generally, PCM is preferred when reasonably dependable estimates of costs to complete the contract can be made.

CCM allows deferral of income and expense recognition until the contract is completed. CCM allows the matching of actual income and expenses. Under ARB 45, CCM is acceptable only if the results are not materially different than when using PCM; or when reasonably dependable estimates of cost to complete and the extent of progress toward completion cannot be made.

Before 1986, the U.S. allowed use of CCM for tax purposes, thus deferring revenue and the resulting payment of tax until the contract was completed (Pirrong, 1987; Hawkins, 1989). Today, essentially all construction contracts must use PCM for U.S. tax purposes (Jensen & Craig, 1998). For financial reporting, the AICPA's annual survey of 600 U.S. firms found that firms used PCM from a low of 82% in 1973 to a high average of 97% in recent years (AICPA 1996).

IASC Standards

The IASC initially addressed long-term construction contracts with IAS 11, which became effective in 1980. IAS 11 allowed both CCM and PCM. Given the flexibility of the original IAS 11, most countries' accounting standards were in compliance with it.

In 1989, the IASC released ED 32 and proposed eliminating CCM as an accounting alternative. After reviewing the comment letters, the IASC eliminated CCM when it approved the Statement of Intent in 1990. The Statement of Intent stated that the revisions to IAS 11 were among the issues exposed in ED 32 and subsequently approved by the Board without substantive change.

In 1992, IASC ED 42, Construction Contracts, was issued not to reconsider whether to eliminate CCM, but to seek comments as "to the adequacy and appropriateness of other improvements made to IAS 11." With ED 42, the IASC officially sought comments on other more technical issues, such as the disclosure requirements and the methods for calculating PCM. The final revised IAS 11 was issued in 1993 and became effective on January 1, 1995.

Issues Regarding the Choice of Accounting Method for Construction Contracts

The issues of profit and revenue recognition are central to the proper accounting for long-term construction contracts. Conceptually, the debate centers on the proper recognition (realization) of income, which is discussed in both the U.S. and IASC Conceptual Frameworks.

Among the issues, there is evidence that external users of financial statements do not properly adjust their analyses when firms use PCM vs. CCM. For example, Trotman and Zimmer (1986) found that some users did not understand that significantly different financial statements may result from these different accounting methods.

A central criticism of PCM itself involves the use of estimates, which can be wrong. Errors in calculating a contract's ultimate profitability with PCM can cause serious consequences (Hamburger, 1988). Construction companies have been known to go bankrupt while officially reporting a profit using PCM (Orlando, 1984).

HYPOTHESIS DEVELOPMENT

A large body of literature has examined the lobbying of accounting standard-setting bodies in the U.S., U.K. and Australia.[3] Comparatively, the lobbying literature examining the IASC and its dues process is relatively sparse (see, for example, Wallace, 1990, 1993; Kenny & Larson, 1995; Larson, 1997). While non-IASC studies may provide some foundational understanding of the IASC (Saemann 1999), more research needs to specifically explore the various global forces influencing the IASC. This is warranted given the IASC's increasing importance and acceptance both globally and in the U.S. It is also necessary given warnings that country specific lobbying study conclusions are not always generalizable in different institutional contexts (Ang, Gallery & Sidhu, 2000).

Resistance to Change from National Accounting Rules

Some suggested factors, such as opposition to any standard that conflicts with domestic standards (Kenny & Larson, 1993), have not been fully empirically tested. The first question is quite basic in that it seeks to determine whether the underlying issue for lobbyists is simply a resistance to change from their own countries' financial reporting standards. For example, are lobbyists supporting the use of CCM primarily or exclusively from countries that allow or require CCM for financial accounting?

H1: Respondents supporting the use (elimination) of CCM are primarily from countries that allowed or required (disallowed) use of CCM for financial reporting purposes.

Resistance to Change from National Taxation Rules

Prior literature suggests that tax regulations may significantly affect accounting harmonization. Guenther and Hussein (1995) used content analysis to study the comment letters sent in regards to the LIFO controversy (IASC ED 32 and IASC ED 38). In their conclusion, they "suggest that the preference for and use of the LIFO inventory method are confined to those countries in which LIFO provides a tax advantage." In other words, a lobbyist's home country's tax laws affect the lobbyist's position. This supports the economic consequences view as PCM usually causes significantly accelerated timings of cash outflows when compared with CCM.

An anecdotal example of tax reasons slowing harmonization via IASs comes from Singapore. Singapore explicitly decided not to comply with four revised IASs, including the elimination of CCM (Tan, 1996). This is an abrupt change for Singapore, which until these revisions had adopted standards almost completely in compliance with IASs. This study seeks further empirical evidence on the influence of taxation on harmonization via IASs.

H2: Respondents supporting the use [elimination] of CCM are primarily from countries that allowed or required [disallowed] use of CCM for tax purposes.

National Financial Accounting and Taxation Linkages

Prior literature suggests that the tie between tax regulation and financial reporting may have a significant effect on accounting harmonization. Studies have also examined the continued ties between tax and financial reporting in many countries of the world (Eberhartinger, 1999; Lamb et al., 1998; Porcano & Tran, 1998; Nobes & Parker, 1998; Lamb, 1996; OECD, 1987). Guenther and Hussein (1995) primarily focused on tax influences and only dealt with the influence of lobbyists' home country financial reporting rules in a limited way. Nobes (1998) theoretically proposes that taxation is highly correlated with other factors, thus obscuring the true nature of the relationships being examined.

If two independent variables, such as financial and tax standards, are highly correlated, and both are highly relevant to the explanation for the variability

of the dependent variable (some aspect of lobbying), then using both related independent variables can over-specify the model. When the concepts are highly correlated, then one variable proxies for the other. With this multi-collineariy, the inclusion of both variables may confound statistical analyses, causing unexpected results and reduced statistical significance. To the extent that financial and tax standards are highly related in countries with lobbyists, using both concepts to explain the tendency to lobby may cause analytical difficulties.

Therefore, we test whether there exists a positive correlation between tax and financial reporting requirements on construction contracts among respondents' home countries in order to better understand the relationship of various hypothesized factors in the lobbying of the IASC.

H3: For countries with respondents on the issue of construction contracts, there is a positive correlation between tax and financial reporting requirements.

METHODOLOGY

Beginning with ED 32 in 1989, the IASC opened up its due process of accounting standard-setting. The IASC's accounting standard-setting procedures are now fairly similar to FASB's and typically include the issuance of EDs for proposed standards, comment periods, revisions, re-exposures if necessary, and issuance of final statements. Copies of most comment letters written regarding IASC EDs are publicly available. IASC comment letters for ED 32 and ED 42 were obtained directly from the IASC. Data about accounting and tax standards in respondents' countries were obtained from multiple sources, including CL (1991, 1993), PW (1979, 1991, 1995), and PW's Doing Business in . . . Series, DRT (Deloitte Touche Tohmatsu) International's International Tax and Business Guide Series, Gray et al. (1984), IASC (1988), KPMG Peat Marwick and Ordelheide (1995), and Arthur Andersen (AA) (1998).

All responses to ED 32 (about 140 letters and 750 pages) were reviewed by three individuals to identify letters and respondents that specifically discussed the proposed revisions to IAS 11. Forty respondents, contained in 39 letters, commented on ED 32's proposed changes regarding long-term construction contracts, including the elimination of CCM (see Table 1).[4] Analysis was performed on them as well as the 40 letters sent in response to ED 42, Construction Contracts (see Table 1).

Respondents were categorized following the methodology of Kenny and Larson (1995). The data were analyzed in several ways to test the hypotheses.

Table 1. ED 32 Respondents that wrote Comment Letters regarding Construction Contract Accounting, and Respondents to ED 42, Construction Contracts.

ED 32	ED 42	Country/Professional Organization
		Australia
X	X	Australian Accounting Research Foundation (Accounting Standard-Setting Body)
X		KPMG Peat Marwick Hungerfords
X		Group of 100 (Association of Senior Accounting & Financial Executives representing major public & government corporations)
	X	Australian Bankers' Association
X	X	Coles Myers Limited
X		CRA (Financial Services Pty Limited)
X		Mayne Nickless Limited
X		Western Mining Corporation
		Belgium
	X	Institut des Reviseurs d'Entreprises (IASC Member)
		Canada
	X	The Canadian Institute of Chartered Accountants (CICA) (IASC Member)
X		Accounting Standards Committee of the CICA (IASC Member)
	X	Certified General Accountants' Association of Canada (IASC Member)
X		M. P. Carscallen, Coopers & Lybrand, Canada
		Cyprus
X		The Institute of Certified Public Accountants of Cyprus (IASC Member)
		Denmark
	X	Foreningen af Statsautoriserede Revisorer (FSR) (Danish Accounting Standards Committee) (IASC Member)
		European Bodies
	X	Commission of the European Communities
X	X	Federation des Experts Comptables Europeens (FEE)
	X	Federation Bancaire de la Communaute Europeene (Banking Federation of the European Community)
		France
X	X	Compagnie Nationale des Commissaires aux Comptes and Ordre des Experts Comptables et des Comptable Agrees (IASC Member)
X		Compagnie Generale D'Electricite

Table 1. Continued.

ED 32	ED 42	Country/Professional Organization
		Germany
X	X	Institut der Wirtschaftrprufer (IDW) (IASC Member)
X		GEIFU (German Financial Executives Institute affiliate)
X		BASF
		Ireland
	X	The Institute of Chartered Accountants in Ireland (IASC Member)
		Japan
X		Japanese Institute of Certified Public Accountants (IASC Member)
X		The Security Analysts Association of Japan
X		Keidanren – Japan Federation of Economic Organizations
		Kenya
X		Institute of Certified Public Accountants of Kenya (IASC Member)
		Netherlands
X	X	Raad voor de Jaarverslaggeving (Council for Annual Reporting) (Standard Setting Body)
	X	Royal Dutch/Shell Group (see also UK)
		New Zealand
	X	New Zealand Society of Accountants (IASC Member)
		Norway
X		Norges Statsautoriserte Revisorers Forening (IASC Member); Joint commentary issued by the Norwegian Institute of State Authorised Public Accountants (NSRF), the Oslo Stock Exchange and the Norwegian Accounting Standards Board (NRS)
	X	Norsk RegnskapsStiftelse (IASC Member)
		Pakistan
	X	Institute of Chartered Accountants of Pakistan (IASC Member)
		Singapore
X		Institute of Certified Public Accountants of Singapore (IASC Member)
		South Africa
X		South African Institute of Chartered Accountants (IASC Member)
X		The South African Breweries Limited

Table 1. Continued.

ED 32	ED 42	Country/Professional Organization
		Sweden
X	X	Foreningen Auktoriserade Revisorer (FAR) (The Swedish Institute of Authorized Public Accountants) (IASC Member)
		Switzerland
X	X	Schweizerische Kammer der Bucher-Steuer-und Treuhandexperten (Treuhand Kammer) (Swiss Institute of Certified Accountants) (IASC Member)
X		Association of Swiss Exchanges
	X	Nestle S.A.
		Trinidad and Tobago
X		Institute of Chartered Accountants of Trinidad and Tobago (IASC Member)
		United Kingdom
	X	The Consultancy Committee of Accountancy Bodies (IASC Member)
	X	Institute of Investment Management and Research
	X	The Law Society
	X	British Bankers' Association
X		The British Petroleum Company PLC
	X	George Wimpey Plc
	X	John Laing Construction Limited
	X	Royal Dutch/Shell Group (see also Netherlands)
		United States
X	X	American Institute of Certified Public Accountants (IASC Member)
	X	Institute of Management Accountants (IASC Member)
X		Securities and Exchange Commission (SEC)
	X	Jim Leisenring - Financial Accounting Standards Board
	X	Financial Executives Institute
	X	New Jersey Society of Certified Public Accountants
	X	New York Society of Certified Public Accountants
X	X	Arthur Andersen & Co.
	X	Deloitte Touche Tohmatsu International
	X	Ernst and Young International
X	X	Citicorp-Citibank
X		Pacific Telesis
X		USX Corporation
	X	CPC International, Inc.
X		Kenneth Most, Florida International University
	X	Willis A. Smith

Table 1. Continued.

ED 32	ED 42	Country/Professional Organization
		Zimbabwe
X	X	Institute of Chartered Accountants of Zimbabwe – letter 4/25/89 - Accounting Procedures Committee report (IASC Member)
X		Institute of Chartered Accountants of Zimbabwe – letter 5/26/89 - full Standard Setting Board report (IASC Member)

Content analysis was used to determine lobbyers' positions in regards to eliminating CCM, as well as justifications for their positions. Chi-squares were performed to test *H1* and *H2*. For statistical tests, Trinidad and Tobago was excluded because its only response did not definitively agree or disagree to the elimination of CCM, and Kenya was excluded due to insufficient data. To test *H3,* a correlation was performed comparing tax and accounting rules for long-term construction contracts of countries represented in the sample.

RESULTS AND DISCUSSION

Characteristics of Lobbyers

Thirty-nine letters representing 40 organizations specifically discussed the revisions to IAS 11 in their ED 32 comment letters. These lobbyers represented 18 countries, including Australia (7 letters), the U.S. (7 letters), Germany (3 letters) and Japan (3 letters) (see Table 2). In terms of organizational categories, IASC members were the largest responders with 15 letters, followed by non-banking corporations (10 letters), accounting standard-setting bodies (3 letters) and public accounting firms (3 letters) (see Table 3).

Forty letters were received commenting on ED 42. The U.S. provided 12 letters, followed by the U.K. (7 letters), Belgium (4 letters) and Australia (3 letters). In terms of organizational categories, IASC members were the largest responders with 16 letters, followed by non-banking corporations (6 letters), banks and banking associations (4 letters), accounting standard-setting bodies (3 letters), public accounting firms (3 letters) and other accounting organizations (3 letters). Eleven organizations wrote comments on long-term contracts for both ED 32 and ED 42. This low level of participation through letter writing is consistent with prior lobbying literature (Walker & Robinson, 1993).

Table 2. Analysis of Responses by Country to IASC ED No. 32, Proposed Change in Treatment of Construction Contracts, including Elimination of Completed Contract Method (CCM).

Country of Respondent	Country Allowed or Required to Use CCM: Financial Accounting	Country Allowed or Required to Use CCM: Tax Purposes	Total No. of Letters	Agreed With IASC to Eliminate CCM	Disagreed With IASC, in Some Form Wanted To Keep CCM	Technical Comments: No Clear Position on CCM
Australia	No	No	7	6		1
Canada	Yes	Yes	2		2	
Cyprus	Yes	Yes	1		1	
France	Yes	Yes	2		2	
Germany	Yes	Yes	3		3	
Japan	Yes	Yes	3		3	
Netherlands	Yes	Yes	1		1	
Norway	Yes	Yes	1	1		
Singapore	Yes	Yes	1	1		
South Africa	Yes	Yes	2		2	
Sweden	Yes	Yes	1		1	
Switzerland	Yes	Yes	2		2	
Trinidad & Tobago	Yes	Yes	1			1
U.K.	No	No	1	1		
U.S.	Yes	No	7	1	5	1
Zimbabwe	Yes	Yes	2	1	1	
Total in Analysis			37	11	23	3
Kenya	N/A	N/A	1	1		
FEE	N/A	N/A	1	1		
Total			39	13	23	3

Overview of Positions of Lobbyers

Twenty-three of the 39 ED 32 letters, or 59%, supported the retention of CCM in at least some form. A number of lobbyers wanted CCM to be required in certain circumstances where the outcome of a long-term contract could not be reasonably predicted. Even more common was the suggestion that the CCM be made an allowed alternative method.

When examining responses by category of respondent, no discernible pattern is present in most cases due to their split positions or small number of responses. The only exception is the category of IASC member bodies, where only 4 of the 15 lobbying members supported the elimination of CCM.

Table 3. Analysis of Responses by Category to IASC ED No. 32, Proposed Change in Treatment of Construction Contracts.*

Category of Respondent	Total Responses*	Agreed With IASC to Eliminate CCM	Disagreed With IASC, in Some Form Wanted To Keep CCM	Technical Comments: No Clear Position On CCM
IASC Member Bodies**	15	4	10	1
Accounting Standard Setting Bodies	3	2	1	
Other Accounting Organizations	1	1		
Public Accounting Firms	3	1	1	1
Subtotal	22	8	12	2
Corporations (non-banking)	10	5	5	
Business Trade Associations	1		1	
Banking	1		1	
Security Regulators	1			1
Securities Analysts	1		1	
Stock Exchanges	2	1	1	
Financial Executives	2	1	1	
Academe	1		1	
Subtotal	19	7	11	1
Total**	41	15	23	3

* This table lists only those respondents that explicitly discussed the proposed changes in their comment letters. Respondents that did not discuss this particular issue in their letters may have been giving implicit approval to the IASC position, but are not included here or in the analysis.

** While there were 39 letters in total, the number of respondents differs for two reasons. First, there was one letter in favor of the IASC position jointly written by three parties: the Norwegian Institute of State Authorized Public Accountants (NSRF), the Oslo Stock Exchange and the Norwegian Accounting Standards Board (NRS). Second, there were two separate letters with conflicting recommendations from the Institute of Chartered Accountants of Zimbabwe.

Conversely, a review of ED 32 respondents by country showed definite patterns. Respondents from a particular country were usually united in their position. Of all the countries with respondents, only the U.S. and Zimbabwe had lobbyers with opposite positions on the elimination of CCM. A chi-square was performed to investigate if respondents from a particular country tended to lobby consistently in a particular manner. Consistent with prior literature, this idea was supported at the 0.014 level of significance. This finding supports

the further analyses and testing of our hypotheses based on differences of lobbyers due to their countries of domicile.

In contrast to the useful analysis of ED 32, content analysis of ED 42 found that most respondents had moved beyond the CCM debate as instructed by the IASC.[5] Therefore, the rest of the analysis focuses primarily on the relevant responses generated by ED 32.

Lobbyists and their Countries' Financial Reporting Standards

There appears to be a relationship between lobbyists' positions regarding the elimination of CCM and their country's own accounting standards. *H1* was supported at the 0.001 level with a chi-squared value of 18.43 (see Table 4, Panel A). Of the 16 countries represented by respondents in the analysis, only Australia and the U.K. did not allow the use of CCM. Of the eight letters from those two countries, not one opposed the elimination of CCM. This included the four corporate responses from Australia and the one corporate response from the U.K. Conversely, in the U.S. where CCM is allowed, only one of the seven letters supported the elimination of CCM. Lobbyers appear highly influenced by their home countries' accounting rules for long-term construction contracts.

Table 4. Frequencies of Individual Lobbying Responses on ED 32 Cross-Tabulated by Whether Country Allowed or Required Completed Contract Method (CCM) for Financial or Tax Purposes.

Use of CCM in Country	Lobbying Responses: Eliminate CCM	Lobbying Responses: Keep CCM	Total Responses
Panel A: Financial Reporting			
CCM Allowed or Required	4	23	27
CCM Not Accepted	7	0	7
Total	11	23	34
	$\chi^2 = 18.43$, $p = 0.001$		
Panel B: Tax Purposes			
CCM Allowed or Required	3	18	21
CCM Not Accepted	8	5	13
Total	11	23	34
	$\chi^2 = 8.19$, $p = 0.004$		

Lobbyists and their Countries' Tax Standards

H2 was supported at the 0.004 level of significance with a chi-squared value of 8.19 (see Table 4, Panel B). Lobbyers appear to be highly influenced by the tax regulations in their home countries. This supports the economic consequences notion that lobbyists will work to protect their financial interests when they are threatened (i.e. firms will lobby to protect the real cash flow advantages associated with certain beneficial tax regimes).

Content Analysis of Justifications for Lobbyists' Positions

To better understand lobbyist motivations and further test the hypotheses, content analysis was performed to analyze the stated reasons for their positions. The written views of those supporting the elimination of CCM were surprisingly terse in response to ED 32. British Petroleum, the Institute of CPAs of Kenya and five Australian supporters gave no reason whatsoever for wanting to eliminate CCM. Another Australian lobbyist just noted that the proposal would be in compliance with Australian accounting rules. Of the seven Australian lobbyists, only the Australian Accounting Research Foundation's letter gave substantive reasons. They believe that it agrees with the IASC framework on revenue recognition. FEE also believes that the change is supported by the realization principle and the true and fair view. Unexpectedly, respondents from Norway and Singapore discuss why it is not practical to eliminate CCM, even when supporting its elimination.

Opponents to eliminating CCM cite multiple reasons to support their position. On a practical level, over a dozen respondents stated that there are times when it is difficult to make reasonable estimates, and, therefore, CCM should be kept in some form. Several respondents from Japan and continental Europe noted that CCM is in widespread use in their own country and/or other countries. Several lobbyists, including two from Germany and one from Switzerland, specifically cite tax regulations for opposing the elimination of CCM. On a more conceptual level, four cite prudence and three cite the realization principle as reasons for wanting to keep CCM. The Japanese Institute of CPAs believes that eliminating CCM does not match the IASC framework.

Even though lobbyers of ED 42 were told not to rehash the elimination of CCM, several did so and provided justifications for their positions. Commentators from Belgium, the Netherlands, Switzerland, and the Commission of the European Communities advocated keeping CCM in some form. Two of these respondents mentioned the tax implications of eliminating CCM.

In examining the stated reasons for opposition to the elimination of CCM, neither *H1* nor *H2* is supported exclusively. Reasons using justification of existing financial reporting practices or national tax regulations are used in roughly equal measure. This supports the "market for excuses" notion that lobbyists will use multiple reasons to support their positions. However, the results do not resolve the question of whether one factor is dominant. Indeed, the results support *H3* and the suggestion that these factors tested in *H1* and *H2* are highly related, and indicate that care needs to be taken before ascribing the results to any single factor being tested (Nobes, 1998).

The CCM vs. ZPM Debate

The content analysis also revealed a surprising question about the IASC's proposed elimination of CCM. ED 32 and ED 42 were billed by the IASC as requiring PCM and eliminating CCM. Indeed, the EDs definitely disallow CCM as a free choice. The interesting question is what method should be used if there is insufficient data to make reliable estimates.

> When the outcome of a construction contract cannot be estimated reliably:
> (a) revenue should be recognized only to the extent of contract costs incurred that it is probable will be recoverable; and
> (b) contract costs should be recognized as an expense in the period in which they are incurred. (Revised IAS 11, par. 32.)

This is referred to as ZPM and is used with construction contracts under certain circumstances in U.S. GAAP (Bloomer, 1996).

Indeed, many respondents opposing the elimination of CCM questioned whether the revised IAS 11 actually, or effectively, eliminated CCM. Under both CCM and ZPM, profit is not recognized until the contract is completed. Can one prove that a firm can make a reliable estimate if it chooses not to do so? Therefore, has anything really changed with the elimination of CCM?

Several lobbyers strongly question this "change." The Raad voor de Jaarverslaggeving (RvdJ) (Council for Annual Reporting in the Netherlands) wrote that under the proposal if one cannot "estimate reliably, the profit is not recognized until after the end of the contract. This means in practice the same result as when the CCM is applied. It is . . . confusing that in the summary table the CCM is classified as an eliminated treatment."

The Institute of Chartered Accountants of Zimbabwe in their letter dated 5/26/89 support keeping CCM and question whether CCM is really being eliminated. They note that allowing ZPM "has the effect of re-instating the CCM without formally doing so."

M. P. Carscallen of CL Canada writes that "the net income and balance sheet positions are much the same under either method (CCM or ZPM)." Interestingly, several respondents acknowledge and approve of the ZPM as a way to essentially keep the CCM available.

Result of CCM/ZPM Debate

Even though many opposed eliminating CCM, the IASC still voted to eliminate CCM when approving the Statement of Intent and later the final revised IAS 11. However, by allowing ZPM, the IASC simply may have tried to placate certain of their existing constituencies while pursuing their larger goals (Saemann, 1995; Fogarty et al., 1992). Wallace (1990) notes that the IASC must legitimize itself with both the professional accounting community and multinational corporations. The IASC claimed victory in eliminating alternatives, but it also sought to mollify its existing constituency. Moreover, the initial response by IOSCO to revised IAS 11 was positive (IASC, 1994).

Analysis of H3 and the Issue of Multicollinearity

In order to test *H3*, a correlation analysis was performed. The analysis showed that tax and accounting rules for long-term construction contracts in countries represented in the sample have a correlation of 0.79 (significant at the 0.001 level). The U.S. was the only country in the sample where the allowance of CCM differed for financial and tax reporting requirements (see Table 2).

This again raises the question of causation for the lobbyists' position. Is it tax implications, or is it simply a resistance to change from their existing domestic standards, or both that motivate respondents? This lends empirical support to the more complex views that attempt to model the influences on accounting standard development (such as Nobes, 1998).

ED 32 Lobbyists and Non-Respondents to CCM Debate

It is always an intriguing question why some lobby and others do not. Studies have found that those lobbying tend to be in opposition to at least some of the proposed changes (Tandy & Wilburn, 1992). ED 32 provides an appealing opportunity to measure whether non-respondents have different characteristics than respondents. ED 32 covered a variety of topics, yet many lobbyists chose only to lobby on a few issues. Thus, while many lobbyists chose to ignore the issue of construction contracts, we can be certain that these lobbyists actually knew about the proposal to eliminate CCM. Therefore, comparisons can be

made between those that responded to ED 32 and lobbied in regards to CCM and those that did not.

One possible comparison is between countries that had respondents to CCM and countries that had no respondents to CCM. Nine countries were identified that had respondents to ED 32, but that did not lobby about construction contracts. After determining these nine countries' use of CCM for financial accounting and tax purposes, a chi-square was done to investigate whether the countries with lobbyists had different characteristics than countries without lobbyists. The results found that there were no significant differences between the two groups of countries in respect to either their financial accounting or their tax use of CCM (see Table 5).

A test was then performed to determine the level of correlation between tax and financial reporting for countries without respondents. The test found that countries without respondents had a correlation of 0.5 between tax and financial reporting (not significant at the 0.05 level), which was lower than countries with respondents. While the difference in correlations (0.50 vs. 0.79) is not large and cannot be statistically tested, it is noteworthy that countries with a

Table 5. Frequencies of Lobbying/Non-Lobbying Countries Cross-Tabulated with Allowing or Requiring the Completed Contract Method (CCM) for Financial or Tax Purposes.*

Use of CCM in Country	Had Lobbying Respondents	Did Not Have Lobbying Respondents	Total
	Panel A: Financial Reporting		
CCM Allowed or Required	13	6	19
CCM Not Accepted	2	3	5
Total	15	9	24
	$\chi^2 = 1.36$, $p = 0.243$		
	Panel B: Tax Purposes		
CCM Allowed or Required	12	6	18
CCM Not Accepted	3	3	6
Total	15	9	24
	$\chi^2 = .533$, $p = 0.465$		

* Divides all countries with respondents to ED 32 between countries with respondents that lobbied about the revisions to IAS 11 (eliminating CCM) and countries with respondents that did not lobby on that issue.

financial and tax reporting linkage on this particular issue appear more inclined to lobby. However, as with most of the data in this study, the small sample size requires caution when assessing the results.

Impact on Harmonization

Given the opposition to eliminating CCM, the impact of this change on harmonization was explored to provide greater context to the study. Specifically, was CCM still allowed or required by many countries' accounting standards after the revised IAS 11 became effective in January 1995? As noted in Table 2, when the changes were proposed, most lobbyists' home countries' accounting standards allowed or required CCM.

In 1995, PW did a survey to determine the level of compliance with the revised IASs after their effective date. While PW tried to accentuate the positive in their discussion on compliance with revised IAS 11, detailed reading of their report found that in 13 of the 21 countries surveyed, CCM is allowed or required in some form.

AA's 1998 study also confirms the continued widespread use of CCM. Countries' accounting standards still allowing or requiring the use of CCM in 1998 include Austria, Canada, France, Germany, Italy, Japan, Sweden, Switzerland and the U.S. If the IASC's goal is to harmonize the actual accounting standards of different countries, then it has not been fully successful. At least in the short term, the harmonization of actual standards (*de jure* harmonization) received a setback.

SUMMARY, DISCUSSION AND IMPLICATIONS

The study found an association between respondents' lobbying positions and both their home country's tax and financial accounting standards. This provides evidence supporting the idea that respondents oppose changes in the status quo (either financial or tax reporting), particularly those changes that they perceive might cause them adverse economic consequences in the future.

The results support *H1*; respondents supporting the use of CCM were only from countries that allowed or required use of CCM for financial reporting purposes. This empirically supports the suggestions of Kenny and Larson (1993) and others. The resistance to change is also supported by the fact that numerous countries chose not to change their accounting standards and eliminate CCM. Harmonization may prove more difficult as popular accounting treatments are eliminated.

The results also support *H2*. With the exception of respondents from only one country, respondents supporting the use of CCM are only from countries that allowed or required use of CCM for tax purposes. This supports Guenther and Hussein's (1995) findings that tax considerations may influence and restrict the harmonization process. Given that tax regulations often have serious economic consequences, the lobbying against the elimination of CCM is not surprising.

The stated reasons in the comment letters lend support to Watts and Zimmerman's (1979) market for excuses argument. Over a dozen respondents stated that CCM was widely used and, therefore, should be kept. This supports *H1*. Many others mentioned tax considerations as a reason for keeping CCM. This supports *H2*. Respondents also listed a wide array of other justifications. This supports Watts and Zimmerman's idea that lobbyists will essentially say anything that sounds like it is in the public interest or theoretically sound in order to support their position.

The results support *H3*; a high positive correlation exists between tax and financial reporting requirements in countries that lobbied the IASC on the issue of construction contracts. Thus, the linkage, or level of conformity, between financial and tax reporting may affect harmonization. This study supports the importance of the relationship between tax and financial reporting in many countries as an influence affecting harmonization (Lamb et al., 1998; Nobes & Parker, 1998).

Beyond the possible importance of the tax and financial reporting linkage affecting harmonization, the study also finds support for concerns regarding multicollinearity of hypothesized variables. The support for *H3* means that the results may be explained by either tax rules, financial accounting standards or both, indicating that the use of a single variable may not fully explain the identity of respondents or the lobbying actions of respondents. The issue of multicollinearity should signal caution when interpreting the results of lobbying studies that simultaneously include highly correlated variables in the same model.

This paper also illustrates why research must move beyond simple one-factor studies of the IASC. Global forces are at work that do not neatly mimic the forces within one particular country. This study suggests that more complex models of lobbying behavior need to be tested in order to more clearly determine the relationships of various hypothesized factors to the lobbying of the IASC.

The limitations of this study are primarily in the areas of its focus on a single issue and on the small data sets analyzed. Further issues beyond construction contracts need to be explored to support the generalizability of this study's

findings. Second, most of the analysis utilized relatively small samples for statistical purposes. As always, caution is warranted in interpreting their results.

Our findings suggest further research in several related areas. Given the strong opposition to eliminating CCM and the fact that many countries still allow CCM, future research should investigate how firms claiming to use IASs actually account for their long-term construction contracts. Are companies claiming to use IASs still using CCM? This would follow the recent work of Street et al. (1999), which found high levels of noncompliance with IASs by companies claiming to follow IASs. Unfortunately, Street et al. specifically excluded IAS 11 from their analysis.

While this study raises questions for future research, it also contributes to the current literature in three ways. First, this study represents one of the few empirical works examining the lobbying of the IASC. Second, this study further tests and supports the application of economic consequences in the international standard-setting environment. Finally, by testing and finding support for multiple factors, this study shows that caution must be used in interpreting prior studies' claims that only one factor, such as tax, solely explains the actions of those lobbying the IASC.

NOTES

1. The paper uses the term harmonization in a broad sense and does not equate it with standardization (Meek & Saudagaran, 1990).
2. See Practer (1998), Zeff (1998) and the IASC web site for recent development on the IASC's work.
3. See Walker and Robinson (1993) and Watts and Zimmerman (1986) for a more complete discussion of that literature.
4. There were 39 letters in total, but the number of respondents differs for two reasons. First, one letter was jointly written by three parties: the Norwegian Institute of State Authorized Public Accountants, the Oslo Stock Exchange and the Norwegian Accounting Standards Board. Second, the Institute of Chartered Accountants of Zimbabwe sent two separate letters.
5. Most ED 42 respondents focused on various technical details. The most discussed issue was the proposed increased level of required accounting disclosures. It generated comments from over 40% of the ED 42 lobbyists. Most of these respondents opposed the additional disclosure requirements as being excessive or stringent.

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THE POST-ISSUE PERFORMANCE OF INITIAL PUBLIC OFFERING FIRMS IN THE PEOPLE'S REPUBLIC OF CHINA

Alice P. L. Chui, Heidi F. W. Lau and Y. K. Ip

ABSTRACT

This study seeks to identify issues related to the process of corporatization of the State-owned enterprises (SEO) and to examine the post-issue performance of initial public offering (IPO) firms in the People's Republic of China (PRC). We have discussed in this paper various incentives and potential opportunities for earnings management during the process of corporatization. These include compliance with listing requirements for profitability, right-issue offerings, issue price and the carving out of assets in financial packaging. Based on a sample of 582 A-share IPO firms, we reject the hypothesis that the performance of IPO firms does not decline subsequent to the IPO year. To see if our results depend on the choice of performance measure, we have conducted the tests using different performance measures. Overall, our findings indicate that performance of the IPO firms in the PRC is not sustainable even after controlling for macroeconomic conditions and that there is evidence leading to possible earnings management.

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INTRODUCTION

In the process of transforming into a modern economy, the People's Republic of China (PRC) has become increasingly aware of the urgency and the importance of improving the performance of its State-owned enterprises (SOE). One of its major tasks is to corporatize many of its poorly performed SOEs as share capital enterprises (SCE). In the corporatization process, the SOEs are first transformed to share-holding companies with limited liabilities. These shareholding companies, which are initially still wholly State-owned, are then restructured from limited companies into listed companies. The restructuring of State-owned enterprises into listed companies is also a common practice in other countries such as Russia where a planned economy is being replaced by a market economy. The PRC is transforming its economy in a similar way. It has itself endorsed a socialist market economy with multiple forms of ownership, although State ownership will remain as the dominant form of ownership among the strategic enterprises. The aims of the corporatization of the SOEs are to help reform the SOE management mechanisms so as to improve their efficiency and profitability, and develop a market mechanism for raising capital. The PRC has indicated that it intends to speed up the SOE reform by encouraging three-quarters of its large and medium-sized State firms to issue shares to the public while the State retains control over 3,000 SOEs in the strategic industries, including armaments, public transport, telecommunications and utilities (Reuter, 1997).

The poor performance of the SOEs, due mainly to a lack of incentives and a shortage of capital, has been a substantial financial burden to the PRC government and a major problem for the development of the economy. The performance of the SOEs has deteriorated significantly since 1994. As shown in Table 1, overall after-tax profits started to level off in 1994 and fell by 19.71% and 38.01% in 1995 and 1996 respectively, although they turned around to show some improvement in 1997. The percentage of SOEs suffering a loss relative to the total number of SOEs also began an upward trend starting from 1994 until 1996 with a slight improvement in 1997. On average, over a quarter of the SOEs was unprofitable.

The short-term goals of the SOE reform in the PRC are to revert the losses of the failing SOEs and to sustain the growth of the profitable SOEs. In the longer-term, the reform aims to create conglomerates that will help the PRC compete in the international market. To achieve these goals, the PRC has adopted a strategy of 'managing the large and letting go the small'. This means that the profitable and large SOEs will be restructured into shareholding companies while the smaller and unprofitable SOEs will be given autonomy to the extent that they may be sold to their employees to form shareholding

Table 1. Statistics on National SOEs and Economic Indicators.

Year	Total No. of Enterprises*	LMSOE/ TSOE**	Fixed Assets†	Total Pre-Tax Profits†	After-Tax Growth Rate*	GDP Growth Rate††	GDP‡	Inflation Rate††
1991	75,248	29.67%	13,556.75	1,661.15	3.62%	16.24%	21,617.8	3.5%
1992	74,066	24.50%	15,669.78	1,944.12	33.05%	23.22%	26,638.1	6.3%
1993	80,586	17.97%	15,682.95	2,454.70	52.73%	30.00%	34,634.4	14.6%
1994	79,731	20.30%	18,869.85	2,876.25	1.44%	35.01%	46,759.4	24.2%
1995	87,905	33.53%	25,413.61	2,874.16	−19.71%	25.06%	58,478.1	16.9%
1996	86,982	37.70%	28,328.09	2,737.13	−38.01%	16.09%	67,884.6	8.3%
1997	74,388	23.56%	31,414.58	2,907.22	3.68%	10.15%	74,772.4	2.8%

LMSOE = Number of Loss-making SOEs.
TSOE = Total Number of SOEs.
Sources:
* China Statistical Yearbooks 1992–1998.
** A Statistical Survey of China 1992–1998.
† China Statistical Yearbooks 1992–1998 in 100 millions of RMB.
†† International Financial Statistics 1998.
‡ International Financial Statistics 1998 in 100 millions of RMB.

co-operative companies, leased to or merged with other companies, or allowed to go bankrupt (Viewpoints, 1997). It is envisaged that the SOE reform will help create a wider degree of corporate autonomy. As a result of the corporatization, the efficiency of the SOEs will be improved through better incentives and management. A successful corporatization of the SOEs is not only crucial to the development of a modern economy but is also instrumental to the further development of the stock markets, which were introduced more than a decade ago.

During the process of corporatization of the SOEs, there may be incentives and opportunities for earnings management to enhance the chances of a successful initial public offering (IPO). If earnings management existed, one would expect the post-issue performance of the IPO to decline as the earnings could not be sustained after the IPO.

INCENTIVES FOR EARNINGS MANAGEMENT

Incentives for earnings management may arise from various sources.[1] For example, earnings management may exist if managers use earnings to convey private information to investors, and hence to lower the cost of capital (Scholes, Wilson & Wolfson, 1990). Earnings management may also exist if, under securities regulations, listed firms are monitored based on their earnings (Bartov, 1993; Moyer, 1990). In the PRC, the incentives for earnings management may come from two major sources, namely, securities regulatory requirements and the accounting environment. In particular, the securities regulatory requirements on listings, right-issue offerings and issuance price provide strong incentives for earnings management. Moreover, the financial packaging that involves carving out of assets also provides such opportunities within the accounting environment in Mainland China.

Listing Requirements

The Company Law of the PRC requires that a firm must have been continuously profitable for three years prior to its listing. Managers are therefore likely to boost earnings or maintain a certain level of earnings for the three consecutive years before listing. Incentives to create opportunities for earnings management exist even after the firm is listed. This is because if a firm can maintain profitability for the first year of listing, it can issue new shares without quota restrictions. Quota here refers to the limit on the number of shares approved by the government to be issued to the public in the stock market. The Chinese Securities Regulatory Commission (CSRC) establishes the total number

of shares to be issued in a year. A specified quota is then distributed to the country's provinces and centrally governed municipalities as well as to each specific State enterprise, which subsequently qualifies and is approved for listing. This quota system exerts an important influence on the PRC's stock market since the total quota appears to be short in supply relative to the demand for shares. Furthermore, CSRC regulations issued in 1996 require that a firm must have an annual return on equity (ROE) of at least 10% for a continuous three-year period to qualify for rights issues.[2] Hence, to be able to raise funds through rights issues, there is a strong incentive for earnings management to maintain a ROE of 10% or above even after the firm is listed.

Earnings management is further motivated by the fact that if a firm makes continuous losses for two consecutive years, the stock exchange will have the right to suspend its trading. The percentage of A-shares in the sample of this study with a ROE ranging between 10% and 11% had increased from 6.5% in 1995 to 27.6% in 1997. In contrast, no similar pattern was found for the median ROA. This is consistent with the belief that an increasing number of firms have attempted to meet the regulatory requirements for ROE but not for ROA.

Issue Price

Prior to 1996, listing regulations stated that the issue price per share was set to be equal to the estimated earnings per share (EPS) in the year in which the shares are issued multiplied by the price-earnings (P-E) ratio. As a result, a tendency to over-estimate the EPS in order to increase the issue price was possible. In 1996, the issue price formula was changed so that the issue price per share must be equal to the P-E ratio multiplied by the average EPS for the three consecutive years prior to the year in which the shares are issued. Hence, there are strong incentives for managers to boost historical earnings. The issue price formula was revised again in 1997 and according to CSRC's 1997 Notice No. 13, the formula is defined as follows:

$$\text{Issue Price}_t = \text{EPS}_t \times \text{P-E}_t$$

where:

EPS_t = $70\% \times \text{EPS}_{t-1} + 30\% \times$ estimated EPS after dilution

P-E_t = maximum of permissible P-E_t − (maximum of 30-day closing average of all sectors − 30-day closing average of IPO firm's sector) × adjustment coefficient + correction value.

adjustment coefficient = (maximum of permissible P-E_t − minimum of permissible P-E_t) / (maximum of 30-day closing average of all sectors − minimum of

30-day closing average of all sectors) and correction value is determined by the authority.

Carving Out of Assets in Financial Packaging

The process of corporatization of SOEs involves financial packaging prior to the listing of SCEs. Lee (1997) demonstrates the basic characteristics of financial packaging in the PRC through a case study of a SOE called Sunve Pharmaceutical Corporation in Shanghai. Financial packaging in the PRC involves not only restructuring a former SOE into a SCE, but also the restating of the company's financial statements. Chui and Wong (1999) identify the differences between Chinese accounting standards and the International Accounting Standards (IAS) and provide an adjustment formula for restating Chinese profits as IAS profits.[3] In general, the restructuring of a company for the purpose of listing can take two forms. The SOE may be reorganized as a whole entity, that is, all assets and liabilities of the SOE are transferred to the new SCE. The newly-formed SCE will then issue new shares and be listed on the market. In such a situation, the original SOE will no longer exist and the State-owned shares will be owned by the local Bureau for the Management of State-owned Assets and known as the "State-owned stock". Approximately one-third of the Chinese listed companies in 1996 had undergone this form of restructuring.

The other form of restructuring is the carving-out of assets. In the carving out of assets, one part of the SOE will be separated from the enterprise. This part will be reorganized as a SCE, while the remaining parts will either be grouped together to form an "industrial company" or will be reorganized as several individual companies. When a SOE is reorganized into a SCE for listing, a holding company is formed in addition to the new SCE. Both the listed and non-listed companies are subsidiaries to the same parent company, which is renamed as a holding or "limited (group) company". For example, the former Maanshan Iron and Steel Company was split into two parts: the listed part is now the Maanshan Iron and Steel Joint Stock Company Limited, while the non-listed part was renamed as the Maanshan Iron and Steel Industrial Company, with all the non-main stream operation units staying with it. The parent company has been renamed as the Maanshan Iron and Steel Holding Company.

There are three methods of carving out that are commonly adopted by companies.[4] They are as follows:

(1) *Retaining "non-operational" units in the holding company.*
Over a long period of time, the SOEs have shouldered the burden of providing various welfare and social facilities to their employees. These

facilities are mostly non-profit units such as hospitals, schools, nurseries, canteens and staff quarters. Pension payments for the retired are directly paid by the SOEs and have not been reserved on accrual basis. During restructuring, these non-profit units are kept away from the firms to be listed, thereby increasing the profits of the listed firm.[5]

(2) *Retaining unprofitable or loss-making production and operating units in the holding company.*
A large number of SOEs were established many years ago and thus have outdated and antiquated facilities and equipment, which have resulted in the unprofitability of many production units. To enhance profitability, these units are not to form part of the enterprise to be listed in the restructuring. For example, in the case of the Maanshan Iron and Steel Stock Company, the financial packaging involved a carving-out of profitable assets that were mainly factories and departments. The less profitable or unprofitable assets are absorbed into the holding company.

(3) *Retaining loans in the original SOEs.*
One of the factors attributable to the poor performance of the SOEs is their rapid increase in debt, partially due to the policy of replacing government subsidies by bank loans. The funds needed for investment or other purposes, previously distributed by the government, have been replaced by debt as a result of changes in government policy. One way of increasing the profitability of a newly-formed SCE is to transfer few or no loans to the listing firm. From the accounting point of view, the non-transfer of the SOE's loans to the new SCE is entirely legitimate and feasible. The funds for the production units normally come from funds allocated by the head office of the enterprise and an account labelled "funds allocated from higher authorities" is set up. When the production unit is to be transformed into a listing firm, the "funds allocated from higher authorities" must be redeemed. There are three ways of redemption:

    (a) by the transfer of one part of the "funds allocated from higher authorities" as debts to the original SOE and the transfer of the remainder to the new SCE as the original enterprise's investment in the listing firm;
    (b) by the transfer of all debts related to the SOE's production units to the listing firm, or
    (c) by the transfer of all "funds allocated from higher authorities" as investments of the original enterprise in the listing firm to the listing firm in addition to the transfer of all debts related to the original SOE (Yang & Yang, 1999).

In summary, profitable assets are carved out mainly to ensure compliance with listing requirements, which require the enterprise to have profits for three consecutive years prior to the listing. In view of this, the incentives for carving out only the profitable assets are clear. However, the profitability of these carved out assets may be temporary and may not be sustainable subsequent to the IPO.

PRIOR STUDIES AND HYPOTHESIS

As discussed previously, there may be incentives for earnings management in the SOE corporatization process. If earnings management exists and the earnings are not sustainable subsequent to the IPO, then the post-issue performance of IPOs is expected to decline. In this section, we will review prior studies on the IPO performance in relation to performance of IPOs and earnings management.

There are studies in the U.S. that support the existence of incentives for earnings management and document a decline in post-issue performance of IPO firms (Scholes, Wilson & Wolfson, 1990; Jain & Kini, 1994). Jain and Kini (1994) focus on the change in operating performance as IPO firms make the transition from private to public ownership. Using U.S. data, they document a decline in post-issue operating performance based on the median return on assets (ROA) of IPO firms. Other U.S. studies, such as Aharony, Lin and Leob (1993) and Teoh, Wong and Rao (1998) find that the IPO firms' performance peaks around the IPO year and declines thereafter. They suggest that managers of IPO firms have an incentive to manage earnings prior to the issue. Jain and Kini (1994) further provide three possible explanations for this decline pattern. Firstly, managers attempt to manipulate accounting numbers and thus earnings prior to the IPO, however these earnings are not sustainable subsequent to the IPO. Secondly, managers choose to time the IPO during periods of good performance, but such performance cannot be maintained in subsequent years. Thirdly, the reduction in management ownership that occurs when a firm makes the transition from private to public company will potentially lead to an increase in agency costs. This explanation is in line with Jensen and Meckling's (1976) agency problem. That is, there can be an increase in the conflict of interest between shareholders and initial owners so that managers become prone to engaging in non-value maximizing activities to increase perquisite consumption. Consequently, the firm's performance suffers.

Aharony, Lee and Wong (2000) investigate earnings management in the process of financial packaging preceding IPOs for the PRC B-shares and H-shares. Based on a sample of 83 IPOs for the period between 1992 and 1995,

they examined the ROA and find that the median ROA for their sample also peaks in the IPO year and decline thereafter. In their study, they find that the incentives and opportunities for earnings management vary across protected and unprotected industries as well as listing locations. In the PRC, shares are categorized as: State shares, institutional shares, employee shares, A-shares and B-shares. State shares ("Guo Jia Gu") are those owned by central and regional state institutions. Institutional shares are those held by other SOEs ("Fa Ren Gu")[6] or by founding SOEs ("Fa Qi Ren Gu"). Employee shares ("Zhi Gong Gu") are owned by employees of SOEs. These are typically not allowed to be traded for a specified period of time and subsequently are traded as A-shares. A-shares and B-shares are listed on the two stock exchanges. A-shares can only be owned by local Chinese citizens, while B-shares are restricted to be owned by foreign investors. H-shares are those issued and traded not in the PRC but on the Hong Kong Stock Exchange.

Following Aharony et al. (2000) study that examine earnings management issues based on B-shares and H-shares, this paper investigates whether A-shares in the PRC exhibit any decline in performance subsequent to the IPO. There are several reasons why we believe more fruitful results may be produced by re-examining the issues based on the IPOs for A-shares. As Aharony et al. (2000) point out, one of the significant limitations of their study is that their results are based on a small sample and therefore should be interpreted with caution. In view of the fact that there are more A-shares than B-shares and H-shares issued, a larger sample size for empirical testing can therefore be obtained. In addition to a larger number of listed firms, the A-share market has a larger market capitalization and trading volume. By the end of 1998, the total market capitalization of the two stock exchanges for A shares and B shares were RMB1,929.93 billion and RMB20.64 billion respectively. The total trading volume of the two stock exchanges for A shares was RMB98.63 billion versus a total trading volume of RMB0.604 billion for B shares.[7] Furthermore, there are differences between accounting standards that A-shares and B-shares follow. As the Chinese and IAS accounts and earnings are prepared on different bases, one would expect differences between them. Companies with A-shares are required to produce accounts in compliance with the rules of the Chinese Ministry of Finance (MOF) while companies with B-shares are required to produce accounts in accordance to the IAS. Chui and Wong (1999) and Chen, Gul and Su (1999) examine the differences between earnings based on the Chinese standards and the IAS. Chui and Wong (1999) show evidence that the process of restating the financial statements from the Chinese standards to the IAS generally adjusts the profits downwards. This further supports that the Chinese standards are generally less conservative than the IAS. Chen, Gul and

Su (1999) conjecture that even where the form of accounting requirements may not be different between the Chinese standard and the IAS, there is scope for management opportunistic applications under the Chinese standards. An example is the discretionary use of accruals by capitalizing expenses such as operating leases, research and development expenses or by an unsystematic allocation of costs between finished goods and work-in-process. One would therefore expect more room for earnings management for the A-shares than for the B-shares.

Furthermore, there is a different set of incentives for earnings management for A-shares. For example, the setting of the IPO issue price was based on the P-E ratio that was pre-determined by the CSRC for each IPO of the A-shares, while the P-E ratios for the B-shares and H-shares were left for the underwriter and issuer to decide. The range of P-E ratio for IPOs for A-shares was 18 to 22 in 1999. This means that if the firm would like to raise more capital through setting a higher issue price, then there would be stronger incentive for IPOs for A-shares to manipulate earnings as the P-E ratio is pre-determined. In view of the above reasons, this study serves to re-examine whether IPOs in the PRC exhibit any decline in performance subsequent to the issue by using a sample of A-share IPOs.

Based on discussion on the existence of opportunities for earnings management prior to an IPO in the previous section, earnings management in the PRC may arise mainly due to the accounting environment and securities regulatory requirements. It would be interesting to investigate the empirical results using data from the PRC to see if the results are different from those obtained in the U.S. given the differences in the regulatory environment, culture, accounting systems and characteristics of the capital markets. The proposition is presented in the following hypothesis:

H_0: The performance of IPO firms does not decline subsequent to the IPO year.

H_1: The performance of IPO firms declines subsequent to the IPO year.

The performance of our sample firms is measured in terms of a return on assets (ROA) and a return on equity (ROE). The variable, ROA, is commonly used in this type of investigation (Teoh, Wong & Rao, 1998; Jain & Kini, 1994 and Aharony, Lee & Wong, 2000). ROE is also chosen as a performance measure because companies have strong incentives to maintain a good ROE even after listing for reasons discussed in previous sections. Prior studies found that managers manipulate the timing and magnitude of non-operating transactions such as asset sales in order to manage earnings (Bartov, 1993). It would also be interesting to see whether managers of Chinese SOEs also manipulate the

non-operating transactions so as to increase the pre-IPO earnings.[8] We use two additional performance measures, i.e. operating earnings/total assets (OP/TA) and non-operating earnings/total assets (NOP/TA) in this study. So far, we are not aware of any study that has used different performance measures to investigate the issue in Mainland China.

DATA AND METHODOLOGY

Our sample includes 582 firms which have A-shares listed from 1992 to 1996 on the Shanghai Stock Exchange and the Shenzhen Stock Exchange which were established in December 1990 and July 1991 respectively. Table 2 indicates the number of listings and the market capitalisation for each of these stock exchanges from 1990 to 1997. Out of the 582 sample firms, 306 firms were listed on the Shanghai Stock Exchange, while 276 were listed on the Shenzhen Stock Exchange. The financial data on net income, total assets and owners' equity for the sample firms for the period 1992 to 1997 were collected from the *Taiwan Economic Journal* (TEJ) and the *Extel* databases. Other sources, including company reports and the *Handbook for Listed Companies' Information* (1997, 1998) were used to check data accuracy and also for collecting data on operating earnings and non-operating earnings.

Following testing procedures similar to those of Jones (1991), Sweeney (1994), Jain and Kini (1994) and Aharony, Lee and Wong (2000), the mean and median changes in various performance variables are measured relative to

Table 2. Shanghai and Shenzhen Stock Exchanges.

	Shenzhen Stock Exchange		Shanghai Stock Exchange	
Year	Number of Listings	Market Capitalisation (RMB billion)	Number of Listings	Market Capitalisation (RMB billion)
1990			7	1.25
1991	6	8.1	7	2.92
1992	24	49.3	29	55.8
1993	77	132.7	106	219.6
1994	120	109.1	171	259.7
1995	135	94.9	188	52.6
1996	237	436.5	293	547.8
1997	362	831.1	383	921.8

Sources: Shenzhen Securities Fact Book 1992–1993; Shanghai Securities Yearbook 1992–1993; and Annual Report on Shenzhen Securities Market, 1996–1998.

the IPO year (t = 0) and for years −2, −1, +1, +2, +3 relative to year 0. An alternative method to detect earnings management is to adopt a general discretionary accruals framework outlined by McNichols and Wilson (1988). In this framework, total accruals are generally divided into discretionary and non-discretionary components. Since discretionary accruals is unobservable and has to be estimated using empirical models as in Jones (1991), DeAngelo (1988) and modified Jones model. The estimated discretionary accruals inevitably contain measurement errors. The test of the presence of earnings management typically conducted by regressing discretionary accruals on a dummy variable where one indicates the period in which earnings management is hypothesised to occur. However as pointed out by McNichols and Wilson (1988), given measurement errors in the discretionary component variable, the coefficient used to test for the presence of earnings management would be biased if using OLS. Collins and Hribar (1999) also demonstrate that the balance sheet approach to measuring accruals which is the dominant method used in the literature, introduces significant measurement errors into both the total and non-discretionary accruals estimates. The measurement errors in balance sheet accruals estimates can confound regressions when discretionary and non-discretionary accruals are used as explanatory variables that may lead to biased results. In addition to the potential measurement errors problem, data on many of the accruals items for a large number of our sample firms, including depreciation, amortization, short-term borrowings, accrued tax and prepayment, are not available from the database, hence it is difficult if not impossible to carry earnings management tests using this alternative method.

In order to examine if test results depend on the choice of performance measure, we use different performance measures as described in the previous section. The time-series pattern in the sample mean and median of the measures is then examined. A non-parametric test, the Wilcoxon-signed ranked test, is used to test if performance significantly declines.

The performance of firms in this study is first measured by the return on assets (ROA). The return on equity (ROE) is also chosen as a performance measure to see if the performance of IPO firms is sensitive to the choice of performance measures. Based on a sample of firms listed in the Shanghai Stock Exchange, Qi, Woo and Zhang (1998) found that firm performance in terms of ROE is positively related to the proportion of institutional shares held by other SOEs but negatively related to the proportion of State shares. They found little evidence in support of a positive correlation between corporate performance and the proportion of A-shares or B-shares. Table 3 shows the ownership structure of the companies in our sample.

There are three types of shares owned directly or indirectly by the State:

Table 3. Ownership Structure as a Result of Financial Packaging for IPOs on the Shenzhen and Shanghai Stock Exchanges (582 firms).

	State Shares	Founding SOEs	Other SOEs	Employee	A Shares	B Shares
Median	44.91%	35.60%	14.04%	3.3%	27.12%	27.31%
Mean	45.04%	35.89%	17.56%	7.87%	30.02%	28.05%
S.D.	20.09%	24.51%	14.58%	10.60%	15.05%	10.74%
Min	1.31%	0.44%	0.06%	0.001%	0.11%	7.62%
Max	98.19%	95.07%	75.00%	83.50%	100.0%	71.27%

(1) directly State-owned shares;
(2) shares owned by other State-owned entities, and
(3) shares owned by the founding SOEs.

As reported in Table 3, the median (mean) percentage of the directly State-owned shares (State shares) is about 44.91% (45.04%) for the overall sample while the median (mean) percentage of A-shares is about 27.12% (30.02%). This is also consistent with the provisions in the PRC Company Law that require the directly State-owned shares not to be less than 35% and the lower limit of the private shares subscribed by individual shareholders to be 25% when enterprises are reorganized into listed companies. There are studies that investigate whether the performance of Chinese listed companies is affected by their ownership structure (Wu, Xiang & Zhang, 1996; Qi, Wu & Zhang, 1998). In order to see if there is any preliminary relationship between return performance and ownership structure based on the sample in this study, we ran a correlation analysis between the two return performance measures (ΔROA and ΔROE) and various ownership structure measures (STATE, DUMMY and AB), where ΔROA is the change in return on asset, ΔROE is the change in return on equity, STATE is the percentage of shares owned by the State, DUMMY is the dummy variable equal to one if the enterprise issues both A-shares as well as B-shares and zero if it issues A-shares only, and AB is the percentage of shares owned by private investors (A-shares and B-shares).[9]

As the results in Table 4 indicate, there is a significant negative correlation between the percentage of shares owned by the State and the change in ROE, but not the change in ROA. Our results also show no significant correlation between the percentage of shares owned by private investors and the change in ROE. These results are consistent with findings by Qi, Wu and Zhang (1998)

Table 4. Pearson Correlation Coefficients for ΔROA and ΔROE.

Variable	STATE	Dummy	AB
ΔROA	−0.0096	0.0521	−0.0053
ΔROE	−0.0733*	0.0170	0.0077

* Significant at 0.10 level.

that corporate performance is negatively related to the proportion of State shares and that there is little evidence in support of a positive correlation between corporate performance and the proportion of A-shares and B-shares. Hence, we should be cautious in choosing the performance measure for our hypothesis testing.

EMPIRICAL ANALYSIS

Descriptive statistics of various financial measures including ROA and ROE are shown in Table 5 for the overall sample. The overall median (mean) of the ROE is 12.69% (14.37%) and higher than the median (mean) of the ROA. This is consistent with the requirement of the PRC Company Law that companies must at least earn a 10% ROE in order to qualify for rights issues, while there is no such requirement for the ROA.

The performance measure in the IPO year (t = 0) is compared with that in each of the two preceding years (t = −2 and t = −1), as well as in each of the three subsequent years (t = +1, +2 and +3). For each company, the ROA_t is the net income in year t (NI_t) divided by the total assets at the end of year t (TA_t), while the ROE_t is the net income divided by the owners' equity at the end of year t. Figures 1 and 2 depict that the median ROA and median ROE for the overall sample start from the peak at 7.79% and 18.76% respectively two years before the IPO year. There is also a noticeable decline in the median ROA and the median ROE starting from the IPO year and a gradual decline thereafter to the third year subsequent to the IPO. This pattern holds for all sample firms. Although the result of a declining pattern in the post-IPO period is similar to patterns documented in the U.S. studies, the pattern itself differs in that the median performance measure is found to start declining before the IPO year rather than peaking in the IPO year as in the U.S. studies as well as in the Aharony et al. (2000) study that examined the B-shares and H-shares. Financial reports for A-shares are based on Chinese Accounting Standards, while financial statements for B-shares or H-shares are based on International Accounting Standards that are closer to standards implemented in the U.S. The difference in patterns may be a result of using A-share data that are

Table 5. Descriptive Statistics of Financial Attributes of A Shares Listed on the Shenzhen and Shanghai Stock Exchanges in Year of IPO (582 firms).

	ROE	ROA	Net Sales*	Net Income*	NOP/TP
Median	12.69%	7.22%	2,730.00	3,332.5	14.37%
Mean	14.37%	8.45%	8,705.13	6,651.82	13.40%
S.D.	9.50%	7.37%	5,5854.6	18,955.33	86.74%
Min	0.75%	0.36%	−957.30	0.26	−935.69%
Max	121.68%	107.06%	1,094,267	325,081	165.38%

NOP = Non-operating profit; TP = Total profit; * Tens of thousands of RMB.

based on Chinese Accounting standards and are different from those that are based on IAS or U.S. GAAP as described in Chui and Wong (1999) and Chen, Gu and Su (1999). However, consistent with the PRC Company Law, which requires a company to be profitable for three years before the IPO, the median ROE and ROA patterns for the pre-IPO period show that the performance was higher in the pre-IPO period than the post-IPO period.

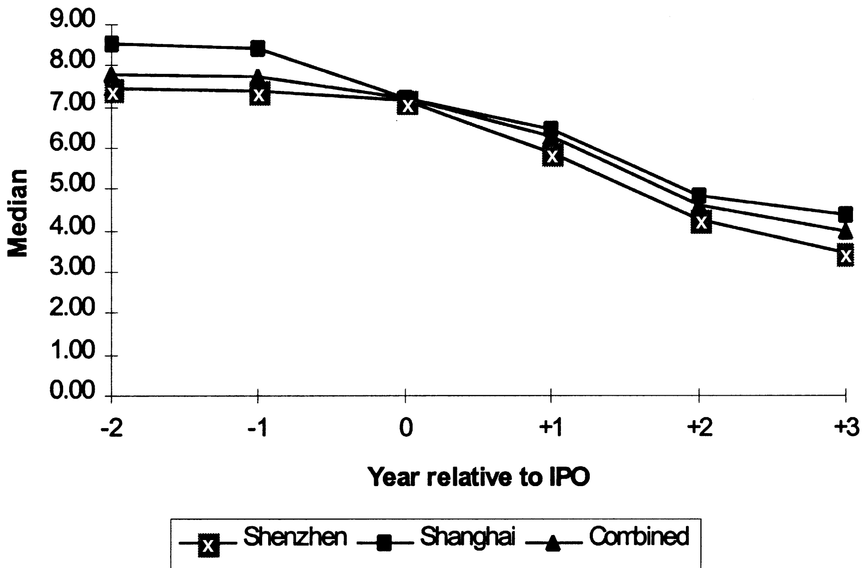

Fig. 1. Median ROA.

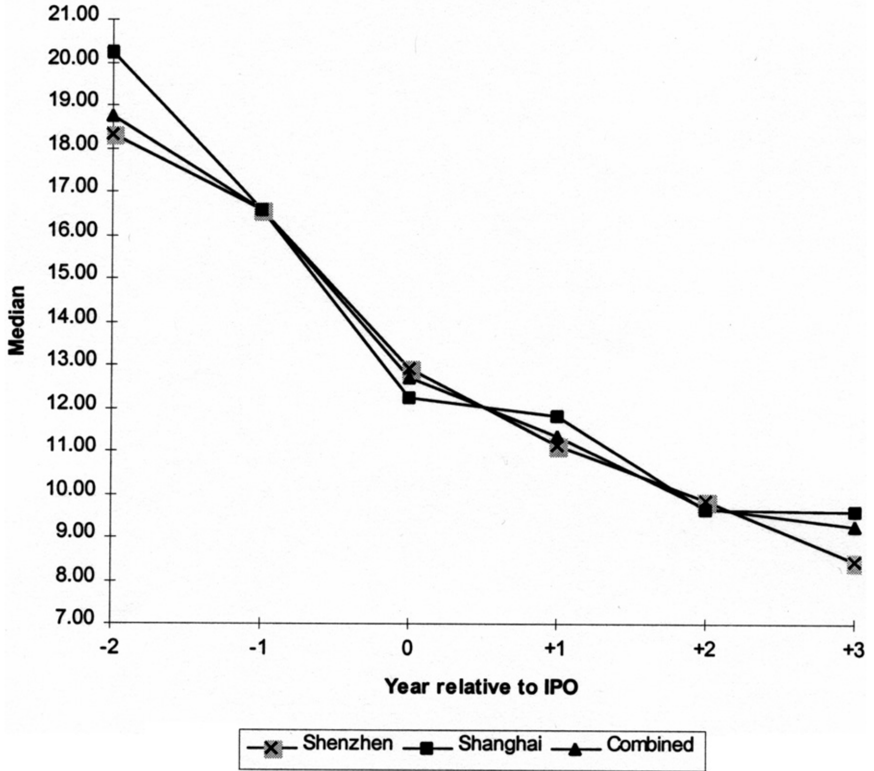

Fig. 2. Median ROE.

Furthermore, the significant declining pattern for the median ROE before t = 0 suggests that there may have been earnings management well before the IPO year. In order to confirm that the median ROE peaked at a year prior to −2, data for years −3 or −4 are needed. However, it is very difficult if not impossible to get a full data set for years −4 or −3 to +3 for our sample data. Hence, such analysis cannot be carried out.

The change in performance between the IPO year (t = 0) and the surrounding years is further examined and calculated as follows:

$$\Delta PM_t = PM_{t=i} - PM_{t=0}$$

where PM is the performance measure and ΔPM is the change in performance.

Tables 6 and 7 present the mean and median changes in the four performance measures, i.e. ROA, ROE, OP/TA (Operating earnings/Total assets) and NOP/TA (Non-operating earnings/Total assets). The significance of the mean is tested using the t-test. The significance of the median is tested using the Wilcoxon-signed ranked test. The number of observations varies from year to year according to data availability. As many observations as possible were included. Similar results were found in samples with smaller but equal numbers of observations for all the years.

The results in Table 6 show that both the mean and median changes in ROE are all positively significant prior to the IPO and the median difference in ROE subsequent to the IPO year are all significantly negative for our sample. There is also a declining trend in ROA subsequent to the IPO. These results confirm that the A-share firms have a time-series earnings pattern that declines subsequent to the IPO.

The mean and median differences in two additional performance measures, i.e. OP/TA and NOP/TA are further obtained to see if there is a similar declining pattern. Results for the OP/TA measure in Table 7 show that both the mean

Table 6. Differences in the IPO Year and Surrounding Years for ROE and ROA.

Panel A: ROE					
	Year Relative to IPO Year (0)				
	−2	−1	+1	+2	+3
Mean[1]	8.09*	5.12*	−2.24*	−7.32*	−14.73*
Median[2]	5.80*	4.08*	−0.86*	−4.25*	−5.09*
N[3]	252	383	451	247	223

Panel B: ROA					
	Year Relative to IPO Year (0)				
	−2	−1	+1	+2	+3
Mean[1]	0.08	0.24	−0.65*	−1.93*	−1.83*
Median[2]	−0.12	0.11	−0.61*	−1.66*	−1.58*
N[3]	224	381	451	247	223

[1] A t-test is used to examine the statistical significance level of the mean.
[2] A non-parametric test (Wilcoxon signed-ranks) is used to examine the statistical significance level of the median.
[3] The number of observations varies from year to year according to data availability.
* Significant at the 5% level.

Table 7. Differences in the IPO Year and Surrounding Years for OP/TA and NOP/TA.

Panel A: OP/TA

	Year Relative to IPO Year (0)				
	−2	−1	+1	+2	+3
Mean[1]	4.62*	3.17*	−2.00*	−5.51*	−4.49*
Median[2]	1.77*	1.65*	−1.48*	−3.13*	−3.51*
N[3]	71	235	188	162	70

Panel B: NOP/TA

	Year Relative to IPO Year (0)				
	−2	−1	+1	+2	+3
Mean[1]	−0.76	−0.61**	2.39	−5.08	0.08
Median[2]	−0.85*	−0.80*	0.003**	0.02	0.38
N[3]	72	235	188	162	69

[1] A t-test is used to examine the statistical significance level of the mean.
[2] A non-parametric test (Wilcoxon signed-ranks) is used to examine the statistical significance level of the median.
[3] The number of observations varies from year to year according to data availability.
* Significant at the 5% level.
** Significant at the 1% level.

and median changes in OP/TA are significantly negative subsequent to the IPO, while they are significantly positive prior to the IPO.

These results are consistent with those for the ROE and ROA measures, which demonstrate a declining pattern subsequent to the IPO year. However, we do not find a declining pattern for the NOP/TA measure. Table 7 further reveals that the changes in NOP/TA are generally significantly negative prior to the IPO and insignificant subsequent to the IPO. There are however incentives for firms to manipulate non-operating earnings after the IPO because many of the listed firms would like to offer rights issues in order to raise more capital. To qualify for rights issues, they need to satisfy the 10% rule for the ROE.

Zhou (1998) documents evidence that the non-main business earnings have become significantly large in recent years. For example, out of the 74 companies that met the 10% ROE requirement in 1997, there were 37 firms with a ratio of non-main business earnings to total earnings exceeding 30%. These non-main business earnings include non-operating earnings, investment income, gain from sale of land, and prior year adjustments.

Zhou(1998) quotes some examples of companies of which non-main business constitute a significant portion of the total profits. For example, Jiangxi Dongfeng Pharmaceutical Co. Ltd had an income of RMB13.01 million from short-term investment in Treasury Bonds that constituted 58.76% of the total investment income while the total investment income was 70.67% of total profits. In the same year, Jilin Light Industrial Group Co. Ltd earned RMB51.98 million from sales of land. These gains from sales of land were 92.16% of the total profits. Inner Mongolia Baoton earned RMB7.33 million of interest income from IPO in 1997 and this non-operating income was 104.85% of the total profit.

There are two possible reasons why evidence of earnings management does not exist for the non-operating earnings measure in this study. Firstly, in order for the SOEs to be chosen to be listed, the earnings arising from main business over the total earnings must not be less than 70% as stipulated by the CSRC. Managers therefore would have focused on manipulating the operating earnings rather than non-operating earnings before the IPO. This is consistent with the results that demonstrate a declining pattern for our operating earnings measure while no such pattern is observed for the non-operating measure. Secondly, the 10% ROE rule for rights issue was promulgated in 1996, while our sample covers the period from 1992 to 1997 for firms with and without right issues offering, hence the effect may have been clouded. Haw et al. (1999) examine the effects of two types of below-the-line items, namely, gains/losses from short-term and long-term investment and other non-operating gains/losses, on the ROE of listed firms in response to security regulations in the PRC. They find that rights offering firms with earnings in the range of 10%–12% reported significantly higher amounts of income-increasing below-the-line items in 1996–1997 (after the promulgation of the regulation requiring rights offering firm to have annual ROE above 10% for three consecutive years) than in 1994–1995. The results are consistent with the existence of earnings management as a response to security regulation.

IMPACT OF MACROECONOMIC CONDITIONS ON POST-IPO PERFORMANCE

It is possible that the decline in post-IPO performance may not be due to firm-specific factors such as earnings management, but rather is a consequence of macroeconomic factors, such as measures to control inflation implemented by the Chinese government in 1993. The PRC has encountered high inflationary pressures and a large government deficit. It became clear in 1993 that the economy was in danger of serious overheating, and the rate of investment

growth became a prime target of government concern. In order to curb excessive growth of liquidity and curb investment demand, the government introduced official policy to restrain lending by the State banks as part of a 16-point program to cool the economy. The so-called "austerity program" began in 1993 and continued until 1995. Various austerity measures, including stringent controls on investment, credit restrictions, restrictions on monetary growth, and price controls, were introduced, although such mainly administrative measures were suppressive rather than conducive to the lowering of inflation. The sector to respond the fastest was the State-owned industry. Since many such enterprises were heavily in debt, tight monetary policies soon led to liquidity problems, and resulted in heavy "triangular debts" between enterprises, suppliers and banks. Other reforms including foreign exchange reforms, fiscal and tax reforms and the implementation of the Company Law took place in 1994. In 1996, inflation came down to a single digit and fell even further in 1997. The austerity measures have therefore been substantially relaxed since 1996. In 1996, a program of transforming 1,000 enterprises into fully autonomous corporations was announced and smaller enterprises were encouraged to merge (China Mongolia, 1998).

Following an earlier version of Aharony et al. (2000) to investigate if the pattern of decline was due to firm-specific factors or macroeconomics conditions, a control group of firms was chosen so that the performance of the control group can be compared against the performance of a group of sample firms. If there is a difference in the performance between these two groups, the pattern of decline is more likely due to firm-specific factors. The earlier version of Aharony et al. (2000) suggested the use of non-IPO SOEs as control firms. That is, either listed or unlisted SOEs that had existed some time prior to the sample firms in the test group, as these firms should be the least subject to firm-specific factors associated with the new IPO firms. However, it is very difficult if not impossible to collect data for unlisted firms in the PRC and there were only a small number of firms listed prior to 1992, we therefore choose all the 38 A-share firms listed in 1992 as our control group, labelled "control." The overall sample was then divided into four separate test groups, labelled "Test $(t-1)$":

(a) 127 IPOs listed in 1993;
(b) 108 IPOs listed in 1994;
(c) 24 IPOs listed in 1995, and
(d) 204 IPOs listed in 1996.

For firms in each test group and the control group, the ΔROA_t and ΔROE_t are calculated for comparison. The results are presented in Table 8. The test group

of 1993 IPOs has a median ΔROA_t of −0.15 in 1994 and is insignificantly different from zero, while the control group shows a significant median of −1.40 in 1994. The results also indicate that there is a significant difference between the median ΔROA_{1994} for the test group of 1993 IPOs and the corresponding control group of 1992 IPOs. However, the rest of the results also show that there is an insignificant difference between the median ΔROA_t for the test groups of IPOs and the corresponding control group of 1992 for the years 1995 to 1997. Similarly, results for the median ΔROE_t also show that there is a significant difference between the median ΔROE_{1994} for the test group of 1993 IPOs and the control group and that there is an insignificant difference between the median ΔROE_t of the test group and the control group for the years 1995 and 1997. However, unlike the results for the ROA measure, the results indi-

Table 8. Post-IPO Performance Controlling for Macroeconomic Factors.

Panel A: Median ΔROA_t [1]			
Year	Test (t−1)	Control	Diff
1994	−0.15	−1.40*	1.755*
1995	−2.65*	−2.29*	−0.69
1996	−1.12**	−0.54	0.30
1997	−0.50**	−0.42	−0.21
Panel B: Median ΔROE_t [1]			
Year	Test (t−1)	Control	Diff
1994	0.38	−1.60*	2.74*
1995	−4.00*	−4.59**	−4.04
1996	−3.48*	−0.97	−2.255*
1997	−0.28	−1.42	0.05
Panel C: Median $\Delta PTAX/FA_t$			
Year	Test (t−1)	Control	Diff
1994	−1.49	−18.22**	9.05*
1995	−11.30*	−12.82*	0.48
1996	−2.90	−3.21	−7.66
1997	−3.37*	−7.31	1.09

[1] A non-parametric test (Wilcoxon signed-ranks) is used to examine the statistical significance level of the median.

* Significant at 0.05 level.

** Significant at 0.10 level.

cate that there is a significant difference (Diff = −2.255) between the median ΔROE_{1996} for the test group of 1995 IPOs and the corresponding control group of 1992.

Both the ROE and ROA results suggest that the pattern of decline in post-IPO performance is more likely a consequence of macroeconomic factors for the years 1995 and 1997 and may be due to firm-specific factors such as earnings management, for the year 1994. For the year 1996, it appears that only the results for the ROE measure show evidence consistent with earnings management. One possible reason for the inconsistent results between the two measures in 1996 is that the government tightened the requirements for rights issue in that year. The revised version of the regulations in 1996 requires the minimum annual ROE to be above 10% for three consecutive years in order to qualify for rights issue, whereas prior to 1996, only a three-year average ROE was required. Hence, firms are more motivated to maintain or raise the ROE if they want to qualify for rights issue. This is consistent with the finding that there is a significant difference between the median ΔROE_{1996} of the test group and the control group, which suggests the pattern of decline is likely due to firm specific factors such as earnings management rather than macroeconomic conditions.

We also used pre-tax profit/fixed assets (PTAX/FA) as an additional performance measure to see if the earnings management is due to macroeconomic factors. Consistent with the results for ROA, the results in Panel C of Table 8 indicate that there is a significant difference between the median ΔPTAX/FA for the test group of 1993 IPOs and the corresponding control group of 1992 IPOs but there is no significant difference between the measure for the test group and control group for the years 1995 to 1997.

CONCLUSION AND DISCUSSION

We have discussed in this paper various incentives and potential opportunities for earnings management during the process of corporatization and examined whether the A-share IPO firms in the PRC exhibit a pattern of decline in performance subsequent to the IPO. Following the study by Aharony et al. (2000) that reports a declining earnings pattern subsequent to the IPO for the B-shares and H-shares, we find similar results for the A-shares. Our results are important in many aspects. Firstly, they provide supporting evidence that the general pattern of decline in performance subsequent to the IPO is applicable not only for the B-shares and H-shares but also for the A-shares. The findings can be more generalized since one of the limitations of the Aharony et al. (2000) study is that their results are based on a small sample size of 83 IPOs. Furthermore, using A-share data may yield more fruitful results for two other reasons. Chui

and Wong (1999) and Chen, Gul and Su (1999) show that there are differences between earnings based on the Chinese accounting standards and those based on the IAS and that the former is less conservative than IAS earnings. Chen et al. (1999) conjecture and provide examples that there is more room for earnings management for A-shares. In addition, there is a different set of incentives for earnings management for A-shares. In particular, the setting of the IPO issue price for A-shares is based on a P-E ratio determined by the CSRC while B-shares do not follow such a practice.

In addition to adopting a different and larger sample, we have examined whether the significant declining performance pattern is subject to the choice of performance measure by using different measures. Furthermore, the evidence of increases in ROE prior to the IPO is stronger than the increases in ROA. The latter finding, together with the finding of significant difference in change in ROE in 1996 between the test group and the group controlled for macroeconomic conditions, further supports that the regulatory requirements (i.e. ROE requirements for listing and rights issue) play as a key factor for the observed performance patterns as well as being a major incentive for earnings management.

Overall, our findings indicate that the pre-IPO performance of the A-shares in the PRC is not sustainable and that there is evidence lending support to earnings management even after controlling for economic conditions. These findings have important implications for the PRC policy-makers and regulators as confidence of investors in the stock market and the development of the stock market in PRC could be adversely affected.[10] To help achieve the goals of the SOE reform, that is, to sustain the growth of profitable SOEs and to further develop the stock market, the PRC government and regulators should concentrate their efforts on lessening the incentives for earnings management by improving corporate governance as well as accounting and auditing controls. It seems that the PRC government has recognized the issues and is moving towards this direction. For example, as discussed by Tang (2000), a new disclosure requirement asking listed companies to disclose net profit excluding extra-ordinary items is now in place. These extra-ordinary items, as discussed in Tang (2000), include gains on disposal of assets, receipts from temporary subsidy, interest income from IPO, amortization of goodwill and etc. Enhancing corporate governance and accounting and auditing controls will help provide closer scrutiny of earnings management and better development in the SOE reform and the stock market in the PRC.

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NOTES

1. Earnings management for the purpose of this study broadly covers accruals earnings management, the listing of assets or parts of a SOE with temporary profitability by carving out profitable operations, and the timing of an IPO during a period of good performance of high earnings that may not be sustainable subsequent to the IPO.
2. CSRC Notice No. 14 issued in 1996 superseded CSRC's 1994 Notice No. 131 which required the average ROE for three years to be more than 10% in order for the firm to qualify for rights issues.
3. See Chui and Wong (1999) for a description of the differences between the Chinese Accounting Standards and IAS and Yang and Kao (1994) for a comparison of the FASB conceptual framework and the Chinese Accounting Standards.
4. See Daiwa Shoken Kabushiki Gaisha and Daiwa Shoken (1996) for descriptions of various forms of restructuring and examples of these cases.
5. In large cities, the government subsidizes public facilities such as hospitals and schools. However, many large SOEs in smaller cities bear the expenses of such facilities themselves. Many of the facilities such as canteens, public baths and staff quarters have been taken over by commercial companies and the related expenses are charged to the SOEs. This has resulted in an even heavier burden on the SOEs and a negative impact on their profitability.
6. Alternatively, these shares can be held by foreign partners of a corporatized foreign joint venture.
7. See CSRC website: www.csrc.gov.cn/CSRCsite
8. Non-operating income is income that is not directly related to the operations of a company, for example, gains on disposal of fixed assets, gains from revaluation of assets, gains on debt restructuring and donations, etc.
9. There are altogether 647 observations excluding the missing data.
10. There are studies that document low stock returns for IPO firms for several years subsequent to the IPO (Jain & Kini, 1994).

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CHARACTERISTICS OF EARNINGS VERSUS BOOK VALUE FIRMS IN THE TAIWAN STOCK EXCHANGE

Ben-Hsien Bao and Da-Hsien Bao

ABSTRACT

This study classifies Taiwanese firms into earnings and book value groups, then examines firm characteristics that can explain the difference between the two groups. Logistic regression results show that earnings firms tend to be large in size while book value firms tend to be small in size. Results of validation through cross-sectional regressions show that earnings are indeed more value relevant than book value for large size firms while book value is indeed more value relevant than earnings for small size firms.

INTRODUCTION

Numerous studies in the past three decades focused on the investigation of different accounting performance measures as the most important determinants of firm value. The accounting performance measures included in those studies are earnings (e.g. Ball & Brown, 1968; Beaver et al., 1979), cash flows (e.g. Bernard & Stober, 1989; Bowen et al., 1987; Livnat & Zarowin, 1990; Wilson, 1987), economic value added (e.g. Biddle et al., 1997), book value (e.g. Bernard, 1993; Burgstahler & Dichev, 1997), and residual income/earnings (e.g. Biddle et al., 1997; Myers, 1999).[1] Results generally showed that earnings, in a cross-sectional sense, have the highest explanatory power of firm value. Other

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measures, although less explanatory, do have incremental information content.

Several studies suggested that earnings have the highest explanatory power of value only for the sample firms as an aggregate, i.e. in a cross-sectional sense by investigating all firms as a group in a particular year. They may not be the most important determinant of value for firms in a particular industry, i.e. in a cross-sectional sense by investigating all firms in an industry. They may also not be the most important determinant of value for an individual firm, i.e. in a time-series sense by investigating a particular firm within a time-period. Empirical results suggested that net sales are more value relevant than earnings for metalwork firms (Biddle et al., 1995). Cash flows are better than earnings as the determinant of value for electric utility firms (Biddle et al., 1995). Cash flows are more value relevant than earnings for firms at the start-up and growth stages (Black, 1998). It therefore is reasonable to conclude that different firms may have different determinants of value. An interesting research question is what firm characteristics explain the difference.

Empirical evidence to date suggested that earnings and book value are value relevant for Taiwanese stocks (Bao & Bao, 1998; Chu, 1997). Book value is a better determinant of value than earnings for firms with negative earnings and book value (Bao & Bao, 1998). This study, therefore, also focuses on earnings and book value.[2] It first classifies Taiwanese firms into two groups: earnings firms and book value firms. Earnings have a higher association with value for earnings firms while book value has a higher association with value for book value firms. It then investigates the difference between the two groups in firm characteristics, such as age, size, growth, dividend payout, and change in investment by using a logit analysis. The results from the logistic regression are also validated through cross-sectional regressions. Empirical evidence shows that size is a significant firm characteristic in explaining the difference between the earnings firms and the book value firms. Earnings firms tend to be large in size while book value firms tend to be small in size. Results of validation through cross-sectional regressions show that earnings are indeed more value relevant than book value for large size firms while book value is indeed more value relevant than earnings for small size firms.

The next section of this study is a brief review of prior research on firm characteristics. It is followed by data collection and availability, classification of firms, logit analysis, and validation. Conclusions are given in the last section.

FIRM CHARACTERISTICS

Selection of variables representing firm characteristics is based on life-cycle (e.g. Anthony & Remesh, 1992; Black, 1998) and book value (e.g. Burgstahler

& Dichev, 1997; Collins et al., 1999) research. Life-cycle studies used firm age, sales growth, and dividend payout to classify firms into start-up, growth, mature, and decline groups. Start-up firms are usually younger, have larger sales growth and higher percentage increase in capital investment than the growth and mature firms, and do not pay dividend.[3] Descriptive statistics also show that they are smaller in size, and have small or negative income, i.e. they are unsuccessful (Black, 1998). Earnings, therefore, are less value relevant than book value.

Book value studies suggested that book value is a proxy for abandonment option for unsuccessful firms (Collin et al., 1999). They also suggested that firm value is determined by a combination of recursion value and adaptation value (Burgstahler & Dichev, 1997). A successful firm is likely to continue its current ways of using resources. Its recursion value reflected by earnings, therefore, is the determinant of firm value. An unsuccessful firm, on the other hand, will find alternative uses of its resources. Its adaptation value reflected by book value, therefore, is the determinant of firm value.

The identified firm characteristics, therefore, include age, growth, capital investment, size, and dividend payout. Since the decline firms are excluded from this study, it is hypothesized that earnings firms are characterized as older in age, lower in sales growth, smaller in percentage increase of capital investment, larger in size, and higher in divided payout.[4] Book value firms, on the other hand, are characterized as younger in age, higher in sales growth, larger in percentage increase of capital investment, smaller in size, and lower in dividend payout.

DATA COLLECTION AND AVAILABILITY

Data for this study were collected from the 1996 edition of the PACAP (Pacific-Basin Capital Markets) – Taiwan database. There are several other databases, such as Compustat-Global Vantage, and Disclosure-Worldscope Global. The PACAP database, however, has the largest amount of Taiwanese firm-specific data. It is produced by the Pacific-Basin Capital Markets Research Center at the College of Business Administration, the University of Rhode Island.

This database has firm-specific data from 1975 to 1995. Table 1 is an indication of data availability. It shows that the database includes the majority of the firms listed in the Taiwan Stock Exchange.

Required firm-specific data, from 1980 to 1995, for this study include net income, book value, sales, total assets, net fixed assets plus investments and other assets, price per share, dividend per share, number of shares outstanding,

Table 1. Data Availability.

Year	Number of Firms with Price, Earnings, and Book Value Data	Number of Listed Firms
1975	62	68
1976	70	77
1977	76	82
1978	80	87
1979	91	96
1980	93	102
1981	100	107
1982	103	113
1983	110	119
1984	110	123
1985	107	127
1986	117	130
1987	130	141
1988	149	163
1989	163	181
1990	183	199
1991	203	250
1992	236	312
1993	273	324
1994	279	335
1995	291	380

Data on number of listed firms are from *1990 SEC Statistics*, SEC, Ministry of Finance, Republic of China, Volume 21, 1991, and Economic Daily, the largest financial newspaper in Taiwan.

and year listing on the Taiwan Stock Exchange. Data from 1975 to 1979 were not used because of the small number of listed companies.

CLASSIFICATION OF FIRMS

Classification of firms is based on two regressions. One regression regresses price on earnings while the other regression regresses price on book value. Theoretically, the former better fits the earnings firms while the latter better fits the book value firms, i.e. earnings of earnings firms explain price with a high R^2 while book value of book value firms explains price with a high R^2.

There are three possible approaches (forms) for the regression equations:

(1) the valuation approach (e.g. Bowen, 1981),
(2) the levels approach (Kothari, 1992), and
(3) the changes approach (Kothari, 1992).

The valuation approach regresses price on earnings (or book value) when both the dependent and the independent variables are normalized by beginning book value. A previous version of this study used this approach, and obtained similar results. The levels approach regresses price on earnings (or book value) when both the dependent and the independent variables are normalized by beginning price. The changes approach regresses the change in price on the change in earnings (or book value) when both the dependent and the independent variables are normalized by beginning price.

This study uses the changes approach for two reasons. First, if earnings follow a random walk then earnings levels and earnings changes deflated by beginning price correlate equally well with price (Ohlson, 1991), and earnings of Taiwanese firms do follow a random walk (Bao et al., 1996). The results from the levels approach should be consistent with those of the changes approach. Second, the changes approach is used by Biddle et al. (1995, 1997) to measure information content.

Regressions are performed for each sample firm using twelve data points, i.e. data from 1981 to 1992. The 1980 price is needed for normalization purpose. Two regressions are performed for each sample firm that has price, earnings, and book value data in the PACAP (Pacific-Basin Capital Markets) – Taiwan database from 1980 to 1992:

$$(P_{i,t} - P_{i,t-1})/P_{i,t-1} = \beta_{1,i} + \beta_{2,i}(E_{i,t} - E_{i,t-1})/P_{i,t-1} + \varepsilon_{1,i}. \quad (1)$$

$$(P_{i,t} - P_{i,t-1})/P_{i,t-1} = \beta_{3,i} + \beta_{4,i}(B_{i,t} - B_{i,t-1})/P_{i,t-1} + \varepsilon_{2,i}. \quad (2)$$

where: $P_{i,t}$ is price per share for firm i at the end of year t,
$E_{i,t}$ is earnings per share for firm i in year t,
$B_{i,t}$ is book value per share for firm i at the end of year t,
t is from 1981 to 1992.

The regression equations state that earnings and book value, respectively, are positively associated with price. Earnings and book value regressions are performed only if a firm has thirteen consecutive years (from 1980 to 1992) of data. Sample size is reduced from 93 (see Table 1) to 68 because of missing values.

A firm is classified as an earnings firm if earnings are positive and significant at $\alpha = 0.10$ level, and the R^2 of the earnings regression (Eq. (1)) is higher than that of the book value regression (Eq. (2)). Earnings for an earnings firm have to be positive and significant at $\alpha = 0.10$ level. If book value is insignificant or has a wrong sign, then the firm is classified as an earnings firm. If book value is also positive and significant, but the R^2 of the book value regression is lower

than that of the earnings regression then the firm is also classified as an earnings firm.

A firm is classified as a book value firm if book value is positive and significant at $\alpha = 0.10$ level, and the R^2 of the book value regression is higher than that of the earnings regression. Book value for a book value firm has to be positive and significant at $\alpha = 0.10$ level. If earnings are insignificant or have a wrong sign, then the firm is classified as a book value firm. If earnings are also positive and significant, but the R^2 of the earnings regression is lower than that of the book value regression then the firm is also classified as a book value firm.

Among the sixty-eight sample firms, twenty-six firms are classified as earnings firms while nineteen firms are classified as book value firms. The remaining twenty-three firms do not belong to either group because both earnings and book value are insignificant at $\alpha = 0.10$ level or both have a wrong sign. They are deleted from further analyses.

The classification results are summarized in Table 2. Earnings on average can explain 34% of the variation in price for the earnings firms, while book value can explain 8%. Book value on average can explain 36% of the variation in price for the book value firms while earnings can only explain 10%. Neither earnings nor book value can explain the variation in price for the deleted firms.[5]

Selected descriptive statistics of the earnings and the book value firms are reported in Table 3. As expected, Earnings firms have higher sales and total assets than book value firms. They are older, have lower sales growth, and smaller percentage increase in capital investment. The only unexpected statistic is the dividend payout ratio, i.e. earnings firms have a lower ratio. Earnings firms, however, do pay higher dividend per share.

LOGIT ANALYSIS

A logit analysis for the forty-five firms (twenty-six earnings firms plus nineteen book value firms) is performed using 1993 data:

Table 2. Classification of Firms.

Group	Number of Firms	Earnings Regression Mean Adjusted R^2	Book Value Regression Mean Adjusted R^2
Earnings	26	0.34	0.08
Book Value	19	0.10	0.36
Deleted	23	−0.05	−0.04

Table 3. Mean Descriptive Statistics.

Variable	Earnings Firms	Book Value Firms
Sales	$18,328,072	$7,286,844
Total Assets	$46,364,427	$10,534,398
Dividend Per Share	$4.40	$3.11
Shares Outstanding	699,187	386,465
Age (years)	22	20
Sales Growth	7.11%	7.28%
Dividend Payout	21.15%	37.72%
Increase in Capital Investment	8.97%	9.39%

$$\text{Group} = \beta_5 + \beta_6\ \text{AGE} + \beta_7\ \text{GROW} + \beta_8\ \text{SIZE} + \beta_9\ \text{DP} + \beta_{10}\ \text{INV}. \quad (3)$$

where: Group is the code for the two groups; it is 0 for the earnings group and 1 for the book value group,
AGE is the age of the firm; it is the age since the firm's listing on the Taiwan Stock Exchange,
GROW is growth; it is measured by the average percentage change in sales over the 1989 to 1993 period,
SIZE is size; it is measured by the logarithm of sales,
DP is the dividend payout ratio,
INV is the percentage increase in capital investment; it is measured by the percentage change in net fixed assets plus investments and other assets.[6]

The logit analysis is performed to investigate firm characteristics that can explain the difference between the earnings firms and the book value firms.

Results are reported in Table 4. Four of the signs are conformed to the expected signs, i.e. earnings firms tend to be large in age, and size, and small in sales growth and increase in capital investment; book value firms tend to be small in age, and size, and large in sales growth and increase in capital investment. Dividend payout ratio, similar to that reported in Table 3, does have the wrong sign. Among the four variables with correct signs, however, only size is statistically significant. It can be concluded that earnings firms are larger firms while book value firms are smaller firms.

VALIDATION

Data requirement for the earnings and book value regressions, represented by Equations (1) and (2), reduced the sample size considerably to sixty-eight.

Table 4. Results of Logit Analysis.

Variable	Expected Sign	Coefficient	Z	P
Constant	?	9.50	2.20	0.03
AGE	−	−0.07	−1.13	0.26
GROW	+	2.71	0.74	0.50
SIZE	−	−1.31	−2.00	0.04
DP	−	0.13	1.59	0.11
INV	+	0.12	0.04	0.97

Group = 0 for earnings firms, 1 for book value firms
Number of observations = 45
Chi-squared = 9.85
Significance level = 0.10

Classification criteria further reduced the sample size to forty-five. The conclusions generated by the logit analysis for 1993, therefore, need to be validated through cross-sectional regressions using considerably larger samples.

Three regressions are performed for 1993, 1994, and 1995, respectively:

$$(P_t - P_{t-1})/P_{t-1} = \beta_{11} + \beta_{12}(E_t - E_{t-1})/P_{t-1} + \varepsilon_3. \quad (4)$$

$$(P_t - P_{t-1})/P_{t-1} = \beta_{13} + \beta_{14}(B_t - B_{t-1})/P_{t-1} + \varepsilon_4. \quad (5)$$

$$(P_t - P_{t-1})/P_{t-1} = \beta_{15} + \beta_{16}(E_t - E_{t-1})/P_{t-1} + \beta_{17}(B_t - B_{t-1})/P_{t-1} + \varepsilon_5. \quad (6)$$

Equations (4) and (5) are similar to Equations (1) and (2) in that the former is an earnings regression while the latter is a book value regression, i.e. they state that earnings and book value, respectively, are positively associated with price. The difference is that Equations (4) and (5) are performed cross-sectionally, i.e. for all firms as a group. Cross-sectional regressions are performed for 1993 to validate the size effect using a considerably larger sample.[7] Cross-sectional regressions are also performed for 1994 and 1995 to test the size effect using data from different fiscal years. Equation (6) is also included to test the incremental information content of earnings and book value.

For validation of the size effect, these regressions are performed for two subsets of the sample: large size firms and small size firms. The entire sample is divided into large and small size subsets by the logarithm of sales. The large half is the large size subset while the small half is the small size subset.

Regression results for the large size firms are reported in Table 5. For 1993, both earnings and book value are positively and significantly associated with

Table 5. Regression Results for Large Size Firms.

Sample Size	Constant	E	B	Adjusted R^2
		1993		
111	0.43	5.84		0.32
	(11.04)	(3.70)***		
111	0.47		2.18	0.08
	(8.98)		(2.28)**	
111	0.43	5.60	0.42	0.32
	(10.62)	(3.49)***	(0.60)	
		1994		
126	0.09	1.77		0.15
	(2.47)	(1.89)*		
126	0.11		1.12	0.10
	(2.61)		(1.21)	
126	0.08	3.03	−1.04	0.16
	(2.22)	(3.31)***	(−1.86)	
		1995		
121	−0.35	0.70		0.04
	(−26.03)	(2.52)**		
121	-0.35		0.19	−0.00
	(−26.67)		(0.94)	
121	−0.35	1.05	−0.36	0.04
	(−26.00)	(2.46)**	(−1.18)	

* Significant at α = 0.10 level with a correct sign.
** Significant at α = 0.05 level with a correct sign.
*** Significant at α = 0.01 level with a correct sign.
White t-values are in the parentheses.

price. R^2 of the earnings regression, however, is much higher than that of the book value regression. In addition, results based on Equation (6) show that book value is not significant and R^2 does not increase by also including book value in the regression. Earnings are the determinant of price while book value is not.

Results for 1994 show that earnings are statistically significant while book value is not. The explanatory power of earnings increases a little by also including book value in the regression. Results for 1995 are entirely consistent with those for 1994. It can be concluded that for large size firms, earnings are the determinant of firm value while book value is not.

Table 6. Regression Results for Small Size Firms.

Sample Size	Constant	E	B	Adjusted R^2
		1993		
111	0.33	0.12		0.00
	(20.26)	(4.21)***		
111	0.34		0.27	0.10
	(9.56)		(2.92)***	
111	0.34	−0.17	0.33	0.10
	(9.45)	(−1.39)	(3.57)***	
		1994		
126	−0.01	0.19		0.00
	(−0.33)	(1.68)*		
126	−0.00		0.15	0.00
	(−0.11)		(1.04)	
126	−0.01	0.28	0.27	0.02
	(−0.45)	(1.60)	(1.25)	
		1995		
120	−0.38	−0.07		0.00
	(−31.39)	(−1.73)		
120	-0.38		0.13	0.04
	(−31.33)		(3.59)***	
120	−0.36	0.47	0.51	0.10
	(−28.86)	(1.67)*	(3.26)***	

* Significant at $\alpha = 0.10$ level with a correct sign.
*** Significant at $\alpha = 0.01$ level with a correct sign.
White t-values are in the parentheses.

Regression results for the small size firms are reported in Table 6. For 1993, both earnings and book value are positively and significantly associated with price. R^2 for the earnings regression, however, is much smaller than that for the book value regression. In addition, results based on Equation (6) show that R^2 does not increase if earnings are also included in the regression. Book value is the determinant of price while earnings are not.

Results for 1994 are weak, i.e. book value is not statistically significant, and both earnings and book value are not significant in Equation (6). Results for 1995 are similar to those for 1993. It can be concluded that for small size firms, book value is the determinant of firm value while earnings are not.

***Table 7*.** Relative and Incremental Information Content.

Panel A. Relative Information Content

Large Size Firms

Year	R^2(E)		R^2(B)
1993	0.32	>	0.08
1994	0.15	>	0.10
1995	0.04	>	−0.00
Mean	0.17	>	0.06
Pair-wise *p* Value = 0.10			

Small Size Firms

Year	R^2(E)		R^2(B)
1993	0.00	<	0.10
1994	0.00	<	0.00
1995	0.00	<	0.04
Mean	0.00	<	0.04
Pair-wise *p* Value = 0.10			

Panel B. Incremental Information Content

Large Size Firms

Year	R^2(E/B)		R^2(B/E)
1993	0.24	>	−0.00
1994	0.06	>	0.01
1995	0.04	>	0.00
Mean	0.11	>	0.00
Pair-wise *p* Value = 0.10			

Small Size Firms

Year	R^2(E/B)		R^2(B/E)
1993	0.00	<	0.10
1994	0.01	<	0.02
1995	0.06	<	0.10
Mean	0.03	<	0.07
Pair-wise *p* Value = 0.10			

Table 7 shows the comparisons of relative and incremental information contents between earnings and book value. Relative information content is determined by the R^2 value of the regressions (Biddle et al., 1995, 1997), while incremental information contents of earnings and book value are defined as follows (King & Langli, 1998):

$$R^2(E/B) = R^2(E,B) - R^2(B). \quad (7)$$

The incremental explanatory power of earnings over book value is the total explanatory power of earnings and book value minus the explanatory power of book value.

$$R^2(B/E) = R^2(E,B) - R^2(E). \quad (8)$$

The incremental explanatory power of book value over earnings is the total explanatory power of earnings and book value minus the explanatory power of earnings.

Panel A of Table 7 shows the results of relative information content comparisons. Earnings consistently have a greater relative information content for large size firms. Book value consistently has a greater relative information content for small size firms. Pair-wise p-values are also reported in Table 7. They are statistically significant at the $\alpha = 0.10$ level.[8]

Panel B of Table 7 shows the results of incremental information content comparisons. Earnings consistently have a greater incremental information content for large size firms. Book value consistently has a greater incremental information content for small size firms. Pair-wise *p*-values are also reported in Table 7. They are statistically significant at the $\alpha = 0.10$ level.

CONCLUSIONS

Empirical results in prior studies indicate that earnings are the most important determinant of firm value. Other accounting performance measures, such as cash flows, book value, economic value added, and residual earnings, have less explanatory power than earnings. Those conclusions are generated through cross-sectional studies, i.e. the results are valid only through investigations of sample firms as a group. They may not be valid for firms in a particular industry, or for individual firms.

If firms have different determinants of value, then an interesting research question is to find out firm characteristics that determine the difference. This study first classifies Taiwanese firms into earnings and book value groups. It then uses logit analysis to examine the difference in firm characteristics between these two groups. Results show that earnings firms tend to be larger in size while book value firms tend to be smaller in size.

The results from the logit analysis are also validated through cross-sectional regressions using considerably larger samples. Results show that earnings do have higher explanatory power of value than book value for large size firms. Book value does have higher explanatory power of value than earnings for

small size firms. Knowledge of firm characteristics does add insights to our understanding of the results of the cross-sectional analyses.

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NOTES

1. Residual income is defined as earnings minus the product of cost of capital and invested capital. The cost of capital is the weighted average of cost of debt capital and cost of equity capital. The invested capital includes both debt capital and equity capital. Residual earnings are a slightly different version of residual income. They only consider equity capital and cost of equity capital.
2. Theoretically, other accounting performance measures, such as cash flows, can also be investigated. PACAP database, however, does not include cash flows data. In addition, Taiwanese firms are required to disclose cash flows information only after 1990, i.e. there are not enough data for the purpose of this study.
3. A class of stocks listed on the Taiwan Stock Exchange is the "stocks requiring full delivery." They belong to the decline group, and are excluded in this study. The decline group, therefore, is ignored in the discussion and analyses.
4. The characteristics of decline firms, which are book value firms, cannot be described by the hypothesis, e.g. they have low growth and low increase in capital expenditure.
5. One explanation is that some other accounting performance measures, such as cash flows, are the determinants for these firms.
6. Capital expenditure data are not available in the PACAP database. Their surrogate is used.
7. There are 222 sample firms for the cross-sectional regressions vs. only 45 sample firms for the logit analysis. 51 firms are deleted from the validation analysis for 1993 because of missing values.
8. The *p*-values are based on Wilcoxon matched-pairs signed-ranks test that is a non-parametric test. There are only three years involved and the non-parametric test is more appropriate (Siegel, 1956). Friedman tests are also performed. Results also show that the differences are statistically significant at $\alpha = 0.10$ level ($p = 0.08$).

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ADVANCES IN THE FINANCIAL REPORTING OF MEXICAN BANKS: AN EVALUATION OF POST-DEVALUATION REPORTING PRACTICES

Alejandro Hazera

ABSTRACT

In 1994, Mexico underwent a severe peso devaluation. Thereafter, the country's financial system experienced severe financial stress as loan defaults forced the government to undertake a program to rescue the country's banks and obtain international financial assistance. One of the measures involved the reformulation of the financial reporting principles used by the country's banks. The standards, which are contained in the Mexican National Banking and Securities Commission's Circular 1343 (1997), were designed to provide Mexican banks with a comprehensive set of financial reporting standards and to bring the financial reporting practices of Mexican financial institutions closer to international standards. However, while the standards contain several improvements in the fundamental aspects of financial reporting for Mexican banks, they lack some important measurement and disclosure provisions contained in international standards. Given this tendency, this paper examines the post-devaluation (1998) financial reporting practices of Mexican banks.

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Emphasis is placed on comparing the reporting practices contained in the banks' 1998 financial statements with the requirements of Circular 1343, the standards published by the Mexican Institute of Public Accountants (MIPA), International Accounting Standards Committee (IASC) standards, and Financial Accounting Standards Board (FASB) rules.

INTRODUCTION

In the 1990s, the governments of emerging market countries in virtually all parts of the world were compelled to devalue their currencies. Correspondingly, the banks in many of these countries came under pressure as rising interest rates resulted in increased loan defaults and decreased the value of the banks' loan portfolios.

Economic events, such as large fiscal or current account deficits, were seen as the principal factors underlying the devaluations. However, other factors, such as inadequate financial reporting standards, were cited as having concealed the magnitude of the banks' financial stress. In response, there was a call for an improvement in the financial reporting practices of banks in emerging economies.

To a large extent, Mexico was the first emerging market compelled to reformulate its financial reporting standards for banks as a result of financial stress (on banks) caused by a currency devaluation. After a December, 1994 peso devaluation, Mexico's banks came under severe pressure as loan defaults increased substantially. One of the factors that contributed to the surprising magnitude of the stress was inadequate financial reporting, which ostensibly disguised the magnitude of the banks' non-performing loans.

Accordingly, as a prerequisite to providing Mexico with financial assistance, the United States and international financial organizations required Mexico to formulate a comprehensive set of financial reporting standards for its banks. The new standards, which were contained in the (Mexican) National Banking and Securities Commission's (NBSC) Circular 1343, became the required basis for the financial reports of Mexican banks. The purposes of the Circular were to provide Mexican banks with a comprehensive set of financial reporting standards and to bring the financial reporting practices of Mexican banks closer to international standards. In order to promote the latter objective, the Circular contained an "alternative source" provision, which states that in cases where Circular 1343 does not address an issue, financial groups should adhere (in order of importance) to the standards promulgated by the Mexican Institute of Public Accountants (MIPA), the International Accounting Standards Committee (IASC), and the Financial Accounting Standards Board (FASB).

In order to assess the effectiveness of the Circular in achieving these objectives, this paper examines the 1998 financial reports of Mexican financial institutions.

ANTECEDENTS

The Mexican financial system was traditionally separated into two types of institutions, both of which directed capital at preferred clients.[1] One type, government sponsored "development banks," directed capital at politically favored economic sectors, such as heavy industry. The other type, traditional banks, directed loans on favorable terms to companies in closely associated industrial groups. By the 1970s, the system's lack of competitiveness compelled the government to pass legislation that encouraged the formation of multiple banking institutions and the establishment by Mexican banks of offices abroad. However, in 1982 the increasing concentration of capital in three banking institutions and an economic crisis caused by a drastic drop in the worldwide price of oil compelled the Mexican government to nationalize the country's banks.[2] Throughout the 1980s, the prolonged economic crisis and poor government management of the banks continued to erode the banks' financial position. As a result, the reform-minded administration of Carlos Salinas de Gortari reprivatized the banks in the early 1990s.[3]

The principal statute governing the structure of financial institutions under the reprivatization was the "Ley para Regular los Grupos Financieros" (Law to Regulate Financial Groups). The law's objectives were to increase the competitiveness of the Mexican financial system by encouraging the formation of financial conglomerates that could provide a variety of services under a common name and open financial groups to minority foreign investment.

The law initially accomplished its objectives. In 1991, the year after the law was promulgated, the Mexican Stock Exchange listed 15 banks, 23 brokerage houses, and only six financial groups. By 1994 the exchange listed ten banks, seven brokerage houses, and 22 financial group holding companies. Many of the holding companies had attracted limited foreign investment.[4]

The drastic *peso* devaluation in December, 1994, however, resulted in substantial increases in both nominal interest rates and inflation.[5,6] Correspondingly, several financial groups came under financial stress as their banks' loan losses liabilities increased dramatically. Consequently, from 1995 through 1998, several smaller financial groups were merged into larger groups or were bought out by foreign, principally Spanish, financial institutions.[7] By the end of 1998, the number of financial groups had been reduced to the fourteen provided in Table 1.

Table 1. Financial Groups Listed in the 1998 Anuario Bursátil.

Name of Financial Group	Board Key
Grupo Financiero Banamex Accival	BANACCI
Grupo Financiero BBV-Probursa	BBVPRO
CBI Grupo Financiero	CBIGF
Grupo Financiero Bancomer	GFB
Grupo Financiero Bital	GFBITAL
Grupo Financiero Fina Value	GFFINA
Grupo Financiero Inbursa	GFINBUR
Grupo Financiero Intreacciones	GFINTER
Multiva Grupo Financiero	GFMULTI
Grupo Financiero Banorte	GFNORTE
Grupo Financiero Serfin	GSERFIN
Invex Grupo Financiero	INVEX
Ixe Grupo Financiero	IXEGF
Grupo Financiero Santander Mexicano	SANMEX

In the aftermath of these events, complaints arose that the financial reporting standards used by the groups' banks had grossly understated the banks' loan loss provisions and reserves.[8] Most notably, while international accounting standards required that banks establish loan reserves equal to 100% of past-due loans, the NBSC's standards only required that banks establish reserves equal to 60% of past-due loans. Also, international standards required that the entire amount of a loan be classified as past due when payment had not been received within 90 days after the due-date; however, the NBSC's standards required only that the amount of a missed payment be classified as past-due if the payment had not been received within 180 days after the due date. Finally, NBSC standards required a lower level of disclosure than international standards with respect to banks' loan portfolios and loan loss reserves.

Given these shortcomings, international financial institutions required Mexico to improve the financial reporting standards for its banks in order to receive financial assistance. In response, the NBSC issued Circular 1343 at the beginning of 1997. The purposes of the Circular were to provide Mexican banks with a comprehensive set of financial reporting standards and to bring the financial reporting practices of Mexican banks closer to international standards. In support of the first objective, the Circular contained several new provisions that had not been previously required by Mexican bank financial reporting.[9] The most notable included requirements that financial groups and banks:

- consolidate their financial statements;
- recognize the full amount of a loan as past due when a payment has not been received within 90 days of the due date;
- adopt full "mark to market" valuation for their securities portfolios;
- adopt full inflation accounting.

Even with these improvements, the Circular did not comply with international standards in several respects. Most notably, the Circular did not require banks to prepare a statement of cash flows or disclose the fair market value and maturities of deposits and other liabilities.

Two aspects of the Circular, however, supported the objective of bringing financial reporting practices closer to international standards (i.e. the Circular's second objective). First, some parts of the Circular (e.g. marketable securities) directly incorporated IASC or FASB standards. Second, the Circular (Section A-2) contained an "alternative source" provision, which states that in cases where the Circular does not address an issue, banks should adhere, in order of importance, to:

(1) the financial standards promulgated by the Mexican Institute of Public Accountants (MIPA);
(2) the standards published by the International Accounting Standards Committee (IASC);
(3) the standards published by the Financial Accounting Standards Board (FASB).

OVERVIEW OF THE 1998 REPORTING YEAR

Method

As discussed above, the financial reporting standards for Mexican banks prior to the peso devaluation were considered to be inadequate in terms of recognition, valuation, and disclosure. As one of the steps to obtain financial assistance from the United States and international financial organizations, the NBSC issued new financial reporting standards in Circular 1343. The purpose of the Circular was to provide Mexican banks with a comprehensive set of financial reporting standards and to bring Mexican reporting standards closer to international standards. In support of the latter objective, the Circular stated that banks should adhere to MIPA or international standards in cases where the Circular does not address an issue.

In order to assess the Circular's effectiveness in accomplishing these objectives, the 1998 financial reporting practices of the ten Mexican financial groups

provided in Table 2 were compared against the provisions of the Circular as well as certain alternative standards.[10]

Two functional aspects of the reports were examined. First, an evaluation was made of certain fundamental aspects of Mexican bank financial reporting. These included:

- the specific financial statements prepared by banks;
- whether the financial statements had been consolidated, and;
- the basis of accounting (i.e. historical cost versus price-level adjusted accounting).

Second, an examination was made of financial statement items that affect financial statement readers' ability to assess the financial position of Mexican banks. These areas included:

- cash;
- loans;
- loan loss reserves;
- investment portfolios;
- deposits;
- long-term liabilities, and;
- contingencies and commitments.

Four possible designations were applied to the banks' 1998 financial reporting practices, including:

(1) *Complied (C)*: This designation was assigned if the available evidence suggested that the financial group/bank had complied with the particular

Table 2. 1998 Financial Group Financial Statements Examined.

Name of Financial Group	Board Key
Grupo Financiero Banamex Accival	BANACCI
Grupo Financiero BBV-Probursa	BBVPRO
Grupo Financiero Bancomer	GFB
Grupo Financiero Bital	GFBITAL
Grupo Financiero Inbursa	GFINBUR
Grupo Financiero Banorte	GFNORTE
Grupo Financiero Serfin	GSERFIN
Invex Grupo Financiero	INVEX
Ixe Grupo Financiero	IXEGF
Grupo Financiero Santander Mexicano	SANMEX

financial reporting standard. Within this context, the financial reports generally contained extensive "accounting policy" footnotes that explicitly stated the extent of compliance with Circular 1343. These footnotes, however, did not contain information regarding compliance with any of the alternative standards. Thus, the designation of "complied" (C) was assigned to recognition and measurement standards contained in Circular 1343 if the financial statements reflected adherence to the standard under consideration and a financial statement footnote concurrently stated that the group had specifically followed a provision of Circular 1343. Less strictly, the designation was assigned to recognition and measurement rules contained in the alternative standards if the financial statements simply reflected adherence to the rule under consideration. The designation was assigned to disclosure rules contained in any set of standards if the item under consideration was presented in either the financial statements or footnotes.

An important aspect of this classification was that it was assigned regardless of the specific set of standards that a financial group had followed. Thus, if a financial group explicitly adhered to a provision in Circular 1343 that was similar to a provision in the alternative standards, the designation of "C" was assigned to both sets of standards. However, a separate notation of "CS" was made to emphasize that the financial group had primarily adhered to Circular 1343 and that the alternative standard had been complied with only on a "secondary" basis.

(2) *Not Complied (NC)*: This designation was assigned if the available evidence suggested that the financial group/bank did not adhere to a specific standard. For recognition and measurement principles, the designation was assigned if the financial statement footnotes stated that a standard other than the particular rule under consideration had been utilized. For disclosure standards, this designation was assigned if the item under consideration was not revealed/presented in the financial statements or footnotes.
(3) *Not Determinable (ND)*: This designation was principally assigned to recognition, measurement, and disclosure standards if there was no evidence to support whether the bank, in fact, possessed the item to be recognized, measured, or disclosed.
(4) *Not Applied (NA)*: This designation was assigned if a body of standards did not address a particular issue.

On the basis of these designations, profiles were constructed for each of the functional areas examined. Tables 3 through 12 summarize the relevant standards as well as the designations assigned to the standards/financial groups.

Fundamental Aspects of Financial Reporting

Financial Statements Available

Applicable standards. Prior to the issuance of Circular 1343, Mexican financial groups prepared a balance sheet and an income statement; however, financial groups generally omitted a statement of changes in financial position or a statement of cash flows. Thus, the principal issue concerning financial statements was whether financial groups had included a "third financial statement" (i.e. a statement of changes in financial position or a statement of cash flows) in their annual reports. As shown in Table 3, Circular 1343 does not provide any guidance on the financial statements to be prepared by Mexican banks. By contrast, MIPA GAAP (MIPA Bulletins B-1 and B-12) require the preparation of a balance sheet, an income statement, and a statement of changes in financial position. Both IASC (IAS 7 Appendix 2; IAS 30, para 9-25) and FASB

Table 3. Profile of Standards and 1998 Compliance Related to Financial Statements.

	Company									
Source	BANACCI	BBVPRO	GFB	GFBITAL	GFINBUR	GFNORTE	GSERFIN	INVEX	IXEGF	SANMEX
Circular 1343										
No applicable standard	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MIPA GAAP										
Require preparation of statement of changes in financial position	C	C	C	C	C	C	C	NC	NC	C
IASC and FASB										
Require preparation of statement of cash flows	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

NA = no applicable standard exists from that source.
C = financial group complied with the standard.
CS = financial group complied with the standard, but on a secondary basis.
NC = financial group did not comply with the standard.
ND = adherence to the standard is not determinable.

(FAS 95) standards require the preparation of a balance sheet, an income statement, and a statement of cash flows.

1998 Practices As shown in Table 3, given the of lack of any standard in Circular 1343 concerning financial statements, Circular 1343 was designated as not applied (NA) for all of the financial groups. However, eight financial groups effectively complied (C) with MIPA GAAP by providing a statement of changes in financial position. Correspondingly, these groups did not comply (NC) with the possibly more stringent IASC and FASB requirement to prepare a statement of cash flows. Two groups (INVEX and IXEGF) did not prepare any "third" financial statement and thus did not comply (NC) with any set of standards.

Consolidation

Applicable standards. Prior to Circular 1343, many Mexican financial groups prepared parent-only financial statements that provided little detail on the group bank. In order to reverse this practice, Circular 1343 (Section C-2) requires that all financial group holding companies prepare consolidated financial statements that incorporate all of their subsidiaries, including banks.[11] MIPA (Bulletin B-8), IASC (IAS 27), and FASB (FAS 94) standards also require consolidation.

1998 Practices. All of the financial groups provided consolidated financial statements in their 1998 annual reports (see Table 4). Nine of the financial reports contained footnotes that specifically stated that consolidation had been performed in accordance with NBSC standards. Accordingly, these groups were considered to have complied (C) with Circular 1343. The tenth group (INVEX) provided consolidated financial statements but did not provide any note stating that it had explicitly followed NBSC standards; however, this group was designated as having complied (C) with the Circular on the basis of the general trend toward consolidation as well as by the group's pre-Circular practice of preparing parent-only financial statements. Finally, since all of the groups consolidated their financial statements, they also complied on a secondary basis (CS) with the requirement in all of the alternative standards to consolidate financial statements.

Basis of Accounting

Applicable standards. Circular 1343 (section C-1) requires that banks utilize a "full" inflation accounting in which all non-monetary assets and liabilities are restated for the effects of inflation. Also, a purchasing power gain or loss is to be recorded in the income statement and netted against interest income/expense

Table 4. Profile of Standards and 1998 Compliance Related to Consolidation Policy.

Source	BANACCI	BBVPRO	GFB	GFBITAL	GFINBUR	GFNORTE	GSERFIN	INVEX	IXEGF	SANMEX
Circular 1343										
Requires the preparation of consolidated financial statements	C	C	C	C	C	C	C	C	C	C
MIPA GAAP										
Require preparation of consolidated financial statements	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS
IASC and FASB										
Require preparation of consolidated financial statements	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS

NA = no applicable standard exists from that source.
C = financial group complied with the standard.
CS = financial group complied with the standard, but on a secondary basis.
NC = financial group did not comply with the standard.
ND = adherence to the standard is not determinable.

to form the banks' "financial margin." These requirements are similar to the MIPA's well-known bulletin B-10, which also requires "full" inflation accounting. Bulletin B-10 (para. 116–120), however, also requires that the purchasing power gain or loss be presented in the income statement as part of an "integral cost of financing" which includes the purchasing power gain or loss, nominal interest expense (or income), and the gain or loss on the translation of foreign currencies. IASC (IAS 15) and FASB (FAS 89) standards only recommend the preparation of price-level adjusted statements.[12]

1998 Practices. All of the groups prepared their financial statements on a price level adjusted basis. Nine of the groups provided footnotes that stated that they had adhered to NBSC standards. Thus, as shown in Table 5 these groups explicitly complied (C) with the Circular 1343 requirement to prepare full price-level adjusted financial statements. The tenth group (INVEX) also provided price

Table 5. Profile of Standards and 1998 Compliance Related to Basis of Accounting and Presentation of Purchasing Power Gain/Loss.

	Company									
Source	BANACCI	BBVPRO	GFB	GFBITAL	GFINBUR	GFNORTE	GSERFIN	INVEX	IXEGF	SANMEX
BASIS OF ACCOUNTING										
Circular 1343 Requires use of "full" inflation accounting	C	C	C	C	C	C	C	C	C	C
MIPA GAAP Requires use of "full" inflation accounting	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS
IASC and FASB Requires presentation of only summary inflation data	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
PRESENTATION OF PURCHASING POWER GAIN/LOSS										
Circular 1343 Purchasing power gain/loss netted against interest income/expense to form a financial margin	C	C	C	C	C	C	C	C	C	C
MIPA GAAP Monetary gain or loss is to be included as part of total cost of financing	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
IASC and FASB No applicable standard	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA = no applicable standard exists from that source.
C = financial group complied with the standard.
CS = financial group complied with the standard, but on a secondary basis.
NC = financial group did not comply with the standard.
ND = adherence to the standard is not determinable.

level adjusted statements; however, the group's financial statements provided no footnote concerning the body of GAAP that had been followed. Nevertheless, the group was considered to have complied (C) with Circular 1343 on the basis of its pre-Circular practice of preparing only historical cost financial statements. Finally, since all of the groups prepared full price level statements, they complied with MIPA Circular B-10 on a secondary basis (CS). None of the groups complied (NC) with the relatively weak IASC and FASB standards.

Regarding the presentation of the purchasing power gain/loss, all of the groups netted the purchasing power gain/loss against interest income/expense to arrive at a "financial margin." Nine of the groups provided notes that explicitly stated that they had complied with NBSC standards; thus, these groups explicitly complied (C) with Circular 1343. The tenth group (INVEX) also presented its purchasing power loss as prescribed by Circular 1343 and was thus designated as having complied (C) with the Circular on the basis of the practice's novelty. Given this adherence to the Circular, the groups did not comply (NC) with the more comprehensive requirement in MIPA Bulletin B-10 to present the purchasing power gain/loss as part of a comprehensive cost of financing which considers interest, inflation, and exchange rates. IASC and FASB standards were designated as "NA" since these standards do not explicitly address the concurrent presentation of inflation, interest, and exchange gains/losses.

Factors Concerning Financial Position

In addition to the fundamental aspects of financial statements, an examination was made of aspects of the banks' financial reports that affect the ability of financial statements readers to assess the banks' financial position. These areas included financial reporting practices related to cash (and cash equivalents), loan portfolios, loan loss provisions and reserves, investment portfolios, deposits, long term liabilities, and commitments/contingencies.

Cash and Cash Equivalents

Applicable standards. Circular 1343 (Section B-1, para. 3 and 4) stipulates that cash and cash equivalents be valued at their nominal values and that foreign currency be valued at the (current) exchange rate published by the Bank of Mexico. The Circular (Section B-1, para. 2) defines cash equivalents on an item specific basis to include:

- cash on hand;
- deposits in banks;

- gold and silver;
- immediately collectible receivables, and;
- deposits in transit.

Finally, the Circular (Section B-1 para. 6 and 7) requires that banks disclose/present several items, including:

- the details of items which constitute cash and cash equivalents;[13]
- cash and cash equivalents that are not available for use, and;
- details concerning the amount of each foreign currency on hand, the exchange rates used to convert the foreign currencies to pesos, and the total peso equivalents.

MIPA GAAP (Bulletin C-1, para 2) define cash equivalents on the same "items based" approach used in Circular section B-1. The IASC and FASB define cash equivalents on the susceptibility of an item to interest rate risk.[14] IASC principles (IAS 7, para 45) require disclosure of the components of cash and cash equivalents and restrictions on cash (IAS 7, para 48) while U.S. standards (AICPA Audit Guide, 1997, para 4.17) require disclosure of the criteria used to classify items as cash equivalents. Both IASC (IAS 21, para 42) and FASB (FAS 52, para 30) standards require the disclosure of the total amount of the gain/loss due to fluctuations in exchange rates.

1998 Practices. As shown in Table 6, six groups (BANACCI, BBVPRO, GFBITAL, GFNORTE, IXEGF, SANMEX) specifically stated that they had complied (C) with the (necessary) requirement in the Circular to value cash at nominal value. These same groups correspondingly complied on a secondary basis (CS) with the identical requirement in the alternative standards. Regarding the definition of cash equivalents, no group stated that it had referred to a specific list of items to be included in "cash equivalents;" however, in apparent compliance (C) with the item specific definition of cash equivalents in Circular 1343, eight groups (BANACCI, BBVPRO, GFBITAL, GFINBUR, GFNORTE, GFSERFIN, IXEGF, SANMEX) disclosed detailed lists of securities which closely matched the specific items defined in the Circular.[15]

Correspondingly, these groups were in non-compliance (NC) with the requirement in the alternative standards that cash equivalents be defined on the basis of interest rate risk. Thus, compliance with Circular 1343 seemingly precluded the application of the more flexible definition of cash equivalents contained in the alternative standards. Five groups (BANACCI, BBVPRO, GFBITAL, IXEGF, SANMEX) definitively complied (C) with the requirement in Circular 1343 (and the identical requirement on a secondary basis in the alternative standards) that foreign currencies be valued at the current exchange rate.

Table 6. Profile of Standards and 1998 Compliance Related to Cash and Cash Equivalents.

Source	Company									
	BANACCI	BBVPRO	GFB	GFBITAL	GFINBUR	GFNORTE	GSERFIN	INVEX	IXEGF	SANMEX
DEFINITION AND VALUATION										
Circular 1343										
Cash is to be valued at nominal value	C	C	ND	C	ND	C	ND	ND	C	C
Cash equivalents defined on item specific basis	C	C	ND	C	C	C	C	ND	C	C
Foreign currency is to be valued at the current exchange rate and foreign currency gains and losses are to be recorded in current income	C	C	ND	C	ND	ND	ND	ND	C	C
IASC and FASB										
Cash is to be valued at nominal value	CS	CS	ND	CS	ND	CS	ND	ND	CS	CS
Cash equivalents are short-term securities subject to insignificant interest rate risk	NC	NC	ND	NC	NC	NC	NC	ND	NC	NC
Foreign currency is to be valued at the current exchange rate and foreign currency gains and losses are to be recorded in current income	CS	CS	ND	CS	ND	ND	ND	ND	CS	CS
DISCLOSURE										
Circular 1343										
Financial statements should disclose:										
Details of items constituting cash and equiv.	C	C	NC	C	C	C	C	NC	C	C
Restrictions on cash	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 6. Continued.

Source	BANACCI	BBVPRO	GFB	GFBITAL	GFINBUR	GFNORTE	GSERFIN	INVEX	IXEGF	SANMEX
Currencies underlying institution's foreign cash holdings as well as underlying exchange rates and corresponding gains and losses	NC	C	NC	NC	NC	NC	NC	NC	NC	NC
IASC and FASB										
Financial statements should disclose:										
Details of items constituting cash and equiv.	CS	CS	NC	CS	CS	CS	CS	NC	CS	CS
Restrictions on cash	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Criteria used to classify cash equivalents	NC	NC	ND	NC	NC	NC	NC	ND	NC	NC
Amounts of foreign currency exchange gain or loss due to holding of foreign currency	ND	CS	ND	ND	ND	ND	ND	ND	ND	ND

NA = no applicable standard exists from that source.
C = financial group complied with the standard.
CS = financial group complied with the standard, but on a secondary basis.
NC = financial group did not comply with the standard.
ND = adherence to the standard is not determinable.

Compliance with the disclosure requirements of Circular 1343 was mixed. Eight groups disclosed (for a classification of "C") the details of their cash equivalents; however, no group disclosed any restricted cash and only one (BBVPRO) disclosed details concerning its foreign currencies.[16] In correspondence with the item specific definition of cash equivalents in Circular 1343, the same eight groups complied on a secondary basis (CS) with the requirement to disclose the items constituting cash equivalents; however, no group complied (NC/ND) with the alternative requirement to provide the criteria for classifying the items which constitute cash equivalents.

Loan Portfolio

Applicable standards. Circular 1343 (Section B-5, para 10) requires that loans be recorded at the original contractual amount (net of a loan loss reserve) plus accrued interest. Paragraph 13 requires that foreign currency denominated loans be valued (and adjusted to) the current exchange rate. Paragraph 17 states that, absent evidence of collection, restructured loans are to be considered past due and maintained in loan loss reserves.

The Circular also requires the disclosure of several items, including:

- the total amount of loans to related parties (Section B-5 para. 32);
- interest by loan type (Section B-5 para. 31);
- interbank loans (Section B-5 para. 32); and,
- restructured loans (Section B-5 para. 32).[17]

The three other sources of standards (MIPA Bulletin C-3, para. 3; IAS 30, para. 44; AICPA Audit Guide, para. 6.45) require that loans be recorded at their original contracted amount and that interest be accrued and included as part of the loan amount. FAS 52 requires that foreign currency loans be recorded at the current exchange rate. FAS 114 requires a write down of a loan that has been deemed to be impaired or restructured.

The alternative sources require several of the basic disclosures provided in Circular 1343 (e.g. related party loans). In addition, the three alternative sources (MIPA Bulletin C-3, para. 7; IAS 30, para. 30; AICPA Audit Guide, para. 6.80) require the disclosure of loan maturities as well as related party transactions (MIPA Bulletin C-3, para. 11 and 12; IAS 30 para. 56-58; FAS 57). IASC (IAS 30, para. 40) and FASB standards (FAS 105) require disclosure of the concentration of credit risk in loan portfolios.

1998 Practices. As shown in Table 7, the groups generally complied with Circular 1343's provisions concerning the valuation of loans. Four groups (BANACCI, GFB, GFINBUR, IXEGF) provided footnotes that stated that loans had been valued at contracted amount plus accrued interest. Eight groups (BANACCI, BBVPRO, GFB, GFBITAL, GFNORTE, GFSERFIN, IXEGF, SANMEX) complied (C) with the requirement to value foreign currency denominated loans at the current exchange rate and nine groups (BANACCI, BBVPRO, GFB, GFBITAL, GFINBUR, GFNORTE, GFSERFIN, IXEGF, SANMEX) complied (C) with the requirement that restructured loans be placed in the past-due loan portfolio. These same groups complied on a secondary basis with similar valuation provisions in the alternative standards (CS). However, in an indication of the reluctance of groups to go beyond Circular

Table 7. Profile of Standards and 1998 Compliance Related to Loan Portfolios.

	Company									
Source	BANACCI	BBVPRO	GFB	GFBITAL	GFINBUR	GFNORTE	GSERFIN	INVEX	IXEGF	SANMEX
VALUATION										
Circular 1343										
Loan portfolio valued at contracted amount plus accrued interest	C	ND	C	ND	C	ND	ND	ND	C	ND
Foreign currency loans valued (adjusted) at (to) the current exchange rate	C	C	C	C	ND	C	C	ND	C	C
Restructured loans are placed in loan reserves	C	C	C	C	C	C	C	ND	C	C
Alternative Sources (IASC and FASB)										
Loan portfolio valued at contracted amount plus accrued interest	CS	ND	CS	ND	CS	ND	ND	ND	CS	ND
Foreign currency loans valued (adjusted) at (to) current exchange rate.	CS	CS	CS	CS	ND	CS	CS	ND	CS	CS
Restructured loans placed in loan reserves	CS	CS	CS	CS	CS	CS	CS	ND	CS	CS
Impaired loans written down	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DISCLOSURE										
Circular 1343										
Related party loans	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Interest income by category	NC	NC	NC	NC	C	C	NC	NC	NC	NC
Inter-bank loans	C	C	ND	ND	ND	C	C	ND	C	ND
Restructured loans	C	C	C	C	C	C	C	ND	C	C
Alternative Sources (IASC and FASB)										
Related party loans	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Interest calculations	NC	NC	NC	NC	CS	CS	NC	NC	NC	NC

Table 7. Continued.

	Company									
Source	BANACCI	BBVPRO	GFB	GFBITAL	GFINBUR	GFNNRTE	GSERFIN	INVEX	IXEGF	SANMEX
DISCLOSURE										
Alternative Sources (IASC and FASB) (cont.)										
Interbank loans	CS	CS	ND	ND	ND	CS	CS	ND	CS	ND
Restructured loans	CS	CS	CS	CS	CS	CS	CS	ND	CS	CS
Concentration of credit risk	C	C	C	C	C	C	C	NC	C	C
Loan maturities	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Fair market value of loans	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

NA = no applicable standard exists from that source.
C = financial group complied with the standard.
CS = financial group complied with the standard, but on a secondary basis.
NC = financial group did not comply with the standard.
ND = adherence to the standard is not determinable.

1343, no group complied with the "extended" standard to write down impaired loans.[18]

Compliance with Circular 1343's disclosure requirements was generally weak. None of the groups provided detailed information on related party loans while only two groups (GFINBUR, GFNORTE) disclosed their interest income by loan category. However, five groups (BANACCI, BBVPRO, GFNORTE, GFSERFIN, IXEGF) complied (C) with the provision in Circular 1343 to disclose loans to other financial institutions and nine groups disclosed (C) the amount of their restructured loans.[19] The same groups complied (CS) on a secondary basis with similar alternative sources.[20] With respect to credit risk, nine groups complied (C) with the extended alternative requirement to disclose their loan concentration by economic sector. This type of disclosure, however, has been traditional to Mexican financial institutions; thus, the groups were most likely adhering to common practice rather than explicitly complying with any alternative standard. Finally, in a further indication of the groups'

reluctance to go beyond the specific provisions of Circular 1343, none of the groups complied (NC) with the "extended" disclosure requirements in the alternative standards to disclose loan maturities and the fair value of loans.

Allowance for Loan Losses

Applicable standards. Circular 1343 contains two basic provisions concerning the establishment of loan loss reserves. First, the Circular modifies a traditional approach used by Mexican banks. Under that method, banks only classified as past due the amount of a payment that was 180 days overdue. Section B-5 (para. 15), however, requires that the entire loan be classified as past due when a payment is 90 days overdue. In addition, the bank must stop accruing interest. In a similar manner, both IASC (IAS 30, para. 45) and FASB (AICPA Audit Guide, para. 7.30) standards prescribe that the entire amount of a loan be classified as past due when payment has not been received within 90 days and that interest on the loan not be accrued.

Regarding the method for valuing loan loss reserves, section B-5 slightly modifies the traditional Mexican "rule of thumb." Under this system, banks have categorized their loan portfolios into five risk categories labeled as "A", "B", "C", "D", and "E." Loans labeled as A are considered current and collectible while the other categories represent increasing degrees of collection risk which require banks to reserve the following percentages against each category: B-1%, C-20%, D-60% E-100%. Under the former accounting rules, the amount of the loan loss reserve needed to equal at least 60% of banks' past due loans. Section B-5 retains the traditional "letter" system; however, the section modifies the "rule of thumb" so that the loan loss reserve only needs to equal 45% of past due loans. By contrast to this partial accrual of past-due loans, both IASC (IAS 30, para. 45) and FASB (AICPA Audit Guide, para. 7.28) standards require that the loan loss reserve include all past-due loans plus a requisite proportion of current loans which management's experience indicates will not be collected.

Regarding disclosures, Circular 1343 (section B-5, para. 32) requires that banks reveal/present the total balance of the estimated loan reserve (by type of loan) as well as movements in estimated loan reserves, such as amounts written off and expensed. The alternative standards, primarily IAS 30, require four principal disclosures. Within the context of the letter system described above, these include requirements that banks reveal/present:

- information about the system used to classify loan risk as well as a discussion of the method (e.g. an aging) used to assign loans to the various "letter" categories (IAS 30, para. 43a);

- information regarding the relative amount of a loan (i.e. a payment or the entire loan amount) classified as past due as well as the amount of time a payment is overdue before the loan is categorized as past-due (IAS 30, para. 43a);
- the absolute and relative size of their loan reserves, including the balance in the allowance for credit losses at the beginning and end of each period as well as the size of the reserve relative to the past-due loan portfolio (IAS 30, para. 43c);
- the movements in loan reserves, including: the addition to the loan loss reserve resulting from the amount charged to loan loss provision; the amount deducted from the loan loss reserve resulting from direct write-off of accounts against the allowance; and, the addition to the loan loss reserve resulting from recoveries of previously written off accounts (IAS 30, para. 43b).

1998 Practices. As shown in Table 8, the banks largely complied (C) with the provisions of Circular 1343 concerning the valuation of loan loss reserves. Eight groups (BANACCI, BBVPRO, GFB, GFBITAL, GFNORTE, GFSERFIN, IXEGF, SANMEX) complied (C) with the requirements to categorize the entire amount of a loan as past due if the payment is not received in 90 days. Also, all of the groups provided sufficient information in their footnotes (or supporting schedules) to confirm that they had complied (C) with the "45% rule".[21] These same groups complied with the similar requirements in the alternative standards on a secondary basis (CS). However, only three groups (GFINBUR, INVEX, SANMEX) complied (C) with the alternative requirement to maintain reserves that are larger than the past-due loan portfolio. Thus, compliance with the 45% rule in (Circular 1343) effectively encouraged banks to maintain smaller reserves than required under the alternative sources (i.e. 100%).

Regarding disclosure, all of the groups complied (C) with the requirement in Circular 1343 to disclose movements in loan reserves and the balances of loan reserves. The same requirements in the alternative standards were complied with on a "secondary" basis (CS). Also, all of the banks complied (C) with the "extended" requirement to provide sufficient information for calculating the relative size of their reserves. However, in another indication of the groups' reluctance to adhere to "extended" alternative standards, only one bank (SANMEX) complied with the alternative requirement to disclose the method for assessing the risk in its loan portfolio.

Investment Portfolios

Applicable standards. Prior to the 1994 devaluation, the investment securities of Mexican banks were principally recorded at historical cost. Circular 1343

Table 8. Profile of Standards and 1998 Compliance Related to Loan Loss Reserves.

Source	Company									
	BANACCI	BBVPRO	GFB	GFBITAL	GFINBUR	GFNORTE	GSERFIN	INVEX	IXEGF	SANMEX
VALUATION										
Circular 1343										
Entire amount of loan classified as past due	C	C	C	C	ND	C	C	ND	C	C
Loans classified as past due after the loan is 90 days overdue	C	C	C	C	ND	C	C	ND	C	C
Loan loss reserves equal at least 45% of past due loans	C	C	C	C	C	C	C	C	C	C
IASC and FASB										
Entire amount of loan classified as past due	CS	CS	CS	CS	ND	CS	CS	ND	CS	CS
Loans classified as past due after the loan is 90 days overdue	CS	CS	CS	CS	ND	C	CS	ND	CS	CS
Loan loss reserves equal at least 100% of past due loans	NC	NC	NC	NC	C	NC	NC	C	NC	C
DISCLOSURE										
Circular 1343										
Financial statements should disclose:										
Balance in loan reserves	C	C	C	C	C	C	C	C	C	C
Movements in loans reserves	C	C	C	C	C	C	C	C	C	C
IASC and FASB										
Financial statements should disclose:										
Balance in loan reserves	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS
Movements in loan reserves	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS
Size of loan reserves	C	C	C	C	C	C	C	C	C	C
Risk assessment method	NC	NC	NC	NC	NC	NC	NC	NC	NC	C

NA = no applicable standard exists from that source.
C = financial group complied with the standard.
CS = financial group complied with the standard, but on a secondary basis.
NC = financial group did not comply with the standard.
ND = adherence to the standard is not determinable.

(Section B-2), however, adapted the general provisions of FAS 115. Thus, securities are to be classified and accounted for as follows:

Trading securities: These are securities which management expects to trade in the short term. The value of the securities is adjusted to market and holding gains/losses are recorded in net income.

Available for sale securities: These are securities which management expects to sell in the medium term. The securities are adjusted to market and holding gains/losses are recorded in shareholders' equity.

Held to maturity securities: These are fixed income securities which management intends to hold until maturity. They are recorded at acquisition cost.

With respect to the alternative standards, MIPA GAAP do not contain a standard which addresses investments and IASC standards categorize investments on the current/non-current dichotomy and are consequently not primarily applicable to banks. Thus, the most comparable (and nearly identical) alternative standard is FAS 115, which contains the same rules as Circular 1343.

1998 Practices. As shown in Table 9, all of the financial groups presented their loan portfolios in accordance with the three classifications contained in Circular 1343 (i.e. trading, available for sale, and held to maturity). Nine of these groups stated in their footnotes that they had followed NBSC standards with respect to their loan portfolios; as such, they explicitly complied (C) with Circular 1343 and with FAS 115 on a secondary basis (CS). The tenth group (INVEX) followed the classification rules provided in Circular 1343 but did not provide any footnote stating that it had adhered to the authority of that promulgation. Nevertheless, the group was classified as having complied (C) with the Circular since classification of securities on the basis of the rules contained in the Circular (i.e. FAS 115) was virtually unknown before the Circular's promulgation.

Regarding the classification of holding gains/losses, nine of the groups stated in their footnotes that they had followed NBSC standards. Thus, they complied (C) with the requirement in Circular 1343 to include gains/losses from trading securities in income and gains/losses from available for sale securities in equity.[22] Correspondingly, the groups complied with FAS 115 on a secondary basis (CS).

Deposits

Applicable standards. Circular 1343 (Section B-9) requires that deposits be recorded at nominal value plus accrued interest. Foreign currency deposits are to be recorded at the current exchange rate. Also, the Circular requires several disclosures, including:

Table 9. Profile of Standards and 1998 Compliance Related to Investment Portfolios.

Source	Company									
	BANACCI	BBVPRO	GFB	GFBITAL	GFINBUR	GFNORTE	GSERFIN	INVEX	IXEGF	SANMEX
CLASSIFICATION OF INVESTMENT PORTFOLIO										
Circular 1343 Securities are categorized as Trading, Available for Sale, and Held To Maturity. Securities are generally "marked to market"	C	C	C	C	C	C	C	C	C	C
Alternative Standard (FAS 115) Securities are categorized as Trading, Available for Sale, and Held To Maturity. Securities are generally "marked to market."	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS
PRESENTATION OF GAIN/LOSS										
Circular 1343 Unrealized gains and losses are to be placed on the income statement for trading securities and in the shareholders equity section of the balance sheet for available for sale securities.	C	C	C	C	C	C	C	C	C	C
Alternative Standard (FAS 115) Unrealized gains and losses are to be placed on the income statement for trading securities and in the shareholders equity section of the balance sheet for available for sale securities	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS

NA = no applicable standard exists from that source.
C = financial group complied with the standard.
CS = financial group complied with the standard, but on a secondary basis.
NC = financial group did not comply with the standard.
ND = adherence to the standard is not determinable.

- the classification of deposits (e.g. demand or time);
- interest expense; and,
- the amount of foreign currency and the exchange rates underlying foreign currency deposits.

The alternative sources require that deposits be valued at nominal value.[23] Also, the alternative sources require the disclosure of deposits by type, interest expense calculations, and details on foreign currency deposits. Finally, the alternatives source require three disclosures not contained in the Circular. First, IASC standards (IAS 30, para. 30) and U.S. standards (AICPA Audit Guide, para. 11.32) require the disclosure of the maturities of time deposits. Secondly, FASB (AICPA Audit Guide, para. 11.32) and IASC (IAS 32 para. 77) rules require the disclosure of fair value of deposits. Finally, MIPA (Bulletin C-9, para. 27), IASC (IAS 30 para. 56-58), and FASB standards (AICPA Audit Guide, para. 11.32) require the disclosure of deposits from related parties.[24]

1998 Practices. As shown in Table 10, four of the groups (BANACCI, GFINBUR, GFSERFIN, IXEGF) explicitly complied (C) with the Circular 1343 requirement that deposits be valued at nominal value while six groups (BANACCI, BBVPRO, GFBITAL, GFSERFIN, IXEGF, SANMEX) indicated that foreign currency deposits had been valued at the current exchange rate. These same groups complied (CS) with similar alternative standards on a secondary basis. Regarding disclosure, all groups complied (C) with the Circular 1343 requirement that the type of deposit be disclosed. This disclosure was generally provided in the body of the income statement. Only three groups (BBVPRO, GFB, IXEGF) disclosed (C) interest expense by type of deposit while five (BBVPRO, GFBITAL, GFINBUR, GFNORTE, SANMEX) disclosed (C) the foreign currencies underlying their deposits. The same groups complied with similar alternative standards on a secondary basis (CS). However, in another sign of reluctance to apply the alternative standards, only one group (GFNORTE) complied with the "extended" standard to disclose the maturities of its time deposits; none disclosed the fair market values of deposits, and; only two groups (BANACCI, SANMEX) provided the amount of deposits owed to related parties.

Long-Term Liabilities

Applicable standards. The Circular (Section B-9; para 14-19) requires that liabilities be accounted for in a manner similar to non-financial companies. Accrued liabilities are recorded at contracted amount; long-term liabilities are recorded net of discount or premium and amortized using the effective interest method;

Table 10. Profile of Standards and 1998 Compliance Related to Deposits.

	Company									
Source	BANACCI	BBVPRO	GFB	GFBITAL	GFINBUR	GFNORTE	GSERFIN	INVEX	IXEGF	SANMEX
VALUATION										
Circular 1343										
Deposits valued at nominal value plus accrued interest.	C	ND	ND	ND	C	ND	C	ND	C	ND
Foreign currency deposits valued at the current exchange rate.	C	C	ND	C	ND	ND	C	ND	C	C
IASC and FASB										
Deposits valued at nominal value.	CS	ND	ND	ND	CS	ND	CS	ND	CS	ND
Foreign currency deposits valued at the current exchange rate.	CS	CS	ND	CS	ND	ND	CS	ND	CS	CS
DISCLOSURE										
Circular 1343										
Financial statements should disclose:										
Classification of deposits	C	C	C	C	C	C	C	C	C	C
Interest expense details	NC	C	C	NC	NC	NC	NC	NC	C	NC
Foreign currency details	ND	C	ND	C	C	C	ND	ND	ND	C
IASC and FASB										
Financial statements should disclose:										
Classification of deposits	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS
Interest expense details	NC	CS	CS	NC	NC	NC	NC	NC	CS	NC
Foreign currency details	ND	CS	ND	CS	CS	CS	ND	ND	ND	CS
The maturities of time deposits	NC	NC	NC	NC	NC	C	NC	NC	NC	NC
The fair value of deposits	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Related party deposits	C	ND	ND	ND	ND	ND	ND	ND	ND	C

NA = no applicable standard exists from that source.
C = financial group complied with the standard.
CS = financial group complied with the standard, but on a secondary basis.
NC = financial group did not comply with the standard.
ND = adherence to the standard is not determinable.

and, foreign currency liabilities are recorded at the exchange rate at the date the transaction occurred and the associated information (e.g. exchange rates) is disclosed.

In addition several disclosures/presentations are required, including:

- the method for amortizing premiums and discounts;
- interest expense;
- the amount of interbank loans; and,
- details on foreign denominated liabilities.

The alternative sources require that accrued liabilities be valued at the contracted amount and that long term debt be recorded at cost and amortized by the effective interest method (MIPA Bulletin C-9; IASC Exposure Draft 48, para. 92; APB Opinion 21). The alternative sources also state that foreign currency liabilities should be valued at the prevailing exchange rate (MIPA Bulletin C-9; IAS 21, para 11a; FAS 52). MIPA bulletin C-9 (para 20-36) requires several general disclosures similar to those contained in Circular 1343 (e.g. interest expense calculations). Additionally, the alternative sources require the disclosure of the maturities of liabilities (IAS 30, para 30; FAS 47, para 10b), the fair market value of liabilities (IAS 32 para 77, FAS 107), and liabilities to related parties (MIPA Bulletin C-13; IAS 30, para 56-58; FAS 57),

1998 Practices. As shown in Table 11, only two groups (BANACCI, IXEGF) explicitly stated that they had complied (C) with the requirements that long-term liabilities be valued at amortized cost and that the effective interest method be utilized. However, five (BBVPRO, GFBITAL, GFSERFIN, IXEGF, SANMEX) indicated compliance with the requirement that foreign currency liabilities be valued at the current exchange rate. The same groups complied with similar alternative standards on a secondary basis (CS). Only one group (BANACCI) explicitly stated that it had used the effective interest method of amortization.

Regarding disclosure, only one group (BANACCI) disclosed its method of amortization and three groups (BANACCI, GFB, SANMEX) complied (C) with the Circular's requirement to provide the amount of interest expense on long-term debt. All groups complied (C) with the Circular's requirements to disclose the amounts of their interbank loans and four (GFB, GFBITAL, GFINBUR, SANMEX) disclosed (C) the amounts of their foreign currency liabilities. These same groups complied with similar alternative standards on a secondary basis (CS). Additionally, in a notable practice beyond the requirements of Circular 1343; eight groups provided the maturities of their long-term liabilities. This disclosure was usually contained in detailed discussion on the groups'

Table 11. Profile of Standards and 1998 Compliance Related to Long-Term Liabilities.

	Company									
Source	BANACCI	BBVPRO	GFB	GFBITAL	GFINBUR	GFNORTE	GSERFIN	INVEX	IXEGF	SANMEX
VALUATION										
Circular 1343										
Liabilities valued at amortized cost	C	ND	ND	ND	ND	ND	ND	ND	C	ND
Foreign currency liabilities valued at current exchange rate and exchange gains and losses recorded in current income	NC	C	ND	C	ND	ND	C	ND	C	C
Effective interest method of amortization used	C	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alternative Sources (IASC and FASB)										
Liabilities valued at amortized cost	CS	ND	ND	ND	ND	ND	ND	ND	CS	ND
Foreign currency deposits valued at current exchange rate	CS	CS	ND	CS	ND	ND	CS	ND	CS	CS
Effective interest method of amortization used	CS	ND	ND	ND	ND	ND	ND	ND	ND	ND
DISCLOSURE										
Circular 1343										
Financial statements should disclose:										
Method of amortization	C	NC	NC	NC	NC	NC	NC	NC	NC	NC
Interest expense details	C	NC	C	NC	NC	NC	NC	NC	NC	C
Interbank loans	C	C	C	C	C	C	C	C	C	C
Foreign currency details	ND	ND	C	C	C	ND	ND	ND	ND	C
IASC and FASB										
The financial statements should disclose:										
Method of amortization	CS	NC	NC	NC	NC	NC	NC	NC	NC	NC
Interest expense details	CS	NC	CS	NC	NC	NC	NC	NC	NC	CS
Interbank loans	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS
Foreign currency details	ND	ND	CS	CS	CS	ND	ND	ND	ND	CS

Table 11. Continued.

Source	BANACCI	BBVPRO	GFB	GFBITAL	GFINBUR	GFNORTE	GSERFIN	INVEX	IXEGF	SANMEX
IASC and FASB (cont.)										
The financial statements should disclose:										
Maturities of liabilities	C	C	C	C	NC	C	C	NC	C	C
Fair value of liabilities	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Related party liabilities	C	ND	ND	ND	ND	ND	ND	ND	ND	C

NA = no applicable standard exists from that source.
C = financial group complied with the standard.
CS = financial group complied with the standard, but on a secondary basis.
NC = financial group did not comply with the standard.
ND = adherence to the standard is not determinable.

subordinated debt. However, no group complied (NC) with the extended requirements to disclose the fair market values of its liabilities and only two groups (BANACCI, SANMEX) disclosed (C) the amounts of long-term liabilities to related parties.

Commitments and Contingencies

Applicable standards. Circular 1343 (section B-9, para 42-47) follows MIPA Bulletin C-12 with respect to commitments and contingencies. That promulgation classifies contingent liabilities into those that are "quantifiable" versus those that are "non-quantifiable." Quantifiable contingent losses are those that can be estimated on the basis of management's experience (e.g. loan losses) while non-quantifiable contingent losses are those that cannot be estimated on the basis of experience. Quantifiable contingent losses are accrued if there is virtual certainty that the contingency will occur. However, quantifiable contingencies for which there is not a virtual certainty of occurrence and non-quantifiable contingencies are only disclosed. Finally, in accordance with MIPA bulletin

C-12, the Circular requires the disclosure of basic instruments with off-balance sheet risk, such as irrevocable letters of credit.

MIPA GAAP (Bulletin C-12) incorporate the same rules as Circular 1343. IASC and FASB standards (IAS 10, FAS 5) generally require the accrual of contingent losses that are estimable and probable, the disclosure of "other" contingent losses, and the accrual and disclosure of commitments. These sources of GAAP also require disclosures regarding off-balance sheet risk. For example, IAS 30 (para 26) requires disclosure of commitments including irrevocable offers to extend credit and information concerning contingencies and commitments arising from off-balance sheet items (such as swaps and options). FAS 105 also requires the disclosure of instruments that result in off-balance sheet risk, including loan commitments.

1998 Practices. None of the financial statements contained footnotes which explicitly described the accounting policies or source of policies followed by the financial groups for contingencies and commitments. Thus, any evidence concerning the financial reporting practices (for contingencies and commitments) was contained in the footnotes describing actual contingencies and commitments. Regarding contingencies, the financial groups seemingly followed Circular 1343 in form, but not substance. For example, eight of the banks provided footnote information concerning contingent losses (see Table 12). Thus, in a somewhat liberal interpretation, they were considered to have complied (C) with the Circular. Six of these banks (BANACCI, BBVPRO, GFB, GFNORTE, IXEGF, SANMEX) provided the amount of the possible losses; however only one (GFB) accrued the losses while others provided various reasons for not accruing the contingent losses. For example, GFSERFIN stated that U.S. authorities had confiscated certain assets in the bank's U.S. operations; however, no accrual was recorded because the bank "felt" that it could recover the assets in the ensuing judicial proceedings. Also, IXEGF provided amounts of contingent liabilities, but said the probability of actually realizing the loss was small.

The financial reporting for commitments was more transparent. Seven banks provided discussion concerning commitments. Six banks disclosed the amounts of commitments (BANACCI, BBVPRO, GFB, IXEGF, GFNORTE, SANMEX). Two of these banks (GFNORTE, SANMEX) disclosed commitments related to various economic and social programs imposed by the Mexican government. GFB disclosed the amount of an irrevocable line of credit. BBVPRO disclosed a line of credit related to activities with the International Finance Corporation (IFC).

Table 12. Profile of Standards and 1998 Compliance Related to Contingencies and Commitments.

Source	BANACCI	BBVPRO	GFB	GFBITAL	GFINBUR	GFNORTE	GSERFIN	INVEX	IXEGF	SANMEX
CONTINGENCIES										
Circular 1343										
Contingencies that are probable and estimable are accrued; other contingencies are to be disclosed	C	C	C	C	C	ND	C	ND	C	C
Alternative Standards										
Contingencies that are probable and estimable are accrued; other contingencies are to be disclosed	CS	CS	CS	CS	CS	ND	CS	ND	CS	CS
COMMITMENTS										
Circular 1343										
Unused lines of credit and irrevocable offers to extend credit are to be disclosed	C	C	C	ND	C	C	ND	ND	C	C
Alternative Standards										
Unused lines of credit and irrevocableoffers to extend credit are to be disclosed	CS	CS	CS	ND	CS	CS	ND	ND	CS	CS

NA = no applicable standard exists from that source.
C = financial group complied with the standard.
CS = financial group complied with the standard, but on a secondary basis.
NC = financial group did not comply with the standard.
ND = adherence to the standard is not determinable.

CONCLUSION

In 1994, Mexico experienced an extreme peso devaluation. To some extent, shortcomings in the country's financial reporting for banks were seen as contributing to the suddenness of the crisis. In response to these concerns, the

NBSC issued a new set of accounting standards in its Circular 1343. The purposes of the Circular were to provide Mexican financial institutions with a comprehensive set of standards and to bring the financial reporting practices of Mexican financial institutions closer to international standards. Given these objectives, this paper has compared Mexican financial groups' 1998 reporting practices with certain standards contained in Circular 1343, as well as with certain "alternative" standards.

Regarding compliance with Circular 1343, most of the banks adopted the Circular's provisions with regard to the fundamental aspects of financial reporting. Most notably:

- all of the banks consolidated their financial statements;
- all of the banks used price-level adjusted accounting;
- most of the banks prepared a statement of changes in financial position, in compliance with MIPA GAAP and with the Circular's "alternative" standard provision;
- all of the banks complied with the new rules regarding the valuation and classification of investments;
- all of the banks complied with the new rules concerning the recognition of past-due loans and the "45%" rule regarding the size of reserves.

However, even with these successes, there were two shortcomings in the banks' financial reports. First, many banks did not comply with the details contained in the Circular. For example, none of the banks disclosed their interest income/expense calculation. Second, compliance with the alternative standards was weak. Most notably, the alternative standards were generally complied with only on a "secondary" basis. Correspondingly, in an indication of the ineffectiveness of the "alternative source provision," banks frequently did not adhere to "extended" alternative standards in instances where Circular 1343 did not address an issue.

On a combined basis, the Circular's strength and the alternative standards' weakness encouraged banks to adhere to weaker standards than would have been permissible under international financial reporting rules. For example, the strict adherence to Circular 1343 regarding the 45% rule effectively required that banks adopt weaker standards than the internationally accepted norm (i.e. a "100%" rule). Also, by complying with the Circular's item specific definition of cash equivalents, the banks avoided the requirement in IASC and FASB standards to consider interest rate risk in the determination of a cash equivalent. From an opposite perspective, banks did not comply with such extended requirements in the alternative standards to disclose the fair market values and maturities of deposits and other liabilities.

Taken together, these tendencies suggest that the best avenue for encouraging banks in Mexico and possibly other emerging markets to adopt and follow international standards is to incorporate those standards directly in an authoritative document enforceable by authorities in those countries. Within this context, however, two caveats must be considered. First, in cases where Mexican standards are actually more stringent than international standards (such as inflation accounting), banks should not be encouraged to comply with the international standard. Secondly, consideration must be given to the economic (and possibly political) motives underlying the standards by Mexican financial authorities. Most notably, it has been widely recognized in the Mexican business press that the NBSC adopted the 45% rule for banks' loan loss reserves to alleviate the post-devaluation pressure on smaller financial institutions and to provide sufficient time for recapitalizing those institutions or merging them with other financial organizations. Given these circumstances, Mexican banks should be encouraged to adopt a "100%" rule, but only over several years.

To be sure, the full-scale adoption by Mexican financial institutions of international standards will be challenging. However, the task will be facilitated if the country is encouraged to formally adopt the standards within an environment which provides due consideration to the status of the country's current standards as well as the country's current state of economic development.

NOTES

1. For a discussion of ISI, see Thompson (1979).
2. For discussion on the nationalization of Mexican banks in 1982, see Tello (1984).
3. For a discussion of the re-privitization of Mexican banks, see White (1992).
4. At the end of 1994, foreign investment constituted double-digit percentages of seven financial groups' total assets and was present, to some extent, in the capital structure of ten others.
5. Nominal short-term interest rates on the government's benchmark notes known as *Certificados de la Tesorería* ("CETES") increased from 15% to 75% between December 1994 and May 1995 and the inflation rate rose to over 50% by the end of 1995.
6. A detailed account of the events that led to the devaluation may be found in United States General Accounting Office (1996).
7. The new financial groups *Grupo Financiero Santander* and *Grupo Financiero BBV Probursa* are Spanish affiliates.
8. An example of these concerns can be found in Rice (1995).
9. As discussed later, even with the improvements contained in the Circular, it lacked several provisions contained in international standards. Most notably, the Circular did not explicitly require Mexican banks to prepare a statement of cash flows, present loan loss reserves equal to at least 100% of past-due loans, disclose the fair market value of all financial instruments (including deposits and other liabilities) or disclose items related to risk, such as loan and deposit maturities.

10. As discussed later, even with the improvements contained in the Circular, it lacked several provisions contained in international standards. Most notably, the Circular did not explicitly require Mexican banks to prepare a statement of cash flows, present loan loss reserves equal to at least 100% of past-due loans, disclose the fair market value of all financial instruments, including deposits and other liabilities, or disclose items related to risk, such as loan and deposit maturities.

11. MIPA GAAP (Bulletin B- 8, para 8 and 9) provide exceptions to consolidation for certain foreign subsidiaries and bankrupt subsidiaries; IASC (IAS 27, para. 13) rules provide exceptions where control is temporary and where restrictions have been placed on distributions, and; FASB (FAS 94 para 9 and 10) rules provide exception where control is likely to be temporary.

12. The IASC (IAS 15) only recommends the disclosure of information concerning changing prices. The FASB (FAS 89) has rescinded any requirement to prepare price level adjusted statements, but recommends them where relevant.

13. Circular 1343 (para 6) states that items that constitute cash and cash equivalents should only be disclosed if they "merit" such disclosure. However, Mexican banks have traditionally disclosed this item. Thus, the requirement in Circular 1343 seems to codify the predominant practice.

14. IAS 7 (para 6) defines cash equivalents as ". . . short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value." FAS 95 (para 8) defines cash equivalents as short-term instruments that are ". . . readily convertible to known amounts of cash . . ." and that are ". . . so near their maturity that they present insignificant risk of changes in value because of changes in interest rates."

15. The groups that did not provide detailed lists were designated as not determinable (ND) since there was no other evidence concerning the definition of cash equivalents that had been used.

16. The groups were assigned a classification of not determinable (ND) for the standard requiring the disclose of restricted cash since there was no evidence to determine if the groups, in fact, possessed restricted cash.

17. The Circular (Section B-6) also requires the disclosure of transactions outside the ordinary course of business. However, for purposes herein, this item was considered roughly equivalent to related party loans.

18. In a rather literal manner, this item was classified as not determinable (ND) since there was no way to determine if the groups possessed impaired loans that had not been purchased by the government.

19. Since it could not be definitively determined which groups actually possessed impaired loans, all of the groups were designated as "non-determinable."

20. These financial reporting areas included the requirements to value the loan portfolio at contracted amount, to value foreign currency loans at the current exchange rate, and to place restructured loans in the past-due loan portfolio.

21. The two groups (GFINBUR and INVEX) that did not explicitly comply with this requirement were designated as not determinable (ND) since no evidence was presented in the footnotes explaining the financial reporting method they had used.

22. INVEX complied with the Circular but did not state in a footnote that it had adhered to the Circular's authority. Nevertheless, the group was (once again) considered to have complied (C) with the Circular on the basis of the novelty of the practice.

23. Neither IASC nor FASB standards contain specific rules regarding the valuation of short-term liabilities. However, the value of short-term liabilities is discussed in the conceptual frameworks for those bodies of standards. For example, see the IASC's *Framework for the Preparation and Presentation of Financial Statements* (1997, para 91) and the FASB's Statement of Concepts Number 5, *Recognition and Measurement in Financial Statements of Business Enterprises* (1998, para 36-40).

24. The AICPA Audit Guide (para 11.32) contains an extensive summary of FASB disclosure requirements pertinent to deposits.

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ACCOUNTING AND THE ECONOMIC REFORMS IN NEW ZEALAND: A STUDY OF THE STATE/PROFESSION RELATIONSHIP

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ABSTRACT

This paper examines some aspects of the developing relationship between the state and the accounting profession in New Zealand focusing on a period when a major programme of economic reform was implemented. The paper suggests that accounting facilitated the macro-micro interface by providing the link between the set of values highlighted through the reform process and the internal workings of organisations while benefiting from the involvement in the reform process. It also points out that the ideological shift and the associated values entrenched in the reform programme provided the environment that motivated and enabled the profession to introduce significant strategic and structural changes. Through the reform process, the accounting profession in New Zealand has changed from the traditional ideal type of established profession to a profession that can adapt to a changing environment. This strategy suggests the emergence of the accounting profession as a new group of "organic intellectuals", that is responsive to the needs of its members and the ever changing surroundings.

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INTRODUCTION

Professional accounting is often assumed to be a technical matter that is of interest only to those who are directly involved in the preparation of accounting reports and their immediate use. Upon closer examination, however, it becomes clear that it is much more than just a technical activity (Tinker, 1985; Hopwood et al., 1977). Accounting is the principal source of financial information about relationships within and among economic entities in society. In this capacity accounting as a social process performs, in addition to a purely technical function, a range of functions including those related to legitimation and rationalization of decisions (Burchell et al., 1980), that impacts on society. Further, accounting is influenced by the socio-economic context in which it operates. For example, because of the role of accountants as personal investment advisors, a change in government policy from regulation to deregulation of capital markets can have a profound effect on professional accounting activity. However, the conventional analysis based on a narrow technical view of accounting function has largely overlooked both the legitimation and rationalization roles of accounting in organizations and society, and the role of the state in the development of accounting profession (e.g. Willmott et al., 1992, p. 33).

With the increasing tendency to see accounting as a social process that is interwoven with wider social-political-economic fabric of the context in which it operates, there has been a significant interest in professionalization of accountants in both accounting and sociology of professions literatures over the last three decades. Initially the general trend in the sociology of professions literature was to see the state in a passive role – a state from which aspiring occupations wrested their legally-based privileges. The relationship was moulded by the concepts of state intervention and professional autonomy, and the attendant assumption that there is a simple inverse relationship between the two – the more ‘intervention’ the less ‘autonomy’ (Fielding & Portwood, 1980; Johnson, 1972). This trend was also reflected in the early research on the accounting profession (Brown, 1905; Carey, 1969).

However, another school of thought has placed greater emphasis on the active as opposed to the passive role of the state in the development of professions (e.g. Freidson, 1970; Larson, 1977; Johnson, 1972; Macdonald, 1995). For example, in his analysis of medicine Freidson (1970) makes a major contribution towards clarifying the nature of professional privilege and the processes by which it is asserted (Larson, 1977). Freidson (1970, pp. 71–72) argues that while a profession is distinct from other occupations, as it has been given the right to control its own work, this autonomy is only technical and not absolute. Accordingly, professions originally emerge by the grace of the state and they

ultimately depend upon the power of the state for their privileged position as it is secured by the political and economic influence of the state, which sponsors them. Macdonald (1995) also argued that the potential for an occupational group to strike bargains is largely dependent on the nature of the prevailing political culture and political power networks.

The active role of the state in the process of professionalization of an occupation has been identified in several U.K. studies, for example, in medicine (Johnson, 1972) and accounting (Cooper et al., 1989; Walker & Shackleton, 1995; Willmott, 1986). Johnson (1972) in his study of the medical profession stresses the initiatory as well as the implementary role of the state in the process of professionalization. Cooper et al. (1989) in their analysis of the accounting profession found that the professionalization project was dependent on the complexion of the reciprocity between profession and state. Walker and Shackleton (1995) also showed that the 1940s political environment conditioned by war, reconstruction, consensus politics and 'corporate bias' was receptive to the competing demands of professional groups and that the state was amenable to conferring awards on those functional collectivities, which performed the role of governing institutions on its behalf.

Gramsci's (1971) distinction between different groups of intellectuals and their relationships to class structure can be useful in understanding the role of the state in the professionalization process. According to Gramsci (1971), intellectuals in the functional sense fall into two groups, namely, "traditional" and "organic". The first group, i.e. 'traditional' intellectuals, is a group that have lost their organic ties to the ruling class. They are generally involved in defending vested corporate interests, and speaking for abstract intellectual freedoms (Larson, 1977). Examples of 'traditional' intellectuals would be the clergy and branches of academia. Their position in society has a certain inter-class aura about it but derives ultimately from past and present class relations and conceals an attachment to various historical class formations. The second group, i.e. 'organic' intellectuals, is the thinking and organising element of a particular fundamental social class. Gramsci (1971) identifies their function to be one of directing the ideas and aspirations of the class to which they organically belong.

Larson (1977) in her study on the "The Rise of Professionalism" draws on Gramsci (1971) and points out that Gramsci's perspective on the intelligensia complements Freidson's account of how a particular occupation rises to the status and power of profession. Larson (1977) also argues that most established professions attempt to present a face of "traditional intellectuality". Further, Larson (1977) explains the mutually constructive nature of the state/profession relationship, and the role of the state in the transition of the model of profession "from a predominantly economic function – organizing the linkage between

education and the marketplace – to a predominantly ideological one – justifying inequality of status and closure of access in the occupational order" (p. xviii).

This paper proposes to examine critically the conceptualization of the state/profession relationship as put forward in the conventional sociology of professions literature in the context of the experience in New Zealand during a period of major economic reform.

ECONOMIC REFORMS AND GOVERNMENT BY THE MARKET

With the election of the fourth Labour Government in 1984, New Zealand embarked on a comprehensive programme of economic reforms that changed the economic landscape of the country. This was triggered by the deteriorating fiscal position, declining living standards and the foreign exchange crisis facing the country at the time. For example, private and public sector foreign debt combined rose from 11% of GDP to 95% between March 1974 and June 1984 (Evans, Grimes, Wilkinson & Teece, 1996). This was creating problems for the local economy and damaging the country's image as a western industrialized nation. The reform programme was directed largely towards rebuilding the country's international image in addition to solving the domestic economic problems such as unemployment. The key areas of reform included the financial sector, monetary policy, fiscal policy, the public sector and labour markets. For example, New Zealand's financial markets moved from a highly regulated position to a highly deregulated position within one year.

The new government brought about a radical ideological shift from a stance of protectionism and social-welfare, based on Keynesian economics, to a clear new-right agenda espousing deregulation, free markets and corporate managerialism, based on neo-classical economics. This shift in focus was strongly supported by the Treasury who articulated a programme of reform (Treasury, 1984, 1987). The experience of the U.K. in its economic reform programme under the Thatcher government also influenced what happened in New Zealand (Evans et al., 1996). Underlying these ideas was a clear market bias on the part of the state with the conviction that the market was the best determinant of allocative efficiency (Jacobs, 1995). Self (1993) refers to this phenomenon as government by the market. According to this view, public responsibilities should be reduced and public policies adjusted to the pressures of economic markets. It is also argued that government itself should be remodelled and transformed according to market concepts of competition and efficiency.

A distinct feature in the reform programme was the deliberate attempt to develop firm theoretical underpinnings to the solution of practical problems and

to incorporate these concepts in legislation (Pallot, 1991, p. 189). These reforms drew on public choice theory, contract theories, managerialism and the new-institutional economics.[1] The impact of these theories is evident in, among other things, the conception that government is a complex series of contractual relationships, the concern to ensure competition in service provision, the emphasis on performance specification, reporting and monitoring, the widespread use of formal, written management contracts, and the emphasis on economic incentives and sanctions (Boston et al., 1996, p. 351).

Government by the market does not imply the removal of all forms of regulation but rather regulatory reform, focussed on the replacement of anti-competitive regulation with regulation to increase competitiveness in the market. In the late nineteenth century and early twentieth century, the dominant approach to the regulation of products and services by the State, was through the regulation of occupations and institutions that provided the products and services. This was usually done through either the licensing of manufacturers and service institutions (banks were licensed to borrow and lend money), as well as occupational groups that provided a particular service, or by state ownership of the institution providing the service. In recent years the state has shown an increased interest in the deregulation of institutions providing a particular service (e.g. banks can in addition to borrowing and lending money, sell insurance and securities). In New Zealand, the state under the reforms has sought to regulate the market for products and services through surveillance and disclosure rather than through direct intervention of the institutions that provide products and services.

The economic policies that led to the withdrawal of subsidies and import controls have left many areas of the domestic economy exposed to new levels of competition both locally and internationally. This necessitated certain legislative measures to prevent the market from being dominated by large companies and industries, and to protect the interests of consumers (Perera & Rahman, 1997). For example, the Commerce Act 1986 aims to promote good competition in New Zealand markets and control restrictive trade practices and business acquisitions that could lead to market dominance. It also identifies economic efficiency as the criterion on which individuals' actions are to be evaluated. The requirements of the Commerce Act are enforced by the Commerce Commission, which was established under this Act as a public enforcement agency. The Commerce Commission has investigative and administrative powers and also has responsibility for enforcing the Fair Trading Act 1986. Further, the Securities Commission was established under the Securities Act 1987 to facilitate private capital investment in New Zealand primarily by improving the efficiency and fairness of markets and enhancing public confidence in these markets.

Furthermore, in the new competitive environment, there have been several changes to company legislation, for example, the Companies Act 1993, the Financial Reporting Act 1993 and the Take-overs Act 1993. The primary aim of these changes has been to provide a more favourable environment for the efficient operation of the capital market. The expectation was that this would be achieved by striking an acceptable balance between providing flexibility and encouragement for business and investment on one hand, and safeguards for the interests of shareholders and creditors, on the other. The Financial Reporting Act 1993 provides specific financial reporting requirements for both private and public sector entities. It also introduced major changes to both accounting standard setting and enforcement in New Zealand by creating a government appointed independent body, the Accounting Standards Review Board (ASRB) to approve accounting standards, and granting the ASRB approved standards legal backing. The Companies Act 1993 aims at strengthening and simplifying company legislation in New Zealand. For example, for the first time, the directors' duties were included in the statute. The Take-overs Act 1993 encourages the efficient allocation of resources and competition for corporate control, assists in ensuring shareholders are treated fairly and promotes the international competitiveness of New Zealand's capital markets.

The public sector reforms constituted a significant part of the total economic reform package. These reforms incorporated measures reflecting the state's desire for greater effectiveness. The state associated increased effectiveness with greater commercial awareness and cost consciousness throughout government, with better management, and with increased utilisation of accounting and financial management knowledge, skills and information (Dixon, 1990). Accordingly, the state departments were identified under trading and non-trading activities, and the new policies in non-trading activities such as education and health have incorporated the principles of organizational and managerial devolution and improved accountability, the catch cry in public sector reforms.[2]

The public sector reforms were introduced through a series of legislation, i.e. the State Owned Enterprises Act 1986, the State Sector Act 1988, the Public Finance Act 1989 and the Fiscal Responsibility Act 1994. The State Sector Act 1988 replaced Heads of Departments with Chief Executive Officers (CEOs) as the employment authorities for their departments. This made the CEOs directly responsible to the Minister. The Public Finance Act 1989 made the CEOs responsible for outputs.[3] Accordingly, the CEOs contract with their Minister for specific outputs. They now have more autonomy in decision making than before. For example, now the CEOs can implement asset transactions, under a value limit, without requiring approval from the Treasury, and for larger sums they have explicit capital injections rather than approval for specific purchases.

The performances of departments are scrutinised at a number of different levels: the relevant ministers; committees of Parliament; the Audit Office (monitors departmental expenditures against contractual arrangements for outputs) and the Treasury through the Minister of Finance (at the time the plans are drawn up or modified).

The State Owned Enterprises Act 1986 converted trading departments into State Owned Enterprises (SOEs) with clearer lines of accountability, contracting and more flexible employment conditions.[4] Prior to 1984, state trading enterprises accounted for over 12% of GDP and covered a wide range of activities – from printing services and agricultural produce, to banking and telecommunications (Evans et al., 1996). However, their objectives were not clear in the sense that there was confusion about their commercial and social service objectives. Further, being government departments, they were subject to political and bureaucratic influences. The SOE Act 1986 clearly state that these enterprises are expected to operate as commercial ventures and are subject to the same competition laws facing private enterprises. The general framework for accountability that underpins the SOE Act has served as a model for subsequent reforms in local government and crown entities (Boston et al., 1996, p. 301).

The SOEs were, however, different from private businesses in a number of respects. On the one hand, their limited liability status was not clear. On the other hand, they were still subjected to government monitoring as a result of non-transferrable shares, albeit to a lesser extent compared to previously when they were government departments. Further, their ongoing relationship to government, albeit much weaker than that of a government department, was seen as an impediment to achieving efficiency in commercial operations. These considerations provided arguments for privatisation of SOEs, which commenced in 1989, e.g. telecommunications services and railway. The sales of SOEs were generally carried out through tender. Privatisation of SOEs and other Crown assets provided funds to pay off part of overseas debt. For example, by 1992, these sales yielded NZ$11 billion, which was 20% of New Zealand's total overseas debt (Dunken & Bollard, 1992, p. 172).

The Fiscal Responsibility Act 1994 emphasises transparency and accountability in managing public and private sector entities, including the government's own fiscal management. It requires government to follow a legislated set of principles of responsible fiscal management and publicly assess their fiscal policies against these principles in order to increase the level of transparency in government fiscal management. Among the set of principles was that of maintaining total Crown debt at prudent levels by ensuring that, on average, over a reasonable period of time, total operating expenses do not exceed total operating revenues.

In summary, opening up the economy to competition, both locally and internationally in order to attract foreign investment and stimulate domestic investment, has been a key feature of the reforms. Further, new legislation was introduced to create a favourable environment for competition and to protect consumer interests. For example, the industry policy focused on developing a competitive environment in which no sector was singled out for encouragement by policy intervention, rather the market place was to be the sole determinant of commercial outcomes. The competition policy has sought to minimise government and regulatory intervention and to place reliance on actual and potential competition for the regulation of prices and monopoly behaviour and the achievement of economic efficiency.

The values entrenched in the economic reform programme, such as deregulation, market orientation, the promotion of competition in the provision of goods and services, and corporate managerialism have had a strong impact on many areas of economic activity including accounting.

CHANGES WITHIN THE ACCOUNTING PROFESSION

The accounting profession in New Zealand has undergone major changes in recent years. While it would be an overstatement to suggest that all those changes were caused solely by the economic reforms, the market-oriented environment certainly facilitated and in many cases motivated the changes within the profession. The profession had clamoured for change for some time and this finally coincided with the calls for change elsewhere in the wider economy. The New Zealand Society of Accountants (NZSA) had commissioned a reform initiative in the early 1980s. At that time, despite several attempts to address the issues associated with the entry requirements, the NZSA continued to have problems in this area, for example, issues concerning equivalence among different tertiary accounting qualifications. Further, there was evidence that its education programme was at variance with those of other comparable professional bodies[5]. In 1982, the Council of the NZSA appointed a representative group of members to formulate long-term objectives and policies on education, for the Society (NZSA, 1984, p. 82). After ample research of the changes occurring in the professional and business environment a document "Horizon 2000 – and beyond" was produced in 1984 with much fanfare (NZSA, 1984). However, initially, not much attention was paid to the main message of the document, that there was a need to cultivate qualities such as "versatility, flexibility and adaptability" in accounting professionals. Later on, with the clear indications of the state's market bias, accompanied by a business and legislative environment more conducive to market based strategies, the accounting scene unfolded to its current state.

In the early 1990s, it was becoming clear that the profession was facing a crisis both internally as well as externally, and that major corrective action was necessary. In the new open economic environment, the providers of goods and services, including professional bodies, are now exposed to global competition, and are subjected to close scrutiny by their overseas counterparts. For example, in 1991, the Institute of Chartered Accountants in Australia threatened to withdraw reciprocal practice rights for New Zealand ACA's if the NZSA failed to raise the standard of its education and admission policy. The Canadian Institute of Chartered Accountants also raised similar concerns.

During this period, the profession was also experiencing problems within its own membership. For example, a proposal by the Council of the NZSA to make continuing professional development (CPD) compulsory was defeated in a ballot by members. While members in large accounting firms were keen on compulsory CPD, corporate and public sector members as well as members in small public accounting firms were not. At this point the big six firms had also developed their own identity and felt the 'Chartered Accountant' designation was becoming irrelevant except as a symbol to convey a continuity with tradition. This rejection contributed to further differences between professional practice requirements of NZSA members and accountants in other Anglo-American countries.

The NZSA was faced with another crisis that created further dissatisfaction among its membership. In early 1992, the criminal actions of an Auckland accountant resulted in $10.4 million worth of claims being made on the Fidelity Fund (NZSA, 1993). To meet most of the claims, the Council of the NZSA had to impose a special levy of $3,300 on all members of the NZSA in public practice (NZSA, 1992). Many members in public practice saw no reason why they should be required to make good the losses incurred through theft by another member of the Society, and threatened to withdraw their membership. This placed the Council of the NZSA in a dilemma. In July 1992, the NZSA made a submission to the Associate Minister of Finance seeking the abolition of the Fidelity Fund and, in return, stated it was willing to sacrifice the restrictions on the use of the term 'accountant' in Section 32 of the 1958 Act (NZSA, 1992). In its submission to the minister, the NZSA stated,

> Despite that provision in the principal Act (restriction on the use of the term accountant), it is possible for people to resign from membership of the Society and practice as financial consultants or similar designation, and virtually continue to carry out the same activities they previously engaged in as chartered accountants (NZSA, 1992).

Further, it was clear that the efforts to maintain occupational control or monopoly, through the restriction on the use of the term 'accountant' were becoming less effective in the current environment. However, there was no incentive to take any major action in the absence of no apparent cost involved

in retaining the restriction. The fidelity fund crisis highlighted the cost of maintaining the monopoly. On 28 October 1992, the Government announced the abolition of the NZSA Fidelity Fund and the removal of statutory protection over the term 'accountant' or 'auditor'.

The only statutory protection available for the term, 'accountant' at present is the provision in the Financial Reporting Act 1993, that requires a person calling himself or herself an accountant to be suitably qualified. Since this does not necessarily mean membership of the professional body, it marks the deregulation of the accounting profession in New Zealand. Subsequent legislation, the Institute of Chartered Accountants Act 1996, clearly restricts the Institute to a certification, and not a licensing role. It permits competition in accounting services.[6] The state, by adopting a policy of direct regulation of services, minimised the need for regulation through the professional body, thereby facilitating deregulation.

In recognising the need to adapt to the new environment, the education committee of the NZSA initiated an international review of its current admissions policy.[7] The International Review Report pointed out that the public interest would be best served by a deregulated economic system where healthy competition is prevalent and areas reserved for professional activity are minimized (Lothian & Marrian, 1992). The report concluded that in order to ensure the future continued recognition of the NZSA qualifications internationally, the current admission requirements needed to be enhanced. It recommended that this should be done by including liberal study in the academic requirement, requiring practical experience through Approved Undertakings, and demonstration of professional competence through Professional Accounting Schools. These recommendations formed the beginning of a series of strategic and structural changes that followed.

Strategic Changes

The Wheeler Campbell report (1993)[8] states that, "The Society ought to offer a place and designation for those who want to differentiate themselves from all other accountants, provided they accept its membership criteria" (p. 6). The report also suggests that the regulatory role of the professional body should be carried out through the ownership of a brand, not through occupational control. It proposes,

> . . . a conceptual framework that suggests that Society membership signals information about the quality of the services the consumer can expect. The ACA in this context can be seen as a brand, and brand reputation is the primary component of the Chartered Accountant product (1993, p.3).

The brand they note provides important information on a product or service, based on perceptions of performance or reputation earned in the market, and reduces marketing cost to providers of a service. They also emphasise the need for the professional body to protect and nurture the brand to ensure that its information content is relevant to the market's needs. Supporting the concept of deregulation, the report notes a growing perception among members that statutory protection is irrelevant in a competitive market, and instead viewed statutory protection to be stifling on the management of the NZSA: "the statute has been a substitute for vision and strategy" (p. 5).

The recommendations of the Wheeler Campbell report have been implemented almost without alteration. Accordingly, there has been a change in the profession's strategy, from occupational control to brand ownership and product differentiation. The brand, chartered accountant, is promoted as "the hallmark of integrity and expertise".

Structural Changes

In March 1994, the Council of the NZSA approved a new structure and educational policy (NZSA, 1994). Accordingly, professional membership is structured into three Colleges recognizing the distinctions among members in terms of qualifications and the extent of involvement in core accounting services. The College of Accounting Technicians is for those who provide paraprofessional accounting services. The College of Associate Chartered Accountants is for those who are not actively involved in providing core accounting services or do not require international recognition. The College of Chartered Accountants is for those who are actively involved in providing core accounting services or require international recognition of their status. Those seeking a career in public practice must attain the CA qualification. The admission requirements for the CA College and ACA College, have a common five-year foundation including four years of full-time tertiary study involving completion of an accountancy major degree programme and general practical experience for a period of one year, with or without a mentor. Another feature common to these two colleges is the requirement to complete the professional competency examination (PCE-1) at the end of the five-year period. A further two years of practical experience accompanied by a second professional competency examination (PCE-2) through the Professional Accounting School, is then required in the case of the CA qualification. The AT qualification requires two years approved tertiary study and one year relevant practical experience with a supervisor/mentor (CA or ACA) or two years relevant practical experience while studying. It also requires the completion of PCE-1 (Fig. 1).

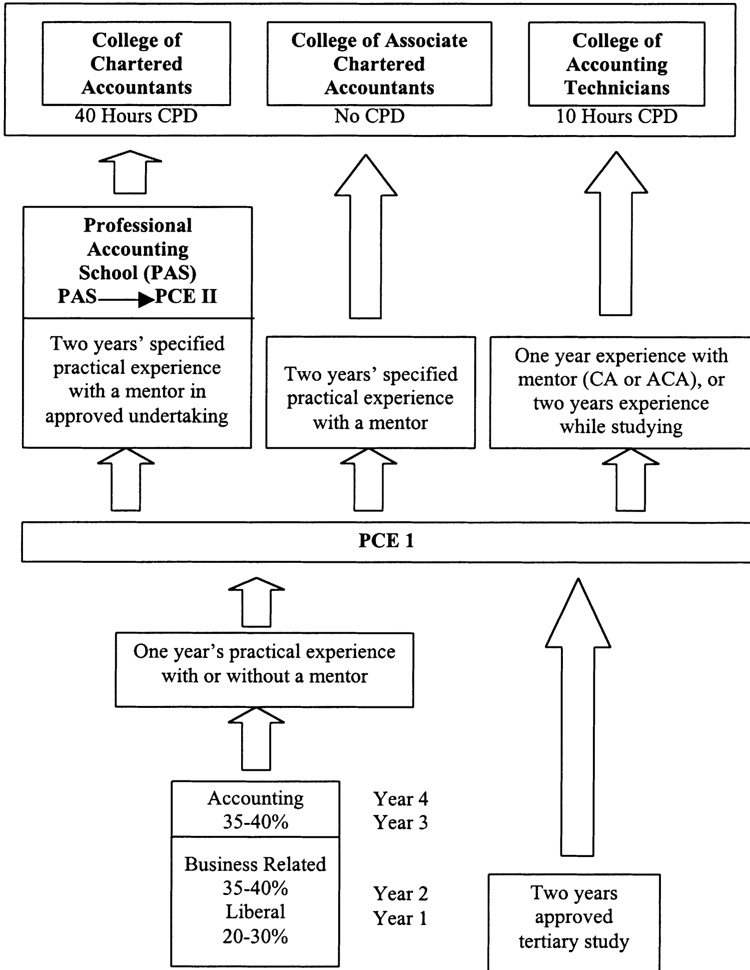

Fig.1. Current Admissions Policy of the ICANZ.

It is expected that the new admissions policy will provide the New Zealand accounting profession with the capacity to adapt to changing circumstances in performing its role in society in the future and help alleviate the growing membership dissatisfaction.[9]

The shift in the role of the Institute from occupational control to brand ownership and product differentiation required a suitable governance structure,

clearer objectives (that of maximising the value of the brand) for the body and quantifiable performance indicators (ICANZ, 1998). Willmott, Cooper and Puxty (1993) explains the problem of determining an appropriate governance structure for an accounting professional body as follows:

> In striving to secure and maintain their power and privileges, 'professional' associations are caught on the horns of their dual responsibility as 'self-interested' sellers of labour and as guardians of 'the public interest'. Positioned within a complex set of interdependent relationships, they face the recurrent difficulty of developing a mode of governance that simultaneously satisfies the 'needs and aspirations' of their membership, and the duty, monitored by the state, to serve 'the public interest' (p. 85).

In this context the corporate form of organisation with clear separation of decision making from executive implementation, and hierarchical authority patterns was found to be more suitable (Wheeler Campbell, 1993).[10] The process of electing Council members was simplified with a more representative system whereby branches are entitled to elect one councillor for every 500 members. In the new management structure, the president of the Institute is more akin to that of a board chairperson, with the Secretary of the Society replaced by a Chief Executive of the Institute. The Executive Board is the operational arm of the Council. The management structure is also divided into commercial activity and membership services with separate objectives of profit and service.

In November, 1998, the ICANZ announced the formulation of another taskforce, the Horizon 2005 Taskforce, to re-examine how the profession maintains its relevance to its various stakeholders in the context of rapid changes caused mainly by technology and deregulation. The taskforce was expected to analyse, among other things, the different market segments and the structure of the Institute. In April 1999, the Taskforce produced a Discussion Document (ICANZ, 1999) identifying its primary objective as "to make recommendations to maximise the value of the Institute to its members" (para. 2.1). The document also equates the Institute to a company operating in a competitive market, seeking to create wealth. Further, it considers that brand value is the most important benefit that members both pursue and receive (para. 5.4).

THE STATE/PROFESSION RELATIONSHIP

As stated earlier, the conventional views about the relationship between the state and the professions are often expressed in terms of the dualism of 'state intervention' and 'professional autonomy'. The issue here is whether the state and the profession engage in a zero sum relationship in which more state intervention automatically means less freedom for the profession to operate.

Cooper (1998) discusses this issue and concludes that this is not necessarily the case, because the state can empower professions in a myriad of different ways, both intentional and unintentional. By using two case studies of the developing relations between professions and state in Britain, Johnson (1982) demonstrates that the conventional view is inadequate and distorting, and provides an alternative conceptualization of the state/profession relationship. He views the relationship as being mutually constructive, and shows that the processes often attributed to professionalization are integral to the process of state formation and vice versa. Explaining the meaning of professional autonomy, Johnson (1982) states:

> The autonomy of a profession consists of a specific structural context where access to organisational, economic, political and technical resources provides the conditions for independent action. Thus, the relationship of a profession to elements of state apparatus may constitute the very conditions within which occupational autonomy is possible (p. 189).

Johnson (1982) argues that the developing relationship of professions to state helps to define the limits and potentialities of state powers, functions and capacities as well as conditioning the possibility of independent action by occupational groups (p. 207). Further, he points out that professionalization as a necessarily partial development toward autonomy, arising out of the articulation of state and occupation, is likely to vary from society to society.

Dingwell and Fenn (1987, p. 61) point out that professions are occupational associations that have contracted with the state, not merely to regulate their members, but also to regulate the behaviour of others. Professions are then agents of two principals, their clients and the state. The state, according to the private interest theory of regulation, is a grouping of self interested parties voted to form government by the people (Mitnick, 1980). It is representative of ideologies that are in vogue and are likely to serve the interests of the majority of the voters. In recent years, the relationship between the state and the accounting profession in New Zealand has been one of co-operation with mutually beneficial effects. For example, the profession provided the tools for the state to implement its reform programme, and in turn, the profession also benefited from its involvement with the state, and the economic environment that was created as a result of the general ideology and policy direction of the state.

A profession offers a number of benefits to the state, for example, certain minimal guarantee of competence, a self-regulatory apparatus to ensure proper levels of technical and moral performance and a measure of disinterestedness in dealing with societal issues of controversial nature (Halliday & Carruthers, 1996, p. 402). Pallot (1991) points out that in New Zealand the wave of reforms implemented in the public sector would not have been possible without reporting standards. A new set of rules designed to convert the public sector entities into

'successful and efficient businesses', based on economic reasoning (Health and Disabilities Services Act 1993, s25(d)) by making managerial values fundamental to their operation were required. This phenomenon of increasing influence of economic reasoning has been described as colonisation of social values by economic reasoning (Habermas, 1987, p. 332). Extending this view to accounting, Laughlin (1991) argues that accounting information acts as a steering medium and in doing so it actively embodies and reinforces certain values.

Associated with the government's market bias and neo-classical economic reasoning was an attempt to reduce the size of the state and reinvigorate markets. However, in achieving the latter, the government faced two major problems. First, the public's perception of the market as being morally deficient (Burrage, 1993), and second, the publics' perception of the bureaucrats as being incompetent to run commercial ventures.[11] Therefore, it was essential that markets won public trust and confidence. In order to achieve this: (a) markets should be seen as efficient, and (b) market participants should be seen as accountable. Professionalism can provide solutions to both these problems of legitimacy and assist markets win public trust and confidence (Halliday & Carruthers, 1996). In contrast to government bureaucrats, professionals offer the appearance of expert knowledge and technical efficiency. For example, in New Zealand, the state used the information provided by professionals, in particular accountants, to highlight the need for reform and to justify the various strategies adopted such as the performance based contracts for CEOs. Burrage (1993) states that professions in England are well-respected in social life and that this helps solve the moral deficit problem the public often associates with the market.[12] The situation in respect of the social status of professions is very similar in all Anglo-Saxon countries including New Zealand. For example, Larson (1977) states that,

> In the Anglo-Saxon societies (and, one could add, in Anglo-Saxon social science) the image of profession is one that implicitly accentuates the relation between professional privilege and the market. Profession is presented, for instance, as the antithesis of bureaucracy and the bureaucratic mode of work organization (p. xvii).

Openness and visibility are essential ingredients in making markets function efficiently. The use of information technology of which accounting would be an integral part was crucial in ensuring increased transparency and accountability in economic activity. Hopwood (1990) states that "accounting has the power to shift patterns of organizational visibility so that the concerns of the external world can permeate and influence internal organizations" (p. 10). The role of accounting in the creation and maintenance of visibility has been the subject of many studies (e.g. Morgan & Willmott, 1993; Broadbent

& Guthrie, 1992; Miller & O'Leary, 1987). It has been pointed out that accounting operates to provide visibility in two important ways. First, accounting makes visible actions and events that cannot be physically observed, e.g. standard costing and budgeting provide the tools to make the individuals responsible for certain actions and events visible and therefore accountable. Second, accounting makes visible concepts and values that are not directly visible, such as cost and profit (they become enshrined in the books of record).

Jacobs (1995) examines how accounting facilitated the macro-micro interface by providing a link between the external values and internal workings of the organisations within the New Zealand's public sector, in particular, the health sector. As required by the Public Finance Act, budgets and other reporting requirements were introduced into the health sector.[13] Accounting performance measurement and control tools provided the state with the technology to transmit the market and managerial values of the reforms into public sector institutions (Jacobs, 1995). In particular, Jacobs (1995) explains, budgets were a device to turn doctors into effective resource allocators and to encourage them to accept responsibility and accountability for their actions. Budgets created new visibilities – the basis for observation and control of efficiency and effectiveness. Further, a number of the managers were on a performance-based salary. Performance was defined as managing and in some cases cutting the budget.

As mentioned earlier, development of reporting standards was crucial to the public sector reforms in New Zealand. The groundwork for public sector reporting standards was prepared in the early 1980s by members of the accountancy profession. Pallot (1991, p. 229) states "the accountancy profession in the early 1980s prepared the ground for the financial management reforms . . . in particular by fostering acceptance of accrual accounting". She also points out that whilst there had been an international trend towards the establishment of public sector standards-setting bodies, the profession in New Zealand went further than its overseas counterparts, in taking the initiative in developing non-financial measures of performance. A key development was the establishment of the Public Sector Study Group within the New Zealand Society of Accountants in 1982 to investigate the possibility of developing accounting standards for the public sector. According to Pallot (1991), two principles dominated the New Zealand approach to public sector financial reporting; first, recognition of the need for non-financial as well as financial measures of performance for reporting in the non-profit sector, and second, a shift from cash accounting to accrual accounting.

In July 1987, the NZSA issued two statements on public sector accounting and reporting. The first, 'Public Sector Accounting Statement No.1' (PSAS-1),

provided guidelines for the selection of appropriate accounting policies for the public sector service-oriented activities. The second, 'Statement of Public Sector Accounting Concepts' (SPSAC), suggested that accounting reports for commercially oriented activities of public sector entities should be prepared in accordance with generally accepted accounting principles (GAAP). These efforts of the NZSA formed the basis for the reporting requirements prescribed in subsequent legislation, e.g. the Public Finance Act 1989. The accounting and financial reporting requirements incorporated in legislation have brought about significant improvements to the type, the quantity and the quality of information available to ministers and to parliament (Boston et al., 1996, p. 267). This is an example of how the accounting profession assisted the state in implementing economic reforms.

The accounting profession also tends to benefit when economic reforms driven by monetarist principles are pursued by the state. For example, explaining the experience in the U.K., Sikka and Willmott (1995) state that,

> . . . the accounting firms rolled the VFM philosophy through the fields of health, education, transport, energy etc. Further, the government's policy of privatising national utilities created a veritable bonanza for auditing firms as they played a central role in reporting on profit forecasts, preparing prospectuses and dealing with matters related to the sale of British Telecom and British Airways, to name a number of the major privatisations (p. 563).

Given the similarities between the policies adopted in the U.K. and New Zealand in their respective economic reform programmes, and the rapid pace at which New Zealand implemented its programme, the New Zealand experience was very similar to that described by Sikka and Willmott.[14] The economic reforms provided a significant amount of new business opportunities for the accounting profession in New Zealand, e.g. through the accounting and reporting requirements embodied in new legislation. The Public Finance Act 1989 requires the Treasury to prepare a set of consolidated annual financial statements for the Crown in accordance with GAAP. These statements are to consolidate the financial statements of the public sector entities such as crown agencies and SOEs, which are also required to prepare their financial statements in accordance with GAAP. Consequently, the same accounting principles are consistently applied to both public and private sector entities. Also, the Public Finance Act requires the Crown Financial Statements to be prepared within two months of the end of the financial year (A full set of CFS, on an accrual basis was produced for the first time in 1992). Further, the Financial Responsibility Act 1994 requires the financial information included in the government's annual budget to be in accordance with GAAP. The need to comply with these requirements meant a significant amount of additional resources in terms of professional accountants in public sector entities.[15]

Prior to economic reforms, the Audit Office, created by an Act of Parliament, carried out the audits in all areas of the public sector. However, the adoption of accruals accounting in place of cash accounting caused a sudden and major expansion of the range of audit activities. For example, the education reforms of 1989 created approximately 2,600 entities that needed to be accountable separately, and hence audited. The expansion of audit activities also meant that the Audit Office had to acquire skills to audit commercial, profit-oriented, and tax-paying enterprises (Boston et al., 1996, pp. 304–305).

In the new environment characterised by contestable markets, the statutory 'monopoly' of the Audit Office in respect of the audit of all public sector entities was unsustainable. In fact a report commissioned by the Finance and Expenditure Committee in 1988 (Kirk, 1988) supported the view that private sector auditors should audit government corporations. Of course, the accounting firms, e.g. Deloitte Haskins and Sells (1986, p. 11) were strong advocates against the Audit Office's monopoly due to self-interest and professional reasons. This is an example of an important accounting related issue over which the wishes of the state and the profession coincided. Further, some public enterprises themselves argued that it would be more difficult to raise funds overseas if the audits were not conducted by internationally recognised accounting firms (Boston et al., 1996, 304). By introducing contestability into public sector auditing, the state could further its philosophy of competition in the provision of services.

In December 1992, the Audit Office embarked on a major initiative to change the audit of public sector entities by introducing a contracting system that made the audit work contestable. Accordingly, the audits (excluding those related to the 'core' public sector, mainly government departments and local authorities) were allocated to competent service providers, i.e. Audit New Zealand and private sector auditors, on the basis of competitive tender. This opened up a huge area of new opportunities for private sector auditors. For example, in 1994, approximately one third of the total annual audit work of the Audit Office was carried out by auditors from the private sector (Audit Office, 1994, p. 26). In 1995, contestability was extended to the audit of some entities in the 'core' public sector, which comprised approximately 43% of the total annual audit workload. By 1997, the contestable portion constituted approximately 80% of the total audit portfolio (The Audit Office, 1998, pp. 44–45).

Granting statutory backing to accounting standards was another major change that took place during this period. The Financial Reporting Act 1993 created the Accounting Standards Review Board (ASRB), as a crown entity, to approve accounting standards for both the private and public sectors.[16] The ASRB approved standards have legal backing, and are imposed on a range of entities

in the private and public sectors, including the Crown, state sector bodies and local authorities. Previously, the accounting standards for the private sector were developed by the Accounting Research and Standards Board (ARSB), within the NZSA, and those for the public sector were developed by the Public Sector Accounting Committee (a sub-committee of the ARSB). The responsibility for approving accounting standards was with the Council of the NZSA. The establishment of the ASRB introduced a major change to this process and pointed to a growing role of the state in the regulation of accounting information. The ASRB took over the important function of approving accounting standards from the profession. However, there is no evidence to suggest that the profession fiercely objected to this change. There were "constitutional" objections to allowing a private body such as the NZSA to determine rules on which people may be prosecuted. Therefore, when compliance with financial reporting standards became enforceable by criminal proceedings, the loss to the profession of ultimate authority in respect of those standards was inevitable. Further, the fact that the ASRB provided a mechanism for professional accounting standards to have legal backing was appealing to the profession. Prior to this change, the level of compliance with accounting standards was low (Tower, Perera & Rahman, 1992, p. 116) due mainly to lack of enforcement power. This had raised concerns about the ability of the profession to regulate matters within its jurisdiction. Furthermore, the ASRB has not in any way obstructed the profession's standard setting process. The appointment of the chairperson of the NZSA as the first chairperson of the ASRB also helped to ensure close relations between the two bodies.

From the point of view of the state, the ASRB provided a mechanism for the state to influence the accounting standard setting process, if necessary. The new institutional framework allows interest groups other than members of the profession through political manoeuvring to influence the standard setting process. Further, lack of openness had been a major concern about the NZSA's standard setting process (e.g. Tower, Perera & Rahman, 1992, p. 121). With the establishment of the ASRB, the state could address this issue by ensuring a degree of openness in the process, and at the same time advance one of the core values highlighted in the reform programme, i.e. openness in public management.

The greater openness also made the standard setting process less prone to technical issues and more adaptive to market needs. This would also reduce the corporate bias of the previous self-regulation model where the NZSA was vested full control over rules that the market had to follow.[17] Finally, the establishment of the ASRB lead to a reform of accounting standard setting through the introduction of a broadly accepted financial reporting framework.

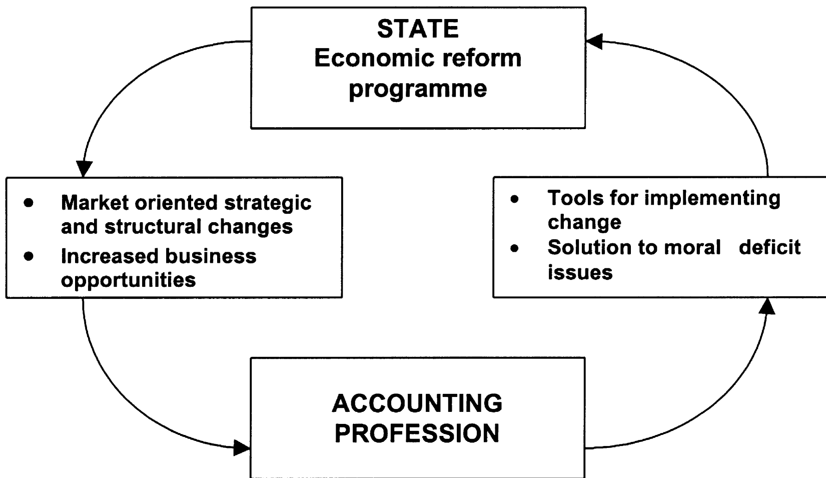

Fig. 2. Economic Reforms and the Accounting Profession.

Consequently, it can be stated that although the moral deficit problem can never be fully solved, as it is a conceptual issue rather than an absolute reality, substantive steps have been taken through co-operative action by the state and the accounting profession to create confidence in the market.

In summary, the accounting profession co-operated with the state and in the process influenced, and was influenced by, the activities of the state. On the one hand, the profession has been called upon to provide the tools and the moral support for implementing change. On the other hand, the profession also benefited from its involvement in the reform process by way of being able to attract increased business for its members. Further, the ideological shift and the associated set of values entrenched in the reform programme provided the environment that motivated and enabled the profession to introduce strategic and organisational changes. This is illustrated in Fig. 2.

DISCUSSION AND ANALYSIS

Important for the economic reforms to happen at such a high pace and with such unison was the coinciding of the ethos of people in key policymaking positions. An important aspect of the reform was a change from Keynesian welfare economics to neo-classical economics. The change in the thinking of

the policy makers and a desire of the people of New Zealand to have a change were key ingredients for such a transformation. (The peoples' desire for a change was evident from the results of the 1984 general election whereby the government that adopted Keynesian economic policies was defeated comprehensively). There was a growing support for economic reforms amongst the establishment, i.e. the staff at the Treasury and other government departments. However, the main initiators of change in the New Zealand political system, the politicians in government, had to change before any reforms could be introduced. For example, the need for major changes in many areas of economic activity had been pointed out even in the 1970s, but no action was taken due to lack of political will on the part of the government. The government elected to power in 1984 provided the necessary political will. The Prime Minister David Lange with his cohort of right wing politicians had a similar mind set as that of the Civil Service personnel, and they immediately set upon eradicating the growing anomalies under the Keynesian model.

Based on an analysis of personnel interviews involving the key individuals, who were associated with the reform programme, Lye (1996) described the experience in New Zealand as a synergistic process of change. She explains that the coming together of the ethos of the parliamentarians, civil servants and the professions, as well as the overall desire of the people of New Zealand to move away from Keynesian principles, at the same point in time, provided a fertile environment for the reform to have an impact on all spheres of activity, including those related to professions such as accounting.

The idea of a synergistic process of change applies equally to the changes that took place within the accounting profession. For example, for public sector accounting issues Lye (1996) found that key parliamentarians worked closely with key staff from the Treasury, the State Services Commission and the Audit Office to bring about change. The need for a major change due to various reasons had been recognised since the 1970s. But, recognition in itself was not enough to actually materialise the desired change. It needed coming together of the right people at the policy-making levels and the right environment. In other words, in the absence of the right environment, even with the right people at the policy making level, the changes would not take place. The economic reform that promoted a set of values conducive to change in all areas of economic activity in a particular direction, e.g. deregulation and market orientation, provided the right environment that was characterised by increased transparency and accountability in the management of both private and public sector entities.

The profession's willingness to trade off abolition of the fidelity fund for the statutory protection was made more likely by the market-oriented values that had

become dominant. This can also be related to the proliferation of occupations in the business sector, which led to the blurring of boundaries between occupations. Furthermore, occupational control was no longer necessary to safeguard the interests of consumers of professional services in the new deregulated environment, because certain legislative mechanisms were already in place for this purpose, e.g. Fair Trading Act 1986. The Consumer Guarantees Act 1993 has consumer protection as its primary objective. It may also be that as the cost of maintaining the monopoly was too high, the profession was willing to get away from it. Under these circumstances, the removal of the statutory protection given to the NZSA over the exclusive right to use the term 'accountant' was not difficult. In the new environment, the state has sought to provide some protection for the consumers of accounting services, but not via the accounting profession. This is an example of the state furthering a policy of deregulation of markets for services through direct regulation intended to facilitate competition in the provision of those services. What is observed here is another instance where the wishes of the profession coincided with the state's reform agenda.

The deep divisions between members of one accounting body working in different areas has been highlighted by Tricker (1983) in a study on the Institute of Chartered Accountants in England and Wales (ICAEW):

> Many small practitioners would say to the Institute – leave us alone. We have been doing a very satisfactory job for many years. Our clients are satisfied. We do not need the imposition of the discipline of accounting and auditing standards from London (Tricker, 1983, p. 21).

The above sentiments are very similar to those expressed by many small practitioners in New Zealand prior to the introduction of the new structure. The three-college structure was designed to address the issue of divisions within the membership. For example, unlike previously, all members are not equal any more. The new structure recognises and provides for the different aspirations of the Institute's membership.[18] Each College has its own College Committee, and these committees have the autonomy to represent the interests of their own membership. This again is a major change from the previous situation where all members were entitled to vote on all issues. As stated earlier, the rationale for the new structure is the need for differentiation within the occupation in order to be able to meet the demands of different market segments more efficiently and effectively.

Traditionally, accounting is often presented as an occupation that has attained professional status in terms of certain attributes, such as core knowledge, professional authority, community recognition and ethical code (e.g. Greenwood, 1957). However, those attributes have also been interpreted particularly by critical researchers as claims that form an integral element of a "professionalizing" strategy through which certain occupations seek to secure

and enhance the material and symbolic value of their labour (Robson & Cooper, 1990, Cited in Willmott, Cooper & Puxty, 1993). Accordingly, contrary to the traditional view, the profession may be described as a commercial or enterprising activity, with accounting firms pursuing profit and growth, seeking new markets and products (Radcliff, Cooper & Robson, 1994).

The view that accounting is a commercial activity, however, would seem to pose a threat to the professionalism of accountants in the traditional sense. Professionalization and commercialization appear to be contradictory processes the profession has to manage because of the perceived clash between the public interest obligations of the profession and the members' self-interest motives. While the Worsley report (1985), commenting on the English accounting profession claims that almost always the public interest and the members' interest coincide, a closer examination reveals that the issues involved are far from clear. For example, as Willmott, Cooper and Puxty (1993) point out these public interest obligations are of a very general nature, and there is considerable scope for negotiating their meaning and fulfilment. It has also been pointed out that the idea that accountants are professionals and that accountancy work is professionalized is not an immutable fact but is open to dispute and contestation (Radcliff, Cooper & Robson, 1994; Freidson, 1970). This view, combined with the argument that professionalization is a process by which producers of special services seek to constitute and control a market for their expertise (Larson, 1977, pp. xvi–xvii), shows the complex nature of the issue.

Prior to the current reforms, the profession in New Zealand was well entrenched in the social, political and economic environment that was in existence. It has survived the turmoil created through the reform process by being an active participant in implementing change and eventually benefiting from it. The shift towards neo-classical economic order would seem to have created a new mindset for the profession. This is evident from the market-driven approach the profession has taken in organizing its activities.

During the period under consideration, exclusion of competition was not a viable option available to the accounting profession in New Zealand given that deregulation had created a situation where the boundaries of the market for accounting services were increasingly becoming blurred. On the contrary, in the new economic environment that valued openness and transparency, the profession had sound reasons to prefer openness to closure as a strategy. Accordingly, the profession sought market dominance and legitimacy through competition by promoting the 'CA' brand, and at the same time attempting to cater for the different needs of its own membership, and the client market. Although the brand to be promoted was the 'chartered accountant' (CA), the NZSA had to accommodate within the new structure a group of accountants including some current

members who did not opt to become members of the CA College, hence the establishment of the ACA College. Further, a new category of membership was added by creating the AT College in order to include another group of individuals providing accounting services at the technician level. This shows that the profession adopted a policy of accommodation and inclusion, rather than exclusion and closure, as part of its strategy in coping with the changing environment. The New Zealand experience can be better described as a case of the state and the profession co-operating with each other in their attempts to deal with the respective crises they were facing. For example, the ICAA's complaints were part of the crisis of professional management faced by the profession, in the same way that worsening external debt situation was part of the crisis of economic management faced by the state.

CONCLUDING REMARKS

The paper has demonstrated how the interaction between the accounting profession and the state has taken place in New Zealand in recent years. On the one hand, the profession facilitated the macro-micro interface by providing a link between the external values (the set of values promoted through the economic reform programme) and the internal values of organisations. In this role, the profession ensured that the external values were incorporated into the manner in which organisations operated. On the other hand, the profession also benefited from its involvement in the reform process, and the environment that motivated and in many cases enabled the profession to make significant strategic and structural changes.

The paper identifies some similarities between the changes that have taken place within the economy and the accounting profession in terms of the background, primary objective and approach, and so on. In the 1980s, both the economy and the profession were facing serious challenges due to internal and external pressures and were attempting to overcome their respective crises. In both cases, rebuilding the international image was the primary objective. Finally, both reform programmes were driven by a market-oriented approach.

The approach taken by the profession in formulating its strategy would seem to be a reflection of the profession's response to the new realities in the rest of the economy. For example, as mentioned earlier, the Institute of Chartered Accountants of New Zealand Act 1996 clearly permits competition in accounting services and restricts the Institute to a certification, and not a licensing role. The profession has realised that its major asset is the brand (qualification) that is recognised in the marketplace, and the principal objective of the professional body should be to enhance the image of this brand, thus

providing better value to its members. This is pursued through a strategy of brand differentiation, which in turn is mainly carried out through the raising of membership requirements, and ensuring that members provide high quality service, through practice reviews and continuing professional development (CPD) as well as strategic marketing of the brand. Brand differentiation also helps create differentiation within the Institute's own ranks in order to satisfy those members who demand such differentiation.

Finally, this paper shows that state/profession relationship is too complex an issue to be understood in terms of the proposition that state intervention automatically leads to a loss of professional autonomy. The paper generally supports the thesis suggested in the recent sociology of professions literature that the state/profession relationship is mutually constructive (e.g. Freidson, 1970; Larson, 1977). However, the analysis presented in this paper raises concerns about some aspects of this thesis, i.e. the explanation of professionalization as a process by which producers of special services seek to constitute and control a market for their expertise, and the assumption that most established professions attempt to project an image of "traditional intellectuality" (in Gramsci's terms) and to achieve closure of access in the occupational order (Larson, 1977). This paper shows that the accounting profession in New Zealand has adopted a strategy of accommodation and inclusion, rather than exclusion and closure, and explains the circumstances that led to such a strategy. Further, the paper provides evidence that suggests that the accounting profession in New Zealand has moved away from the traditional ideal type of established professions, and has devised a strategy that gives them a position in the new environment. This strategy of showing an increased willingness to be openly associated with particular interests in society also suggests the emergence of the accounting profession as a new group of "organic intellectuals" (in Gramsci's terms).

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NOTES

1. For the theoretical underpinnings of public sector reforms in New Zealand and what was intended by the new system, see Scott and Gorringe (1989); Boston et al. (1991).

2. Indeed for a period of time, health agencies such as crown health enterprises (CHEs) were placed on a quasi-commercial basis for performance with a profit focus.

3. The Public Finance Act 1989 distinguishes between outputs and outcomes and defines the latter as the consequences of the former.

4. For a list of government trading departments that have been transformed into SOEs, see Scott and Gorringe, 1989, p. 91.

5. The professional accounting bodies in the U.K., Australia and Canada provided a uniform final examination, whereas NZSA did not (NZSA, 1984, pp. 78–79).

6. This Act replaced the New Zealand Society of Accountants Act 1958, and redesignated the professional body as the Institute of Chartered Accountants of New Zealand (ICANZ).

7. At the invitation of the NZSA, the Institute of Chartered Accountants of Scotland sent to New Zealand two experts, Niall Lothian and Ian Marrian, for this purpose.

8. Wheeler Campbell Ltd., a private consultancy firm, was commissioned by the NZSA taskforce that was appointed by the Council, following the International Review Report (Lothian & Marrian, 1992), to carry out a strategic and organisational review of the NZSA. The Wheeler Campbell report (1993) provided the basis for, among other things, the new admissions policy approved by the NZSA Council in March, 1994.

9. The Wheeler Campbell report (1993) identifies major divergence of interest between members in public practice and those not in public practice, and highlights public practitioners' interest in dynamic and ongoing quality control as well as standards of professional practice.

10. The Wheeler Campbell Report (1993) raised questions of control that needed to be addressed including a large council, and a plethora of committees, whose work could be more efficiently handled at executive level.

11. For example, the common perceptions are: markets do not have compassion; markets do not care; markets may be manipulated and bought; and markets lead to survival of the fittest or strongest.

It is interesting that Burrage's analysis also represents a paradox of the market ideology in that its legitimation is dependent on the privileged groups that it should eliminate.

12. These included, a statement of the financial position at balance date, an operating statement reflecting revenue and expenditure for the year, a statement of cash flows, a statement of objectives, specifying outputs to be produced and financial performance to be achieved, and a statement of service performance, reporting on outputs produced.

13. Many of the changes adopted in New Zealand were similar to those adopted in the U.K. under the Financial Management Initiative (FMI) commenced in 1981.

14. The successive holders of the office of Controller and Auditor General pointed out the serious shortage of competent accountants able to provide a proper financial management services and the mediocrity of accounting and its non-utilisation by people who might be expected to perform some kind of managerial function (in central government) (e.g. CandAG, 1978, p. 7; 1987, p. 57).

16. The ASRB came into operation in 1994.

17. Through the New Zealand Society of Accountants Act 1958, the state had granted the NZSA the authority to control and regulate the practice of accountancy in New Zealand.

18. The fidelity fund, the idea that all members are equal and easy entry policies were all reflections of the centre-left policies within the profession under the previous regime.

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THE PROBLEMATIC RELATIONSHIP BETWEEN AUDIT REPORTING AND AUDIT EXPECTATIONS: SOME EVIDENCE FROM HONG KONG

Patrick Leung and Gerald Chau

ABSTRACT

The audit expectation gap has been documented virtually in most Western parts of the world and has been a concern of professional accountants and professional accounting bodies for decades. It leads to undesirable consequences such as increased litigation against auditors and discrediting the accounting profession. Professional accounting bodies attempt to narrow the gap by introducing new auditing standards and revising format, content, and wording of the auditors' report. This paper reports the results of a mail questionnaire, which is a partial replication and extension of Hatherly et al. (1991) to bankers and auditors in assessing the effectiveness of the recently adopted revised auditors' report in Hong Kong in reducing the audit expectation gap. Institutional context and culture in Hong Kong are suggested to provide some plausible explanations of the differences in findings. The results are likely to be relevant to other countries given the similarity of the format and wording of the revised auditors' report used in this study and the global harmonization of auditing standards. The revised auditors' report has a "double edged" effect. On the one hand,

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the results indicate that it is effective in reducing perceptual differences on a few dimensions, especially those directly addressed in the revised auditors' report. On the other hand, it also creates greater disenchantment and devaluing of the audit function, which would lead to a larger expectation gap in the long run. Consistent with previous studies, this study also found that bankers still have high expectations on the role of auditors in fraud detection. Implications to the auditing profession are discussed.

INTRODUCTION

In recent years litigation against the auditors for companies that go into liquidation or have been defrauded has increased dramatically. In Hong Kong, the auditors in the well-publicised Carrian case were faced with claims of HK$50 million (SCMP, 1987) for alleged negligence in carrying out their audit work. In 1995, the outstanding claims against auditors were approximately US$440 million in Canada, US$220 million in New Zealand, and US$4.4 billion in Australia (HKSA, 1995). In the same Hong Kong Society of Accountants (HKSA) report, total Big-6 outstanding claims amounted to approximately US$30 billion in the USA and £20 billion in the U.K. Recently, the auditor of the BDO Binder Hamlyn case in the U.K. was also held liable for £65m (Thompsell, 1997). In view of the increasing possibility of litigation against auditors, there is an urgent need for the accounting profession to respond. According to Amhowitz (1987), this crisis can be characterised as one of professional competence, one of public confidence in the accounting profession, or one of the profession's fears about its own vulnerability. Although the emphasis of these three characterisations differs, they all reflect a single underlying notion – that there is a gap between the public accounting profession's understanding of its functions and the role that the society has expected it to play. An "audit expectation gap" exists when there are differences between financial statement (external) users' expectations of auditor performance and their perception of the auditor's actual performance (Gill & Cosserat, 1996, p. 131). Humphrey (1997, p. 9) also argues that this gap is "a representation of the feeling that auditors are performing in a manner at variance with the beliefs and desires of those for whose benefit the audit is being carried out".

Its existence has been documented in many parts of the world and is a global phenomenon (see, for example, Gay et al., 1997; Holt & Moizer, 1990; Innes et al., 1997; Nair & Rittenberg, 1987). In fact, the gap appears to have resulted from four main areas of the audit function: (1) audit assurance; (2) audit reporting; (3) audit independence; and (4) audit regulation and liability

(Humphrey, 1997, p. 13). Of all these four areas, Porter (1997, p. 44) also argues that "the auditors' responsibilities in connection with corporate fraud is a particularly significant factor in the audit expectation gap". The differing expectations about the auditors' responsibility for detecting and reporting fraud may be caused by those associated with:

(1) the nature of the external audit that tends to support limiting auditors' responsibilities to detect and report corporate fraud; and
(2) society's expectations that tends to support extended responsibilities for auditors".

The initiations to narrow the gap can be classified into two broad categories:

(a) improving communication, such as by expanding the scope paragraph and providing more detail about the responsibilities of the directors in respect of financial reporting in the auditors' report; and
(b) improving performance by means of improving auditing standards and the implementation of quality assurance programs.

This study investigates the effect of the expanded auditors' report in narrowing the audit expectation gap in an Asian metropolitan city – Hong Kong. Previous studies support "the view that the expanded report changes the reader's understanding of the auditor's responsibilities, the audit process and the nature of the audit opinion" (Hatherly, 1997, p. 192).

In response to needs for reducing the gap, the HKSA introduced SAS 600 "Auditors' Report on Financial Statements" in August 1994. The principal changes in the revised auditors' report are the inclusion of statements describing briefly the respective responsibilities of the directors of companies for the preparation of financial statements, and the duties of the auditors to express an opinion on these financial statements. It was believed that the expanded auditors' report could play an important part in improving communication between auditors and users of financial statements, hence reducing the expectation gap (Gay & Schelluch, 1993; Monroe & Woodliff, 1994). This communication improvement could be made through inducing a change in the report users' perceptions of the audit, and auditors' role and responsibilities (Gay & Schelluch, 1993; Miller et al., 1990; Monroe & Woodliff, 1994; Nair & Rittenberg, 1987).

Previous studies did not evaluate the effects of the culture and the institutional characteristics in a country on the effectiveness of the expanded auditors' report in reducing the expectation gap. These differences may affect its effectiveness. One of the institutional characteristics in Hong Kong is that the extent of control of listed companies by one shareholder or one family group of shareholders is

significant (HKSA, 1997). The presence of family-owned companies "creates a position of unfettered dominance, and gives an undesirable perception of nepotism" (HKSA, 1997, p. 6). Family-owned companies have little motivation to disclose information in excess of the mandatory requirements because the demand for corporate information is usually weak in comparison with that for companies, which are less, family-controlled. Gray's (1988) cultural theory also argues that where a company's shares are held by a relatively small number of shareholders, there is a preference for confidentiality and restriction of disclosure of information about the business only to those who are closely involved with its management. Along this line of argument, it is predicted that financial statement users in Hong Kong, such as bankers, rely less on the auditors' report and financial statements in making investment, lending, and other financial decisions because of the secretive nature of information disclosure in family-owned companies.

Societal culture may affect the effectiveness of the expanded auditors' report in narrowing the expectation gap. There is a difference in societal culture between the U.K. and Hong Kong and this may lead to differences in some of the results between Hatherly et al. (1991) and this study. Hofstede (1980) and Hofstede and Bond (1988) identify five cultural dimensions that distinguish the societal value of countries. Table 1 shows the scores on these five cultural dimensions in Hong Kong and the U.K. As compared to Hong Kong, the U.K. culture is significantly more individualistic and masculine, but is significantly lower in both power distance and uncertainty avoidance. The U.K. is also classified as having short-term orientation. Not all cultural dimensions affect the audit reporting and bankers' perception of the revised audit report. Following the suggestion of Perera (1989), we would select only two cultural dimensions, namely power distance and individualism, to predict and explain some of the differences in the results of the two above-mentioned studies. Power distance is the cultural dimension that is particularly relevant to the difference in auditing and financial reporting. "In a large power distance culture, the right of the power to create rules and direct behaviour is accepted and expected, regardless of whether the power is exercised legitimately or not. In a small power distance culture, the stress is on expert power, and the exercise of power is subject to evaluation of its legitimacy" (Hofstede, 1980, p. 122). Thus, in large power distance societies, such as Hong Kong, there will be less demand for accountability than in small power distance societies, such as the U.K. because of the less degree of centralisation of authority and autocratic leadership. Hence, financial reporting will be less comprehensive in large power distance societies, such as Hong Kong (Hussein, 1996; Wood, 1996), and financial statements will be less useful in making financial decisions. Thus, it is predicted that financial

Table 1. Cultural Dimension Scores for Hong Kong (HK) and the United Kingdom (U.K.).

Cultural Dimension	HK	U.K.	Mean (Range) for 50 countries
Power Distance	68	35	52 (11–94)
Uncertainty avoidance	29	35	64 (8–112)
Masculinity	57	66	50 (5–95)
Individualism	25	89	50 (12–91)
Long-term Orientation	96	25	48 (0–96)

Source: Hofstede and Bond (1988).

statement users in Hong Kong would rely less on the auditors' report and audited financial statements in making lending and financial decisions.

Another relevant cultural dimension is individualism. In a less individualistic society, such as Hong Kong, belief in independence is lower (Chow et al., 1995 & Gray, 1988) and financial reporting is less geared to users (Hussein, 1996). Based on this, individualism would have the same predicted effect as the power distance dimension on financial statement users' reliance on the auditors' report and audited financial statements.

This paper reports the results of a mail questionnaire to auditors and bankers in assessing the effectiveness of the recently adopted revised auditors' report in Hong Kong in reducing the audit expectation gap. The research instrument used is a partial replication and further development of the work of Hatherly et al. (1991). Hong Kong data are used in this study mainly because of the recent introduction of the new auditors' report offered an opportunity to assess the changes in perception of financial statement users due to the changes in format, content and wording. Given the fact that the format, content and wording of the revised auditors' report in Hong Kong [SAS 600 (HKSA, 1994)] are very similar to those adopted in the USA [SAS 58 (AICPA, 1988)], Canada [S5400 (CICA, 1991)], the U.K. [SAS 600 (APB, 1993)], and Australia [AUS 702 (AARF, 1999)] (see the Appendix for a comparison), the results of this study can be seen as an exemplar of the general phenomenon.

This study is expected to make three major contributions. First, this study is the only one addressing bankers' perceptions of the revised auditors' report in Hong Kong and comparing their perceptions with those of the auditing profession. Lee (1990) compared the general perceptions of auditors and bankers on the responsibilities of auditors but did not refer to the revised auditors' report. Second, this study has practising auditors and bankers as respondents. The results represent the perceptions of parties involved, which is more

appropriate than using surrogates, such as part-time MBA students (Hatherly et al., 1991). Third, Hofstede's cultural theory and institutional context in Hong Kong are employed to predict and explain the differences in results between Hatherly et al. (1991) and this study.

RESEARCH METHODOLOGY

Research Design

This study surveyed two groups of respondents – bankers and auditors. The perceptions of auditors and bankers on the roles of auditors are solicited after reading the revised auditors' report. The survey was conducted on an anonymous basis. The timing of the study is important. The survey was administered and data were collected in January 1995. The HKSA required all auditors in Hong Kong to adopt the revised auditors' report in expressing an opinion on the financial statements, which ended on or after December 31, 1994. Therefore, bankers would not have been exposed to the revised auditors' report in January 1995 because most of the auditors would still be conducting the audit and would not have issued the new auditors' report. The *Companies Ordinance* in Hong Kong requires companies to hold an annual general meeting within six months after the end of the fiscal year. The audited financial statements and the auditors' report have to be tabled at the annual general meeting. Most listed calendar year-end companies publish their financial statements and hold their annual general meetings in March or April. Therefore, the timing of conducting this study in January 1995 allows us to assume that the responses of bankers before reading the revised auditors' report represents the status quo perception. Auditors had knowledge of the revised auditors' report through continuous professional development, reading professional publications and the new auditing standard (SAS 600) promulgated by the HKSA. This was confirmed in the discussion after the pilot test with five bankers and five auditors.

Research Instrument

There are two sets of questionnaires, one for bankers and the other for auditors. The questionnaire for bankers has three parts. Part I solicits demographic data from the respondents. Part II comprises four questions addressing four general expectations on auditors' roles in audits. Before proceeding to Part III, bankers are required to read the revised auditors' report of a fictitious company that has an unqualified auditors' report. They then proceed to Part III to answer the eighteen questions regarding their perceptions of the roles of auditors.

The questionnaire for auditors is similar to that for bankers except that it has only two parts. Part II of the bankers' questionnaire is omitted because auditors would have knowledge of the revised auditors' report either through reading professional publications or attending continuous professional education courses.

Many dimensions of the audit expectation gap have been mentioned in the literature (see, for example, Bailey et al., 1983; Hatherly et al., 1991; Holt & Moizer, 1990; Nair & Rittenberg, 1987). The eighteen dimensions in Part III are mainly based on Hatherly et al. (1991). These dimensions were also investigated by at least two of these studies. The set of dimensions represents the perceptual differences between auditors and bankers. Discussions with bankers and auditors in the pilot test also support this belief. Eight dimensions are directly addressed in the revised auditors' report whilst the remaining ten are not. Table 2 summarizes these dimensions.

POPULATION AND SAMPLE SELECTION

The population of auditors in this study was restricted to CPAs holding a practicing certificate because they:

(1) are active in the corporate audit field; and
(2) have the final decision and responsibility with respect to the audit opinion in the auditors' reports.

The latest list of CPAs published by the HKSA was defined as the population.

Table 2. Dimensions of the Audit Expectation Gap.

Dimensions Directly Addressed by Revised Auditor's Report	Dimensions Not Directly Addressed by Revised Auditor's Report
Q1. Purpose of audit clearly communicated	Q4. Auditors' accountability
Q2. Responsibility for production of financial statement	Q6. Expertise
Q3. Auditors' integrity and independence	Q7. Statement reliability
Q5. Auditors judgment and discretion	Q11. Auditors' responsibility for accuracy
Q8. Management representation	Q12. Fraud
Q9. Accounting standards and principle	Q13. Valuation
Q10. Extent of audit	Q15. Performance monitoring
	Q16. Riskiness/viability of the company
	Q14. Proper accounting records
	Q17. Credibility of financial statement
	Q18. Investment decision

Table 3. Questionnaire Response Rate.

Respondents	Population	Sample	Responses	Response Rate
Auditors	1,450	250	76	30.4%
Bankers	395	395	83	21.0%

Auditors' report users were also confined to one sophisticated user group – bankers. Bank loan officers are sophisticated users of the auditors' report (Libby, 1979). When assessing loan applications from companies, they will refer to the auditors' report. Therefore, they should be familiar with its format and contents. Bank loan officers are constantly making lending decisions in both public and non-public market settings (Bailey et al., 1983). Understanding how bankers perceive auditors' reports is important as misperceptions can cause bankers to make inappropriate lending decisions. A list of all the registered banks in Hong Kong as of December, 1994 was defined as the population and questionnaires were sent to all the commercial lending department managers on the list. Table 3 summarizes the samples and response rates and Table 4 reports some demographic data of respondents.

DATA ANALYSIS

The response rates for auditors and bankers were 30.4% and 21% respectively. These response rates are considered relatively low in Western countries. However, the response rates for most mail questionnaire surveys have always been low in Asian countries. For example, a mail questionnaire survey in Hong Kong with auditors and loan officers as respondents had response rates of 23% and 24% respectively (Lee, 1990). Hence, the response rates of this study are considered acceptable in Hong Kong environment. Non-response bias was

Table 4. Demographic Data of Respondents.

Demographic	Auditors ($n = 76$)	Bankers ($n = 83$)
Average years of experience	6.5	7.8
(standard deviation)	(2.6)	(3.2)
Professional membership	100%*	37%**

* All the practicing auditors are members of the HKSA.
** Most of the bankers are members of the Chartered Institute of Bankers.

assessed respectively for auditors and bankers. First, we compared the first 20 percent and the last 20 percent respondents' mean scores on the 18 dimensions in Part III of the questionnaires (Oppenheim, 1992, 106–107). The t-test results did not show a significant difference between these groups at the 0.05 level of significance. Second, we compared the demographic data of the early 20% and late 20% of respondents. Again, the test results showed no significant difference at the 0.05 level of significance. Based on the results of the above statistical tests, it seems that material non-response bias is unlikely. In line with previous studies, non-parametric statistical techniques were used in data analysis.

Analysis of Dimensions Directly Addressed in Revised Auditors' Report

Prior to comparing the responses of bankers and auditors on the eighteen dimensions, we summarize the results of bankers' general perception on the roles of auditors in Table 5. In general, bankers have favorable expectations in terms of auditors' objectivity, and expertise and competence. In addition, they also expect auditors to detect fraud and to conduct extensive work in performing audits

The responses of auditors and bankers on the eighteen dimensions are summarized and compared in Table 6. Of the eighteen dimensions in Part III of the questionnaire, eight are addressed directly in the revised auditors' report. After reading the revised auditors' report, there is no significant difference in the perception of these dimensions between bankers and auditors, with the exception of one dimension. This dimension (Dimension 8) addresses whether the auditor has sought appropriate corroborating evidence before accepting management estimates and explanations. The mean scores for auditors and bankers are 2.55 and 3.59 respectively. The difference is significant ($p < 0.01$) between the two groups using the Mann-Whitney test. Auditing standards require auditors to seek appropriate corroborating evidence before accepting management representations. Auditors would tend to agree more with this dimension.

Table 5. Bankers' General Expectations of the Roles of Auditors.

Expectation of Role of Auditor	Questions in Part II	Mean of Rank Scale
Auditor is unbiased and objective	Q1	3.13
Fraud detection	Q2	3.37
Auditors' expertise and competence	Q3	2.92
Extent of audit work	Q4	3.10

Note: A seven-point Likert Scale is used with 1 = strongly agree and 7 = strongly disagree.

Table 6. Summary Responses and the Mann – Whitney U Test Results.

Dimensions	Mean of Rank Scale		
	Bankers (n = 83)	Auditors (n = 76)	Difference
Q1. Purpose of audit clearly communicated	3.11	3.18	−0.07
Q2. Responsibility for production of financial statement	4.75	5.09	0.34
Q3. Auditors' integrity and independence	3.51	3.53	0.20
Q4. Auditors accountability	4.43	4.93	−0.50*
Q5. Auditors judgment and discretion	3.28	2.93	0.35
Q6. Expertise	3.39	3.62	−0.23
Q7. Statement reliability	4.18	3.68	0.5**
Q8. Management representation	3.59	2.55	1.04***
Q9. Accounting standards and principle	2.71	2.42	0.29
Q10. Extent of audit	3.59	3.75	−0.16
Q11. Auditors responsibility for accuracy	4.28	3.24	1.04***
Q12. Fraud	3.98	4.91	−0.93***
Q13. Valuation	3.66	3.88	−0.22
Q14. Proper accounting record	3.28	3.03	0.25
Q15. Performance monitoring	4.29	3.82	0.47*
Q16. Riskiness/viability of the company	4.05	3.47	0.58**
Q17. Credibility of financial statement	2.93	2.62	0.31
Q18. Investment decision	4.12	3.79	0.33

* $p < 0.1$
** $p < 0.05$
*** $p < 0.01$

There is no significant difference in perception between auditors and bankers for the other seven dimensions, which are directly addressed in the revised auditors' report.[1] The mean scores of two dimensions (Dimensions 1 and 3) are virtually the same. The results are important and provide a strong indication that the revised auditors' report is successful in communicating to financial statement users the purpose of an audit and the roles of an auditor in the audit process. This is in line with previous studies (Kelly & Mohrweis, 1989; Nair & Rittenberg, 1987). Of particular importance is that bankers and auditors have the same perception of auditors' integrity and independence (Dimension 3).

Although the difference is not significant, bankers have slightly higher mean scores in three dimensions (Dimensions 5, 9 and 14). That is, bankers may not fully appreciate that auditors have to exercise judgment and discretion in selecting audit tests and procedures (Dimension 5). They are less confident that financial statements have been prepared in accordance with appropriate

accounting standards and policies (Dimension 9), and that the company has kept proper accounting records (Dimension 14).

Two dimensions (Dimension 2 and 10) deserve special attention although the differences in perception between the two subject groups are not significant. Bankers have a slightly stronger perception than auditors do that the latter have performed extensive audit work before forming audit opinions (Dimension 10). Prior to reading the revised auditors' report, they had significantly higher expectations in this dimension (see Table 4). The subsequent lowering of expectations may be due to the fact that the revised auditors' report explicitly describes the extent of audit procedures. "An audit includes examination, *on a test basis*, evidence relevant to the amounts and disclosures in the financial statements; to obtain *reasonable assurance* as to whether the financial statements are free from material misstatement and to evaluate the overall presentation of the financial statements" (SAS 600, para. 25, emphases added). Dimension 2 relates to the responsibility for the preparation of financial statements. Both bankers and auditors agree that it is the responsibility of the directors. In the revised auditors' report the respective responsibilities of directors and auditors are clearly stated. It seems that the revised auditors' report is effective in communicating this important message to this financial statement user group.

Dimensions Not Directly Addressed in Revised Auditors' Report

Of the eighteen dimensions in Part III of the research instrument, ten are not directly addressed in the revised auditors' report. It is found that the revised auditors' report is able to change perceptions on dimensions that it does not directly address (Hatherly et al., 1991). Bankers and auditors have significantly different perceptions on some of these dimensions. These differences may have caused the audit expectation gap. In particular, bankers have significantly higher expectations than auditors do that the company is free of fraud after the audit (Dimension 12). The mean scores are 3.98 and 4.91 respectively ($p < 0.01$). This result is consistent with those of previous studies (see for example, Holt & Moiser, 1990; Humphreys et al., 1993; Lee, 1990). The perception of the two subject groups is significantly different ($p < 0.05$) in three other dimensions. Auditors have higher expectations than bankers do on the reliability (Dimension 7) and accuracy (Dimension 11) of financial statements, and the assurance of the financial viability of the company (Dimension 16). All these dimensions relate to the truth and fairness of the financial statements on which auditors have to express their opinions.

Bankers have lower expectations that auditors should be accountable for the quality of their work and opinions to shareholders and others who rely on their

reports (Dimension 4). The mean scores for bankers and auditors are 4.43 and 4.93 respectively. The difference is only marginally significant ($p < 0.1$). An important element of this result is the relatively high mean scores. Bankers tend not to hold auditors accountable for the latter group's quality of work and opinion. This may be peculiar to Hong Kong because there are not many cases where auditors were found to be negligent or to have violated professional conduct. In 1996, the HKSA handled 42 professional misconduct complaint cases among its 9906 members. There was only one case that resulted in disciplinary proceedings (HKSA, 1996, p. 23).

The perceptions of bankers and auditors do not have a significant difference in four dimensions. Bankers have slightly higher expectations on the expertise of auditors in evaluating all the circumstances and transactions underlying the financial statements (Dimension 6) and that the audited financial statements reflect the real value of the company (Dimension 13). These differences coupled with that of Dimension 10 suggest that bankers have high regard for the expertise and the work performed by auditors. However, their actual level of performance may not be up to the standard as expected by bankers.

On the whole, there are differences in expectations between auditors and bankers. Auditors have higher expectations on dimensions relating to the function of an audit, such as reliability, accuracy, and the value of the audited financial statements; and the technical aspects of an audit, such as the acceptance of management representation. On the other hand, bankers have higher expectations that the company should be free of fraud after the audit. The differences in perception between the two groups are greater in some of the dimensions not directly addressed in the auditors' report.

Results of This Study and Hatherly Study

The eighteen perceptual dimensions in Part III of the research instrument of this study are adapted from previous studies (Hatherly et al., 1991; Holt & Moizer, 1990; Innes et al., 1997; Lee, 1990). In particular, the wordings of nine dimensions are very similar to those of Hatherly et al. (1991). Table 7 compares the findings of Part-time MBA students of Hatherly et al. (1991) with those of this study.

There are differences between the findings of these studies. It should be noted that the former study surveyed part-time MBA students in the U.K. Practicing auditors and bankers in Hong Kong were the respondents in this study. Given the sample sizes in these studies, a difference in mean score of 0.5 is significant at approximately the 5% level (see Table 5) using the Mann-Whitney U test. If this approximation is applied, the responses of auditors and bankers in our study differ significantly from those of MBA students in Hatherly et al. (1991)

in three dimensions (Dimensions 9, 15, and 18). One of the possible causes for these differences is the fact that the studies have different respondent groups. However, part-time MBA students should not be very different from bankers in many respects as most of them have basic business knowledge and are users of financial statements. This may not fully explain the differences.

We offer two additional plausible explanations. First is the institutional characteristic that Hong Kong has many family-owned companies and they disclose relatively less information. As a consequence, respondents in Hong Kong customarily rely less on the disclosed financial information in making financial decisions (Dimensions 15 and 18).

Second, consistent with the predictions of Hofstede's (1980) and Hofstede and Bond's (1988) cultural theory, we speculate that users in societies with higher power distance and lower individualism, such as Hong Kong, would rely less on auditors' reports and audited financial statements in making financial decisions. This prediction is in line with the results. Further research should explore this area.

CONCLUSION, LIMITATIONS AND AREAS FOR FUTURE STUDIES

The results of this study are not only relevant to Hong Kong, but are also relevant to other parts of the world, given the similarity of the format, content and wording of the revised auditors' reports adopted in different countries, such as the USA, Canada, the U.K. and Australia. The results show that the revised auditors' report is able to achieve more consensus between auditors and bankers. This is particularly the case for dimensions directly addressed in the revised auditors' report. The results are consistent with previous studies. In fact, "audit report expansion serves to improve the users' perceptions of the audit process and of the audit report in terms of its ability to communicate purpose" (Innes et al., 1997, p. 714). However, there is some mismatch in expectations between the two groups on dimensions not directly addressed in the revised auditors' report, such as the technical details of an audit and the perceived usefulness of an audit and audited financial statements. Auditors generally have higher expectations in these dimensions. Consistent with previous studies, bankers have a higher expectation that the company would be free of fraud after the audit.

We attempt to incorporate institutional characteristics of societies and employ Hofstede and Bond's (1988) cultural theory in reconciling the differences in results between this study and that of Hatherly et al. (1991). Consistent with predictions, the extent of family-owned companies and differences in some cultural dimensions between Hong Kong and the U.K. may possibly contribute

***Table 7*.** Comparison of Results with Hatherly et al. Study (1991).

			Mean Scores				
			Hatherly Study	This Study		Difference	
Dimension	Hatherly et al. Study (1991)	This Study	MBA Students	Bankers	Auditors	Bankers	Auditors
Purposes of audit clearly communicated (1)	Purpose of the audit is clearly communicated in audit report.	Purpose of the audit is clearly stated in the audit report.	2.7	3.1	3.2	-0.4	−0.5
Management representations (8)	Auditor does not accept management's estimates and explanations without seeking appropriate corroborating evidence.	Auditor has sought appropriate corroborating evidence before accepting management's estimates and explanations.	3.0	3.6	2.6	-0.6	0.4
Accounting standards and principles (9)	Financial statements have been prepared on basis of accounting policies appropriate to circumstances of business.	Financial statements have been prepared in accordance with accounting policies appropriate to circumstances of business.	3.3	2.7	2.4	0.6	0.9
Extent of audit (10)	Audit work is extensive.	Extensive audit work has been carried out before forming an audit opinion.	4.1	3.6	3.8	0.5	0.3
Proper accounting records (14)	Company has kept proper accounting records during year.	The company has kept proper accounting records during year.	2.9	3.3	3.0	−0.4	−0.1
Performance monitoring (15)	To what extent are financial statements useful for monitoring performance of company?	Financial statements are useful for monitoring performance of company.	2.9	4.3	3.8	−1.4	−0.9

Table 7. Continued.

			Mean Scores				
			Hatherly Study	This Study		Difference	
Dimension	Hatherly et al. Study (1991)	This Study	MBA Students	Bankers	Auditors	Bankers	Audito
Riskiness/viability of the company (16)	Audit report is useful in process of assessing whether or not company is financially viable.	Audit report can help assessing whether or not company is financially viable.	3.7	4.1	3.5	−0.4	0.2
Credibility of audited Financial Statements (17)	To what extent does audit report enhance creditability of financial statements?	Audit report can enhance credibility of financial statements.	2.8	2.9	2.6	−0.1	0.2
Investment/disinvestment decisions (18)	To what extent are financial statements useful for investment/disinvestment decisions made by an investor?	Financial statements are useful for investment/disinvestment decisions made by an investor.	3.1	4.1	3.8	−1.0	−0.7

to some differences in results on some expectation gap dimensions. We suggest that future research should focus on investigating the impact of cultural variables on audit expectation gap.

The findings can have implications for the auditing profession. First, there is an important "double edged" effect. On the one hand, the revised auditors' report achieves more consensus. On the other hand, it may also lead to greater disenchantment and devaluing of the audit function, which would establish a greater expectation gap in the long run. Second, financial statement users still have higher expectations of auditors' role in fraud detection. The auditing profession has to consider whether to state explicitly that it is the primary responsibility of management to implement an appropriate internal control system to prevent and detect fraud and errors, or to improve the auditing standards and the level of performance of auditors in this aspect. Third, the auditing profession may consider the impact of dimensions not directly addressed in the revised auditors' report on the expectation gap. More research in this area is recommended. Fourth, the auditing profession currently stipulates the auditing standards and level of performance and then communicates them to financial statement users, whose needs may not be directly incorporated into the process. This procedure may be dangerous to the profession and may lead to the widening of the expectation gap.

Two limitations of this study have to be considered. First, this study only surveyed bankers. The opinions of other financial statement user groups may also be important in reducing the audit expectation gap. More research is needed to target them. Second, this study used a questionnaire survey and this research method has inherent limitations. It highlights some of the differences in perceptions between auditors and bankers, but it cannot clearly ascertain the underlying reasons leading to the observed patterns.

One line of further research is to investigate the *overall* effect of the revised auditors' report in reducing the expectation gap after taking into account the "double edge" effect mentioned above and dimensions not currently directly addressed. However, this would require the development of a better theoretical framework. Investigating the impact of institutional and contextual characteristics and the cultural dimensions of societies on the effectiveness of the revised auditors' report is also important before we can generalize the research findings. In terms of research methodology, it is recommended to adopt a multi-method approach. Surveys can identify the differences in expectations while in-depth interviews can be employed to reveal a better understanding of the phenomenon. Experiments can be employed to investigate the effect of the revised auditors' report on judgments and decisions of users.

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NOTE

1. Some statistically non-significant results are briefly discussed for two reasons. First, it is believed that the direction of the differences may be of interest and has practical considerations. Second, it is not known whether the aggregate of these non-significant results contributes to the audit expectation gap.

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APPENDIX

Comparison of Wordings of Auditors' Reports.

Statement No.	HK SAS 600	USA SAS 58	U.K. SAS 600	Australia AUS 702	Canada S5400
Title	X	X	X	X	X
Addressee	X	X	X	X	X
Introductory and Respective Responsibilities of Directors and Auditors Paragraph					
1 Audit financial statements listed	X	X	X	X	X
2. Financial statements responsibility of management/director	X	X	X	X	X
3. Auditor's responsibility is to express an opinion	X	X	X	X	X
Scope/Basis of Opinion Paragraph					
1. Conduct audit in accordance with auditing standard	X	X	X	X	X
2. Provide reasonable assurance statements free of material misstatement	X	X	X	X	X
3. Examine on a test basis evidence supporting amounts and disclosures	X	X	X	X	X
4. Assess accounting principles, significant estimates and judgment	X	X	X	X	X
5. Assess accounting policies are appropriate, consistently applied and adequately disclosed	X		X	X	X
6. Evaluate overall presentation	X	X	X		X
7. Provide reasonable basis for opinion	X	X	X	X	
Opinion Paragraph					
1. In our opinion	X	X	X	X	X
2. Fairly present/"true and fair" view	X	X	X	X	X

DEVELOPMENT OF ACCOUNTING REGULATORY FRAMEWORK IN CHINA: AN EMPIRICAL EVALUATION

Z. Jun Lin and Chen Feng

ABSTRACT

In China, the government has long been involved in directly regulating accounting work. The rule-based accounting regulations have been formulated for different industry and business ownership structure by the central government since the founding of the People's Republic in 1949. Remarkable changes have, however, taken place in Chinese accounting which have resulted from the wide-ranged economic and accounting reforms in the last two decades. Recently, an accounting regulatory framework based on accounting standards has been introduced, with great efforts to develop a set of practical accounting standards. A survey study was conducted to empirically investigate the prevailing perceptions of the users and providers of business accounting in respect of four major conceptual and practical issues underlying the construction of the accounting regulatory framework in the changing business environment in China. The study results demonstrate that the respondents from various interest groups possessed mixed views. They generally endorsed the current progress in the accounting reforms. On the other hand, the majority of the respondents were supportive of further changes in reshaping accounting regulatory framework to accommodate the growth of market-oriented economy in China.

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INTRODUCTION

Accounting practices have been subject to regulatory guidance to varied extent in many countries since the beginning of this century (Demski, 1974; Ingram & Chewmning, 1983; Taylor & Turley, 1986; Belkaoui, 1993). This is because accounting information or financial disclosure plays a key role in distribution of social resources and effective functioning of capital markets (May & Sunder, 1975; Holthausen & Leftwich, 1983; Lindahl, 1987). Thus firms' accounting policy-making has been governed, directly or indirectly, by the accounting regulatory framework established in individual countries (Watts & Zimmerman, 1979; Buckley & O'Sullivan, 1980; Benston, 1980, 1985; Sunder, 1988). In general, the regulation of accounting is through the enforcement of authoritative accounting guidelines imposed by either government authorities or the profession (Puxty et al., 1987; Kapland, 1980; Amenkhienan, 1986; Belkaoui, 1993). For instance accounting standards, or the Generally Accepted Accounting Principles (GAAP), are the main component of nationwide accounting regulatory system in the USA and the U.K. while the government-imposed accounting rules played a major part in accounting practices in France, Germany and Japan (Bromwich & Hopwood, 1983; Committee, 1990; Choi & Mueller, 1992).

In China, the government has been directly involved in regulating accounting work since the founding of the People's Republic in 1949. The government authority in charge of accounting work, the Ministry of Finance (MOF), is responsible for promulgating and enforcing the uniform accounting systems nationwide. Accounting regulations, rule-based and compulsory in nature, have been set by business ownership and industry (Yang, 1994a). The industry-specific accounting regulations (IARs) had long been inclined to regulate accounting practices in terms of the government's information needs for centralized economic planning and control over business operations across the country. Under traditional regulatory framework, Chinese accounting served mainly as a simplified recording and reporting tool for the government's business administration (Lin, 1988; Scapens & Hao, 1995).

Remarkable changes took place in Chinese accounting in pace with the wide-ranged economic and accounting reforms in the last two decades. A primary goal of the accounting reforms is to establish a new accounting regulatory framework to accommodate the emerging market-oriented economy in China. To date, the Chinese accounting reforms have made significant progresses in four major phases. Phase I of the accounting reforms commenced with the introduction of *Accounting Regulations for the Joint-ventures with Chinese and Foreign Capital* (ARFJV) by the MOF in mid 1985.[1] ARFJV was

the first set of accounting regulations to incorporate extensively the internationally accepted accounting practices in China. It has satisfied the needs for China to open to the outside world and attract foreign investments, and laid down the foundation for accounting reforms. Phase II of the reforms was characterized by the implementation of *Accounting Regulation for Enterprises Experimenting Share-Capital Systems* (ARSCE). This set of accounting regulations has extended many internationally accepted accounting practices to those state-owned enterprises (SOEs) experimenting with share-capital systems and contributed to extensive reforms of business accounting in China. The introduction of *Accounting Standards for Business Enterprises* (ASBE) and 13 new industry-specific accounting regulations (IARs) by the MOF in November 1992 (effective on July 1, 1993) represents a milestone in reshaping Chinese accounting. The adoption of accounting standards in the national accounting regulatory framework has been widely regarded as the beginning of a new phase of accounting reforms (Ge & Lin, 1993; Winkle et al., 1994; Aiken et al., 1995). More recent progress in formulating and enforcing a set of *practical accounting standards* (PASs) since the mid-1990s heralded the Phase IV of accounting reforms in China (Yang, 1994a, Qu, 1997). Notwithstanding, Chinese accounting has successfully undergone a systematic transition over the last two decades. It is currently in the process of fine-tuning and improvement (Zhang, 1997, Hepp & Chen, 1997; Lin et al., 1998).

The establishment of a new accounting regulatory framework incorporating accounting standards is one of the most admirable outcomes of the accounting reforms in China (Jiang, 1992; Scapens & Hao, 1995). To date, the original rules-based accounting regulations have been replaced by a multi-tied system of accounting standards and regulations. Figure 1 illustrates the structural components of current accounting regulatory framework in China.

There is, however, a lack of logical coherence in the existing Chinese accounting regulations as accounting reforms have proceeded on a try-and-error basis and in a piecemeal manner. Overlap or inconsistency exists among various components of the Chinese accounting regulatory framework. For instance, accounting regulations are currently segregated either by industry (e.g. 13 industry-specific accounting regulations) or by sources of capital (e.g. domestic enterprises vs. foreign-invested enterprises). In addition, varied sets of accounting regulations are in place for different business ownership structures such as listed (stock) companies, state-owned enterprises (SOEs), and foreign-invested enterprises (FIEs). Confusion or contradiction among different sets of accounting regulations is apparent, resulted in negative effects on the comparability of accounting information generated by different types of business entities (Qiu, 1994; Ge & Liu, 1995). It is worthwhile and beneficial to examine the strength or weakness of the

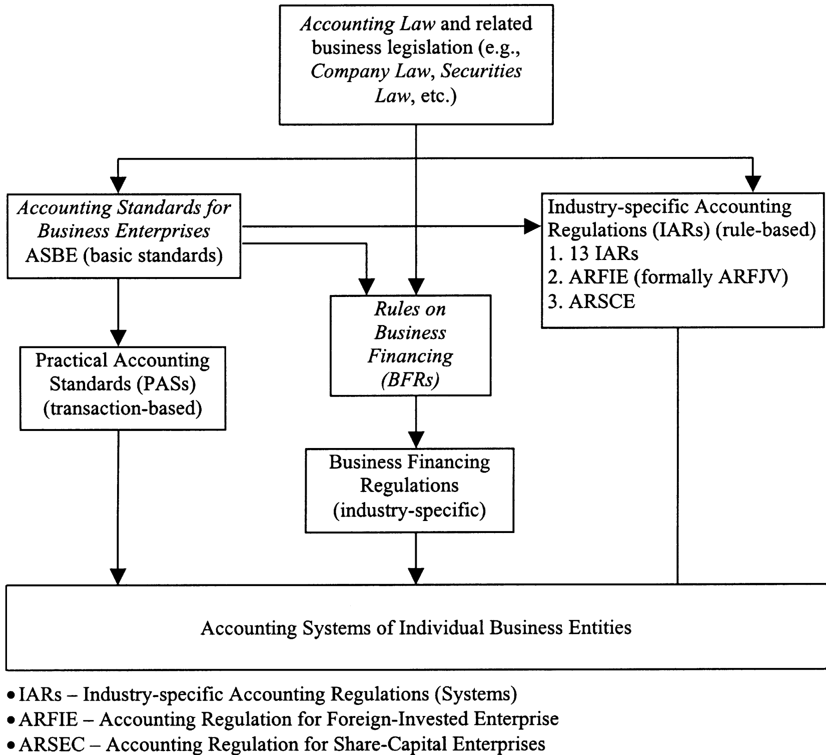

Fig. 1. Structure of Chinese Accounting Regulatory Framework.

Chinese accounting regulatory framework. A survey study was conducted to empirically evaluate the progress in formulating and enforcing accounting regulations in China. This study found that the respondents possessed mixed attitudes towards the recent developments in accounting regulation. Although representatives of various interested groups were inclined to endorse the current progress of accounting reforms, they have also expressed demands for further changes in the Chinese accounting regulatory framework.

BACKGROUND OF STUDY

After the adoption of a new regulatory framework based on accounting standards in the early 1990s, current endeavors of the accounting reforms have aimed at

developing a set of transaction-based practical accounting standards (PASs). The Study Group on Accounting Standards, under the auspices of the MOF, had been undertaking the tasks of preliminary research, drafting, and public consultation for accounting standard setting since 1992 (Jiang, 1992).[2] A Steering Committee on Accounting Standards, consisting senior officials at several ministerial authorities of the central government, was also formed by the MOF to oversee the formulation and enforcement of PASs. The exposure drafts for about 30 practical standards were prepared and issued in 6 batches during 1994–1996 (Shun, 1996). The first piece PAS, *Related Party and Disclosure of Related Party Transactions*, was officially pronounced by the MOF in May 1997, followed by 7 practical standards being released in 1998 and one more piece in 1999. Details of the PASs that have been promulgated and implemented by the end of 1999 are presented in Table 1.

Except for the two standards of "Cash Flows Statement" and "Debts Restructuring," the recently released PASs are used exclusively in publicly listed companies at present. The MOF plans that a total of 25 PASs will be promulgated in 3–5 more years. The applicability of PASs will be extended to all types of business entities nationwide within next 10 years (Tang & Liu, 1997; Lin et al., 1998).

Establishment of accounting standards has been the major focus of Chinese accounting over the last 15 years (Liu, 1996; Graham, 1996). Formulation and enforcement of PASs in recent years led to a new wave of research endeavors. In particular, accounting researchers and practitioners in China and abroad have debated continuously on some conceptual and practical issues pertinent to developing the Chinese accounting regulations after the introduction of ASBE in 1993. Four major issues are at the center of this debate.

Table 1. Chinese Practical Accounting Standards at End of 1999.

Issue Date	Effective Date	Title	Applicability
May 1997	January 1, 1997	Related Parties and Disclosure of Related Party Transactions	Listed Companies
March 1998	January 1, 1998	Cash Flow Statement	All Businesses
May 1998	January 1, 1998	Post Balance Sheet Date Events	Listed Companies
June 1998	January 1, 1999	Debt Restructuring	All Businesses
June 1998	January 1, 1999	Revenues	Listed Companies
June 1998	January 1, 1999	Construction Contracts	Listed Companies
June 1998	January 1, 1999	Investments	Listed Companies
July 1998	January 1, 1999	Accounting Policy, Estimates and Accounting Error Changes	Listed Companies
July 1999	January 1, 2000	Non-Cash Transactions	Listed Companies

Interrelationship of IARs and PASs

The rule-based IARs (the so-called *Uniform Accounting Systems*, UAS) promulgated by government authorities have long been the backbone of accounting regulations in China since 1949. When the Chinese government introduced a new system of business accounting in 1993, 13 sets of new IARs were simultaneously implemented as the supplementary rules to accommodate *Accounting Standards for Business Enterprises* (ASBE) being adopted.[3] However controversial views over the coexistence of IARs and accounting standards have appeared in the Chinese accounting literature following the recent introduction of PASs. According to the mainstream viewpoint, IARs are governmental regulations designated by industry. They can concretize the basic requirements in ASBE and provide much-detailed rules for accounting work. Thus IARs are more operational in contrast to accounting standards. Due to the persistent influence of the centralized industry administrative patterns over the last several decades, IARs should be maintained for the foreseeable future even after the complete set of PASs have been adopted (Ge, 1992; Ma, 1994). In particular, the rule-based IARs could better ensure the uniformity of accounting practices and the comparability of financial information disclosed by all enterprises (Yang, 1994a). This view has been supported by the MOF as it released an official circular in 1997 to amend some of the existing IARs in order to maintain the coexistence of IARs and the more recently introduced PASs (Li, 1998).

Some Chinese accounting scholars argue that there is a great overlap between IARs and PASs. Although the two elements of the existing accounting regulatory framework have been developed with different purposes, the relationship between IARs and PASs is mutually replaceable (Qu, 1997). They argue that the rule-based IARs might play a positive role in accounting practice during a transition period before the completion of formulating and implementing PASs. But a coexistence of IARs and PASs over a long period is nevertheless inappropriate. As the primary goal of accounting reforms is to establish a new system of accounting regulations based on accounting standards, it is absurd to maintain the rule-based IARs (regardless of whatever format) that served as the backbone of the old-fashioned accounting regulations in the past. To enforce IARs and PASs concurrently would otherwise have an effect of rejecting accounting standards in substance (Qiu, 1994; Hu, 1996).

Compatibility of Accounting Standards and Rules on Business Financing

The MOF introduced simultaneously a set of Rules on Business Financing (BFRs) in 1993 when ASBE was introduced. The BFRs are currently a

component of the regulatory framework of business accounting in China. It sets out specific administrative requirements by industry on business financial operations. Some Chinese researchers contend that BFRs are, in fact, an outcome of the traditional mode of governmental business administration. Under a centralized planning economy in the past, funding for business enterprises was mainly from governmental fiscal appropriations, while profits or taxes collected from business enterprises were the major sources of the government's fiscal revenues. There is a direct link between the government's fiscal planning and business financial operations. Although China is now in a transformation to a market-oriented economy, the traditional pattern of governmental control over business operations remain in effective so loon as state-owned enterprises (SOEs) are a dominant force in the national economy (Luo & Jiang, 1996). Thus many measurement procedures in business accounting such as product costing, expenditure or spending, and asset valuation, depreciation or amortization have long been treated as financing issues to be directly regulated by governmental authorities. Since financial activities incurred in individual enterprises determine the levels of business profits and would affect fund flows between the state and enterprises, the government is very reluctant to give up its intervention of business financial operations. It is inevitable for government authority to set out BFRs for closely monitoring the financing, accounting and reporting procedures in individual business enterprises (Yang, 1994b) But many Chinese accounting academics hold a critical view of BFRs. They contend that BFRs have overlapped with ASBE or PASs in many aspects. In particular, they argue that the logical coherence of business accounting had been impaired due to the imposition of BFRs since accounting measurements are subject to specific needs of the government's fiscal policy and business administration (Yang, 1995). They further contend that, in a market-oriented economy, business financing should be a firm behavior at the micro level and enterprises should have the right to determine most appropriate practices of fundraising, investing and other financial needs in light of their own operating conditions and management needs. Thus, the government should abandon the old pattern of direct intervention in business financing and accounting operations. They argue that it is unnecessary for the government to stipulate and implement a set of compulsory regulations on business financing. In other words, the existing BFRs should be suspended or phased out as soon as possible (Jiang, 1997; Yan & Gen, 1997). Accordingly, some researchers advocated that accounting standard setting in China should be independent of BFRs (Luo & Jiang, 1996).

The Nature of Accounting Standards

Generally speaking, accounting standards are official pronouncements, with substantial authoritative support, on the preparation of financial statements (UNCTC, 1984). The degree of authority determines the level of standard acceptance or the effectiveness of standard enforcement (Johnson & Messier, 1982; Peter, 1985). However, accounting standards can be enforced as either compulsory rules or demonstrative guidelines, as experienced in many countries (Skinner, 1987). At present both IARs and PASs take the form of governmental regulations in China. They are compulsory in nature, leaving little room for individual enterprises to adapt in light of their own situations (Yan & Xu, 1995). Some Chinese accounting academics and practitioners contend that the compulsory nature of accounting standards is necessary to facilitate the adoption of the new accounting regulations, particularly, during a transition period under China's changing economic environment (Ma, 1994). However, others argue that the compulsory nature of accounting standards should not be overemphasized. Authoritativeness of accounting standards should not prevent business enterprises from designing accounting systems based on their own operating conditions and management needs so long as they follow the basic guidance specified by accounting standards (Liu, 1994; Zhang, 1997).

Experience in the West demonstrates that accounting standards usually focus on practical guidelines for accounting measurement and disclosure on a transaction basis, i.e. to set generally accepted practices for major types of business transactions and events, without regulating the detailed recording or accounting procedures. The requirements of accounting standards are generally concise, leaving necessary rooms for professional judgment or adaptation by individual businesses (Tinker, 1980, 1984; Ball & Smith, 1992). Chinese accounting regulators and practitioners are not in favor of the form of accounting standards prevailed in most Western countries. They argue that the majority of Chinese - business accountants got used to mechanically following government-imposed and detailed accounting rules and lack of the ability or skills to exercise professional judgment to properly comply with the transaction-based accounting standards. Thus, PASs, if they are to replace IARs, should be set in a form of great detail, in order to ensure their applicability in practice. Accordingly, PASs should prescribe not only the compulsory Chart of Accounts and the basic format or content of the designated financial statements to be adopted by all business enterprises but also the standardized journalization procedures for major types of accounting transactions or events. In other words, the Chinese PASs should be in- between the western-styled accounting standards and the traditional rule-based IARs in respect of details in content (Lou & Chen, 1995; Yan & Xu, 1995).

Standard-Setting Procedures

Accounting standard setting can take two alternative approaches. One is a process dominated by professional bodies in the private sector (such as in the USA and the U.K.). Another approach is to set accounting regulations or rules through government authorities or special agencies under the auspices of government (such as in Japan and France). Both approaches have relative strengths and constraints (Kaplan, 1980). Belkaoui (1993) contended that the governmental approach may enhance the degree of authority and efficiency in standard enforcement while the professional approach would better maintain logical coherence of accounting standards and avoid frequent alternations of standards due to government's specific policy change. In China, accounting standards are currently developed following the governmental approach, because: (1) it is required by the *Accounting Law* that the national accounting systems must be stipulated by the MOF at the central government; and (2) the bottom-up procedures of reporting and approval of the final accounts of all economic entities by the public finance departments at different levels of government in previous decades had enforced the need for government-dominated approach of standard-setting. On the other hand, the accounting profession is under-developed in China. Professional accounting bodies can exercise fairly limited influence on accounting practices so far. They are short of the resources and creditability that are necessary for formulating and enforcing national accounting standards. Even the main accounting bodies such as The China Society of Accounting (CSA) and The Chinese Institute of Certified Public Accountants (CICPA) are currently semi-governmental institutions. They play a part mainly in academic research or implementing the government's policy for industrial administration. Neither is capable of formulating and enforcing business accounting standards (Lou & Chen, 1995; Li, 1998). Thus, the government-dominated approach for standard setting and enforcement should prevail so long as the market-oriented economy remains under-developed in China (Chen et al., 1997).

Criticism against the government-dominated approach of standard setting has surfaced in recent years. Some Chinese accounting researchers argue that the existing standard-setting process was overshadowed by governmental influences, i.e. overemphasizing the government's information needs for business administration. As a result of economic reforms and changes in the structures of business ownership, other non-governmental special interest groups (e.g. external investors, creditors and business management) should also be involved in setting accounting standards. Proposals for an independent standard-setting body consisted of the representatives from various interest groups to develop national accounting standards emerged. According to advocates, this special

standard setting body should be financially independent of any interest group and its members should not be the subordinates of governmental authorities or other economic entities. In addition, it is necessary to ensure "due-care" and transparency in standard setting (Qu, 1997).

STUDY PROPOSITIONS

Most of prior studies, inside or outside of China, have concentrated on conceptual discussion of the four major issues pertinent to reshaping the accounting regulations in China. No empirical analysis or evidence is available in the literature at the moment. This study intends to examine the prevailing perceptions of the regulatory framework of Chinese accounting by the providers and beneficiaries of business accounting, in order to evaluate the current endeavors of establishing the transaction-based accounting standard under the changing business environment in China. Taking into consideration the controversial nature of the pertinent issues as documented in the literature, the study is to examine which of those representative viewpoints could be supported by the users and providers of accounting information at present.

The first issue to be investigated is the interrelationship of IARs and PASs. The core of this issue is whether or not the rules-based IARs should be maintained or abolished after implementation of the transaction-based PASs in the near future. Although the government authority has intended to maintain a coexistence of IARs and PASs for the foreseeable future, it is critical to determine whether this policy could be accepted by various interest groups in practice. Thus, the first proposition to be empirically examined is stated as follows:

Proposition 1:
The rule-based IARs and the transaction-based PASs are complementary to each other and both should be enforced concurrently in the business environment in China.

The second proposition investigates the compatibility of accounting standards and the Business Financing Rules (BFRs). As indicated earlier, Chinese accounting researchers expressed few positive views of BFRs. It is anticipated that BFRs, as an extension of the governmental business administrative pattern rooted in a highly centralized planned economy, would be unsuitable for the market-oriented economy with increasing diversity in economic structures and business operations. In addition, the dominant influence of BFRs may have detrimental effects on logical coherence of accounting standards under the existing structure of the Chinese accounting regulatory framework. Nevertheless,

the compatibility of BFRs and accounting standards should be empirically examined for the sake of a smooth development of accounting standards in China. The second proposition is stated as follows:

> *Proposition 2:*
> Business Financing Rules (BFRs) are incompatible with accounting standards under the new business environment in China.

Regarding the nature of Chinese accounting standards, the Chinese accounting literature favors of the compulsory standards at the moment. This may be attributed to the long time practices of governmental regulation of accounting in previous decades. However, it is expected that different views might emerge as a result of continuing decentralization of governmental control over business activities. In particular, business operations have become increasingly complicated in China. It may no longer be appropriate to overstate the compulsory characteristics of accounting standards. Rather the demonstrative role of accounting standards should also be addressed. As a result, accounting standards should not be set in a too rigid or detailed format. Leeway should be considered for individual enterprises to adapt in terms of their own operating conditions and management needs (Ge & Liu, 1995; Li & Li, 1998). The third proposition is formed to assess the acceptability of this contention:

> *Proposition 3*:
> The demonstrative role of accounting standards should be addressed and enterprises should be allowed to adapt accounting standards in the light of their own business conditions and management needs.

At present, Chinese accounting standards are formulated and enforced by the MOF. The government-dominated approach has been consistently accepted in the Chinese accounting literature. However, no evidence is available to assess whether this arrangement for setting accounting standards is optimal under the present Chinese business environment or whether this approach has been endorsed by business community and accounting practitioners. In addition, it is also necessary to assess the merits or feasibility of other alternatives for standard setting taking into consideration the rapid growth of the market-oriented economy in the country. The last proposition, therefore, focuses on investigating the general perception of the appropriate arrangement for standard setting in China:

> *Proposition 4*:
> The government-dominated standard setting process is the optimal approach under the present business environment in China.

SAMPLES AND DATA

A mail questionnaire survey was applied to collect data for analysis of the propositions delineated above. The survey targets at users and providers of business accounting information in order to assess the general attitudes of various special interest groups towards the recent development of accounting regulatory framework in China.

The survey instrument contains four sections of question.[4] Six questions were listed in the first section to examine the prevailing views on the interrelationship between IARs and PASs. The second section, with four questions, focused on the perception of the compatibility of BFRs and accounting standards. The third section of the survey questionnaire included five questions regarding the nature of accounting standards. Four more questions were listed in the last section to investigate the general perceptions of the optimal approach of standard setting in China. An additional background section was included in the questionnaire to collect profile data of respondents, such as types and sizes of business entity affiliated, job specifications, work experience, etc.

The survey subjects consisted of governmental users, investors and creditors, business managers and accountants, auditors, and academics. Under the Chinese economic system with substantial state-ownership, government authorities are a dominant user group of business accounting. Financial statements generated by business entities have long been requested by various government agencies to exercise administrative control of business enterprises. In this survey, the subjects of governmental users consisted of officials in charge of financing and accounting affairs in various government authorities at the central and local levels (e.g. the departments of public finance, taxation, administration of state-owned properties, industrial administrations, state auditing, etc). Investor and creditor subjects consisted of financial analysts in various investment institutions and credit and loan officers at commercial banks across the country. They are a major user group of business accounting information. Business management was included in the user groups because management would benefit from financial reporting in making operating decisions or discharging their accountability. Business managers and accountants in both state-owned enterprises (SOEs) and listed companies were selected as subjects to represent management users.

Initially 50 copies of questionnaires were sent to survey subjects in some governmental departments and SOEs in Beijing area. Minor modification of the survey instruments was made after the pilot survey. In total, 800 questionnaires were distributed in two batches in China. Three hundred copies were sent to external user groups of financial analysts in investment and securities companies,

credit and loan officer in commercial banks, and government officials involved in regulation of finance and accounting work. The subjects were randomly selected from data sources of the *Almanac of China's Financial and Banking Institutions* (1998) and the *Handbook of Chinese Governmental Institutions and Agencies* (Vol. 1 and 2, 1997). Another 300 questionnaires were sent to business subjects selected from the *China Industrial Enterprises 1000* (1993/94) and the *China Listed Companies Reports* (1998). The questionnaires were directed to general managers or the heads of the financing and accounting sections in the sample SOEs and publicly listed companies.[5] 120 questionnaires were mailed to practicing Chinese CPAs at the main accounting/auditing firms listed in the *China Securities Yearbook* (1997). Another 80 copies were sent to accounting academics at universities across the country. Each questionnaire was accompanied by a cover letter, briefing the study objectives, anonymity of respondents and availability of survey results upon request. A pre-stamped return envelope was included. Collection of the returned questionnaires was assisted by accounting faculty in a university in the ShenZhen Special Economic Zone, China, neighboring Hong Kong.

In total, 209 questionnaires were returned, with an overall response rate of 26.1%.[6] Excluding 11 copies of substantially uncompleted questionnaires, the total number of useable questionnaires was 198. The adjusted overall response rate was 24.8%. Among the usable questionnaires, 71 came from business managers/accountants (a response rate of 23.6%), 51 from government officials (a response rate of 34.0%), 21 from investment analysts and bank officers (a response rate of 14.0%), 30 from practicing public accountants (a response rate of 25%), and 25 from auditing academics (a response rate of 31.3%), respectively. The details of the survey samples is presented in Table 2.

As indicated by the profile data collected from the returned questionnaires, the majority of respondents have a relatively high level of regular education or vocational training. About 69.3% of them completed post-secondary schooling, and 27% of the respondents possessed post-graduate degrees. About two-third of the respondents have working experience over 6 years, while a quarter of the total respondents had over 20 years of work experience. In addition, more than 75% respondents held professional titles or ranks at an intermediate level or above.[7] The profile data indicate that the majority of respondents were experienced and relatively senior staff, i.e. they were the persons holding positions at middle or senior levels within the sample enterprises, investment institutions, commercial banks, and governmental departments. The views of these matured and experienced respondents are expected to be reasonably reliable.

Table 2. Details of Survey Samples.

Subjects	Questionnaires					
	Copies Distributed	Copies Returned	Return Rate	Unusable Copies	Usable Copies	Adjusted Return Rate
Business managers and accountants	300	79	26.3%	8	71	23.6%
Government officials	150	51	34.0%		51	34.0%
Investment analysts and bank loan officers	150	23	15.3%	2	21	14.0%
Auditors (practicing CPAs)	120	30	25.0%		30	25.0%
Accounting Educators	80	26	32.5%	1	25	31.3%
Total	800	209	26.1%	11	198	24.8%

RESULTS AND ANALYSIS

A Likert scale of 1 to 5 was used for data collection and analysis. For each survey question, 1 indicates "Strongly Disagree"; 2 indicates "Somewhat Disagree"; 3 indicates "No Opinion"; 4 indicates "Somewhat Agree" and 5 indicates "Strongly Agree." Data collected from the returned questionnaires were processed using SPSS statistical software. Descriptive statistics of the data are presented in Table 3, including the frequencies (percentages) of the respondents who held generally favorable or unfavorable views towards each survey question, and the overall means and standard deviations of the responding scores.[8]

Questions in the first part of the survey instrument pertains to the interrelation of the ruled-based IARs and the transaction-based PASs. Overall, 76.3% of the respondents agreed that there is a complementary relationship between the two elements of the accounting regulatory framework in China (Question 1.1); 58.1% of respondents were in favor of retaining IARs after the implementation of PASs (Question 1.2). However, most respondents did recognize the following limitations of IARs: (1) IARs were unable to ensure the comparability of accounting information generated by different enterprises (Question 1.3; 54.6% vs. 41.9%), and (2) IARs could not facilitate the diversified operations of business enterprises (Question 1.4, 59.6% vs. 36%). Hence a majority of respondents (53.5%) agreed that IARs should be abolished when PASs are fully implemented (Question 1.5).[9] In addition, most respondents (90.4%) were supportive of accelerating the process of formulating and implementing PASs

Table 3. Survey Questions and Summary Statistics.

Questions		% Agree (% Disagree)	Mean (S.D.)	t-statistic (p-value)
Part I – Interrelation of IARs and PASs				
1.1	Rule-based IARs and the transaction-based PASs are complementary to each other.	79.3 (21.3)	3.854 (1.136)	0.54 (0.000)
1.2	IARs should be maintained after the full implementation of PASs.	58.1 (38.9)	3.278 (1.294)	3.021 (0.003)
1.3	IARs would have a negative impact on the comparability of accounting information generated by enterprises in different industries.	54.6 (41.9)	3.264 (1.250)	2.964 (0.003)
1.4	IARs cannot facilitate diversified operations by business entities.	59.6 (36.9)	3.355 (1.357)	3.674 (0.000)
1.5	IARs should be abolished right after the full implementation of PASs.	53.5 (41.0)	3.263 (1.348)	−3.703 (0.000)
1.6	The process of formulating and implementing PASs in China should be speeded up.	90.4 (6.6)	4.465 (0.841)	24.513 (0.000)
Part II – Compatibility of Accounting Standards and Business Financing Rules (BFRs)				
2.1	BFRs can facilitate business enterprises to enhance their financial management.	85.4 (12.6)	4.061 (1.021)	14.620 (0.000)
2.2	Accounting standards setting must follow the requirements laid down in BFRs.	49.5 (42.9)	3.228 (1.441)	2.226 (0.027)
2.3	BFRs are not applicable to non-state-owned business entities.	34.4 (58.6)	2.677 (1.224)	−3.715 (0.000)
2.4	Formulation of accounting standards should be relatively independent of BFRs.	57.6 (35.3)	3.389 (1.387)	3.945 (0.000)
Part III – The Nature of Accounting Standards				
3.1	The authoritative and compulsory nature of accounting standards should be emphasized.	81.9 (13.6)	4.259 (1.068)	16.376 (0.000)
3.2	Accounting standards should be demonstrative rather than strictly mandatory.	72.2 (22.8)	3.840 (1.300)	9.051 (0.000)

Table 3. Continued.

	Questions	% Agree (% Disagree)	Mean (S.D.)	*t*-statistic (*p*-value)
3.3	Unnecessary to regulate compulsory Chart of Accounts and required journalization procedures in the Chinese accounting standards.	53.7 (39.3)	3.273 (1.400)	2.717 (0.007)
3.4	Business enterprises should be allowed to set up own accounting systems so long as they follow guidelines specified by accounting standards.	75.8 (20.2)	3.852 (1.282)	9.301 (0.000)
3.5	Accountants should be allowed to exercise professional judgment in processing accounting transactions or events.	70.7 (23.2)	3.786 (1.179)	9.331 (0.000)
	Part IV - Standard Setting Approach			
4.1	Accounting standards should be uniformly formulated and enforced by the Ministry of Finance.	57.5 (34.4)	3.518 (1.391)	5.149 (0.000)
4.2	Accounting standards should be formulated and enforced by the accounting profession in China.	24.8 (64.7)	2.468 (1.156)	−6.266 (0.000)
4.3	Accounting standards should be formulated and enforced by independent standard-setting body consisting of representatives from various interest groups in government, business community and the profession.	49.5 (38.4)	3.253 (1.317)	2.616 (0.010)
4.4	Accounting standards should be prepared by the accounting profession and endorsed and promulgated by the Ministry of Finance.	62.6 (29.8)	3.628 (1.323)	6.563 (0.000)

Notes:

(1) Answers to survey questions are denoted in Likert scale of 1 to 5, where highest score represents strongest agreement and lowest score stand for strongest disagreement. Neutral view to each question is indicated by score of 3.

(2) "% Agree" represents percentage of total respondents answering 'strongly agree' or 'somewhat agree' "% Disagree" represents the percentage of total respondents answering "strongly disagree' or 'somewhat disagree'. Percentage of the respondents expressing "neutral view" is omitted.

(3) Statistical tests are based on one sample two-tailed t-test of the means with respect to the value of 'neutral opinion.'

(Question 6). These data suggest that the respondents held mixed perceptions of the interrelationship between IARs and PASs. The findings may weakly support the first proposition as a majority of respondents agreed that the two elements of Chinese accounting regulation systems are complementary to each other. The respondents, however, did not express any explicit support for the coexistence of IARs and PASs.

The second part of survey focused on the compatibility of BFRs and accounting standards. The study found that a majority of respondents held a positive view of the role of BFRs. 85.4% of the respondents agreed that BFRs could facilitate business enterprises in enhancing financial management (Question 2.1). But the respondents were in contradictory positions with respect to the compatibility of BFRs and accounting standards. They agreed that accounting standards should embody the basic guidance specified in BFRs (Question 2.2, 49.5% vs. 42.9%). On the other hand, a majority of the respondents were supportive of the statement that "Formulation of accounting standards should be relatively independent of BFRs" (Question 2.4, 57.6% vs. 35.3%).

Regarding questions in Part III of the survey instrument, respondents were overwhelmingly inclined to confirm the authoritative or compulsory nature of Chinese accounting standards (Question 3.1, 85.4% vs. 13.6%). However, they were also supportive of the need for an increasing emphasis of the demonstrative role of accounting standards (Question 3.2, 72.2% vs. 22.8%). A significant number of respondents indicated that accounting standards should not be set in a too rigid or detailed form. In fact, a large portion of the respondents agreed that: (1) it is unnecessary to specify the Chart of Accounts and the detail journal-entry procedures in PASs (Question 3.3, 53.75% vs. 39.93%); (2) uniform accounting standards should leave certain room for enterprises to adapt or design their own accounting systems (Question 3.4 75.8% vs. 20.2%); and (3) business accountants should be allowed to exercise professional judgment in processing accounting transactions (Question 3.5, 70.7 vs. 23.2). In general, these responses confirm the third study proposition.

With respect to the optimal approach of standard-setting in China, respondents were supportive of the existing government-dominated standard setting mechanism, i.e. accounting standards are uniformly formulated and enforced by the MOF (Question 4.1; 57.5% vs. 34.4%). This may support the fourth study proposition. However, the respondents did not reject the feasibility of other alternatives of standard setting in China. Although most respondents were declined to accept the profession-dominated approach (Question 4.2; 24.8% vs. 64.7%), they were supportive of other alternatives such as a joint-force of the accounting profession and government authority in formulating and enforcing accounting stan-

dards (Question 4.4, 62.6% vs. 29.8%); or through an independent standard-setting body consisted of representatives from various interest groups from government, business community, enterprises and the accounting profession (Question 4.4, 49.5% vs. 38.3%). Overall the optimal standard setting procedures under Chinese business environment, as perceived by the respondents, are rank-ordered as follows: (1) a joint-force of the profession and government; (2) the government-dominated mechanism; (3) the independent standard setting body arrangement; and (4) the profession-dominated approach.

Accounting information has a direct impact on redistribution of wealth among different social groups and accounting standard setting bears economic consequences (Zeff, 1978). Varied interest groups would have different preferences over accounting regulations or policy alternatives (Demski, 1974; Sunder, 1988; Solomon, 1991). Potential conflict of interest among different social groups may affect their perceptions or acceptance of accounting regulations or standards. Thus the study investigated the representative attitudes towards the regulatory framework of Chinese accounting by different interest groups. For a further detailed analysis, the responding data were resorted into several subgroups, i.e. investors/creditors, governmental users, business managers/accountants, and academics. Descriptive statistics of these subgroups are presented in Table 4. An one-way ANOVA was run. The testing results indicated that there were statistically significant differences in the mean scores of some survey questions among the five subgroups of respondent. In addition, a nonparametric Krusal-Wallis Chi-square test was run which indicated there were statistically significant differences in the mean scores of 12 questions listed in the survey instrument. Both results of ANOVA and Chi-square tests are presented in Table 5. The data analysis is based upon Kruskal-Wallis Chi-square results because this statistics is generally regarded as relatively more powerful to interpret nonparametric data (Siegel & Castellan, 1988).

Judging by the mean scores and Kruskal-Wallis Chi-square statistics, the study found that the respondents in government group and business group were more inclined to keep the rule-based IARs than other subgroups (Question 1.2, $p < 0.05$). Respondents from banking and investment institutions, CPAs and accounting academics demonstrated greater concerns about the potential limitations of IARs. They were relatively more supportive of abolishing IARs after their full implementation of the PASs in the near future (Question 1.5, $p < 0.01$). With respect to the issue of the compatibility of BFRs and accounting standards, the governmental respondents strongly agreed that accounting standard setting must be subject to the requirements prescribed by BFRs (Question 2.2, $p < 0.01$). The views of business respondents were relatively consistent with that of governmental respondents. Although respondents in other three

Table 4. Descriptive Statistics by Subgroups of Respondent.

	Overall $n = 198$	**Enterprises** $n = 71$	**Government** $n = 51$	**Investors** $n = 21$	**Auditors** $n = 30$	**Educators** $n = 25$
Questions	Mean* (S.D)	Mean* (S.D)	Mean* (S.D)	Mean* (S.D)	Mean* (S.D)	Mean* (S.D)
Part I – Interrelation of Accounting Systems and Accounting Standards						
Question 1.1	3.854 (1.138)	3.930 (1.046)	3.880 (1.154)	4.191 (1.167)	3.867 (1.042)	3.280 (1.306)
Question 1.2	3.278 (1.294)	3.465 (1.263)	3.549 (1.238)	3.143 (1.424)	2.900 (1.212)	2.760 (1.267)
Question 1.3	3.264 (1.250)	3.254 (1.227)	2.920 (1.275)	3.667 (1.238)	3.267 (1.202)	3.640 (1.221)
Question 1.4	3.355 (1.357)	3.282 (1.495)	3.180 (1.381)	3.619 (1.117)	3.200 (1.297)	3.880 (1.054)
Question 1.5	3.262 (1.279)	3.268 (1.253)	2.706 (1.375)	3.952 (1.161)	3.600 (1.452)	3.400 (1.225)
Question 1.6	4.465 (0.841)	4.451 (0.891)	4.235 (0.971)	4.667 (0.577)	4.600 (0.814)	4.640 (0.490)
Part II – Comparability of the BFR and Accounting Standards						
Question 2.1	4.061 (1.021)	3.824 (1.014)	4.352 (0.830)	4.238 (1.044)	4.000 (1.083)	3.640 (1.221)
Question 2.2	3.228 (1.441)	3.643 (1.330)	3.843 (1.489)	2.877 (1.224)	2.867 (1.252)	2.760 (1.451)
Question 2.3	2.667 (1.224)	2.267 (1.121)	2.619 (1.284)	3.039 (1.199)	2.500 (1.196)	3.360 (1.113)
Question 2.4	3.389 (1.387)	2.900 (1.218)	3.056 (1.372)	3.381 (1.499)	3.549 (1.418)	3.840 (1.375)
Part III – Nature of Accounting Standards						
Question 3.1	4.259 (1.068)	4.219 (0.998)	4.417 (0.895)	4.286 (1.189)	4.167 (1.117)	3.880 (1.364)
Question 3.2	3.849 (1.300)	3.836 (1.262)	3.449 (1.385)	4.381 (1.071)	3.967 (1.377)	4.080 (1.152)
Question 3.3	3.273 (1.400)	3.147 (1.479)	3.260 (1.259)	3.381 (1.359)	3.200 (1.563)	3.640 (1.319)
Question 3.4	3.852 (1.282)	3.928 (1.332)	3.843 (1.239)	3.476 (1.289)	3.567 (1.454)	4.320 (0.852)
Question 3.5	3.786 (1.179)	3.855 (1.216)	3.549 (1.301)	3.905 (1.044)	3.500 (1.167)	4.320 (0.690)

Table 4. Continued.

Questions	**Overall** $n = 198$ Mean* (S.D)	**Enterprises** $n = 71$ Mean* (S.D)	**Government** $n = 51$ Mean* (S.D)	**Investors** $n = 21$ Mean* (S.D)	**Auditors** $n = 30$ Mean* (S.D)	**Educators** $n = 25$ Mean* (S.D)
Part IV – Standard Setting Approach						
Question 4.1	3.518 (1.391)	3.544 (1.354)	3.837 (1.359)	3.524 (1.436)	3.429 (1.501)	2.920 (1.288)
Question 4.2	2.468 (1.156)	2.585 (1.102)	2.213 (1.214)	2.667 (1.238)	2.373 (1.227)	2.560 (1.044)
Question 4.3	3.253 (1.317)	3.500 (1.285)	2.553 (1.157)	3.429 (1.287)	3.103 (1.345)	3.960 (1.136)
Question 4.4	3.628 (1.323)	3.776 (1.229)	3.204 (1.427)	4.000 (1.304)	3.724 (1.279)	3.640 (1.319)

* The mean scores are based on a Likert scale of 1 to 5, denoted as "strongly disagree" to "strongly agree."

subgroups confirmed a positive role of BFRs on enhancing business financial management, they were rather supportive of a relative independence of accounting standard setting in relation to BFRs (Question 2.4, $p < 0.10$).

Different views among the respondents of the five subgroups are not surprising. Subject to persistent influences of the governmental business administrative systems rooted in a centralized planned economy in the past, government authorities (including public finance and taxation departments and industry administrators) have not, and are not ready, to given up direct control over operation of business enterprises at the moment. They would exercise direct screening or intervention in business financial operations (investing and borrowing activities in particular) and accounting and reporting through governmental regulations such as BFRs and the rule-based IARs. However, investors, creditors and other non-governmental users preferred the segregation of accounting standards and BFRs in order to facilitate adoption of a new accounting regulation system that can fit the growth of market-oriented economy and be more consistent with internationally accepted accounting practices.

The similarity in the views of respondents in business and government groups could be interpreted as that the majority of business accountants (those working at SOEs in particular) had long been accustomed to a mechanical adoption of governmental regulations on business financing, accounting and reporting in the past decades. They might prefer the rule-based and detailed IARs for the sake of convenience in implementation.

Table 5. ANOVA and Kruskal-Wallis Statistics.

	ANOVA		**Kruskal-Wallis**	
	F-value	*P*-value	χ^2	*P*-value
Part I – Interrelation of Accounting Systems and Accounting Standards				
Question 1.1	1.477	0.211	8.904	0.064*
Question 1.2	3.388	0.010***	10.711	0.030**
Question 1.3	3.064	0.018**	8.195	0.095*
Question 1.4	0.462	0.764	4.826	0.306
Question 1.5	2.349	0.056*	15.980	0.003***
Question 1.6	5.226	0.001***	0.614	0.158
Part II – Comparability of the BFR and Accounting Standards				
Question 2.1	1.749	0.141	17.528	0.002***
Question 2.2	13.125	0.000***	18.859	0.001***
Question 2.3	7.494	0.000***	21.267	0.000***
Question 2.4	3.506	0.009***	8.397	0.078*
Part III – Nature of Accounting Standards				
Question 3.1	0.647	0.630	2.422	0.659
Question 3.2	0.786	0.536	9.320	0.051**
Question 3.3	3.640	0.007***	2.009	0.734
Question 3.4			7.053	0.133
Question 3.5			8.101	0.080*
Part IV – Standard Setting Approach				
Question 4.1	0.788	0.534	8.204	0.084*
Question 4.2	4.012	0.004	6.215	0.184
Question 4.3			23.365	0.000***
Question 4.4			6.916	0.140

* Sgnificant at $p < 0.10$ level ** Significant at $p < 0.05$ level *** Significant at $p < 0.01$ level

Generally the respondents in all five subgroups were in favor of the authoritative and compulsory nature of Chinese accounting standards. However some statistically significant differences were found in the respondents' perceptions of the need for emphasizing the demonstrative role of Chinese accounting standards. For instance, governmental respondents, when compared with respondents in other groups, expressed a great reservation for allowing business accountants to exercise professional judgment in processing accounting transactions and events (Questions 3.2 and 3.5, $p < 0.05$ and $p < 0.10$

respectively). Other groups of respondents were inclined to have alternative accounting standards for business entities to adapt in developing their own accounting systems.

With respect to the optimal approach of standard setting, comparison of the subgroup data demonstrates that the existing accounting standard-setting procedures dominated by the MOF were backed up mainly by government authorities. Governmental respondents were supportive to a higher degree of the existing standard-setting approach than respondents in other groups (Question 4.1, $p < 0.10$). They also strongly declined other alternative approaches for which either an independent standard-setting body or the accounting profession would play a key role in setting and enforcing accounting standards in China (Question 4.3, $p < 0.01$). On the other hand, respondents from businesses, banking and investing institutions, and academics expressed no particular rejection of non-government-dominated alternatives, such as formulating and enforcing accounting standards by a joint-force of the Chinese accounting profession and the MOF or by an independent standard-setting body consisted of representatives from a wide range of interest groups and the business community. The providers and non-governmental users of accounting information would nevertheless support further reforms of the existing process of setting and enforcing accounting standards in China.

DISCUSSION AND SUMMARY

Respondents to this survey study possessed mixed perceptions with respect to the four fundamental issues pertinent to the regulation of accounting in China. In general most respondents recognized or accepted the status quo, such as the coexistence of the rule-based IARs, the BFRs and the transaction-based PASs, as well as government-dominated approach of standard-setting and enforcement. On the other hand, a significant portion of respondents have expressed support for other alternatives to develop a new accounting regulatory framework in China. The conflicting views of the respondents are explainable contextually by the historical and present evolution of Chinese accounting.

China is currently in a period of economic transition. The market-oriented economy is still underdeveloped. The traditional business administrative systems rooted in a highly centralized planned economy in the past had persistent influence on business management and accounting practices. So long as state ownership remains a dominant force in the Chinese economy, government authorities at different levels would not relinquish direct administrative control over business operations. Thus, the government's public finance or taxation departments and various industry administrative authorities will be directly

involved in monitoring financial operations and accounting or reporting of individual business enterprises through a means of governmental regulations. Various interest groups or users of business accounting have to recognize that the existing situations can not be substantially altered in the foreseeable future and have accepted the dominant roles of government in the regulation of business financing and accounting operations at present. In addition, subject to the constraints of the centralized pattern of business financial management and accounting in the past, a majority of business accountants in China were accustomed to mechanically following the financing rules or accounting regulations imposed by government authorities. They have long been relying upon detailed and compulsory governmental rules or regulations and lack of the motivation as well as the ability to exercise professional judgment in handling accounting transactions. As a result, providers and users of business accounting information in China might be skeptical of the potential merits or actual effects of the new system of accounting regulation centered on transaction-based accounting standards. In particular, the formulation and enforcement of Chinese accounting standards is still at an initial stage as the applicability of PASs and their actual effects remain to be confirmed in the future. Skepticism of the potential roles of accounting standards is apparent in practice. Under such circumstances, demand or support for a coexistence of IARs, BFRs and PASs from various interest groups is nevertheless understandable.

However, the Chinese economy has undergone significant changes that have resulted from wide-ranged economic reforms in the last two decades. In pace with the growth of a market-oriented economy, business operations had become much more diversified and non-state-owned business activities have expanded dramatically. External investors, creditors and other non-government users have thus paid increasing attention to the reliability and comparability of accounting information as well as the harmonization of Chinese accounting with internationally-accepted practices. Users and providers of accounting information will place a greater emphasis upon the objectives and the logical coherence of existing accounting regulations developed under the changing business environment in China. Therefore, various interested groups will not reject a move towards a new accounting regulatory framework that is more in line with a growing market-oriented economy even they have to accept or endorse the existing arrangement of formulating and enforcing Chinese accounting standards. The results of this study have demonstrated some empirical support for further changes in reshaping the Chinese accounting regulatory framework.

In summary, this survey study reveals the mainstream attitudes of various interest groups towards the development of accounting regulations in the present

business environment in China. This study should have positive practical implications. The study findings provide empirical evidence to assess the conceptual debates on accounting standard setting in the literature and to offer necessary input to ensure smooth progress in formulating, enforcing, evaluating and improving accounting standards in China.

This survey study is not without limitation. One of the major limitations is the low response rate to survey questionnaires. An overall response rate of 24.8% is less than satisfactory. The response rate was considerably lower for certain subgroups of respondents. In addition, the perceptions of various interest groups may change over time in pace with continuing progress in economic and accounting reforms in China. Precaution is necessary in making inference from the results of this study.

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NOTES

1. This set of accounting regulation has been amended and renamed as Accounting Regulation for Foreign Invested Enterprises (ARFIE) with its applicability extended to all types of foreign-affiliated business entities operating inside China, including joint ventures and foreign subsidiaries.
2. It has been renamed as "The Chinese Accounting Standards Board" in 1998.
3. There are notable differences between the traditional IARs and the 13 new IARs adopted in 1993. For instance, the total number of IASs has been reduced from over 100 to 13 while the new IARs have been set in terms of the basic requirements specified by ASBE. Thus the logic coherence of the new IARs had been relatively improved, comparing to the counterparts prevailed before 1993.
4. This survey instrument is a part of a large study project undertaken by the authors.
5. Judged by the returned questionnaires, most respondents in this group were chief-accountants or the persons in charge of financing and accounting work within individual enterprises. That means that some survey subjects of general managers in the sample enterprises might have passed the questionnaires to the persons in charge of financing and accounting transactions within their entities.
6. Among the total returned questionnaires, 163 copies were returned within weeks 2–6 following the distribution date. Another 46 copies were collected in weeks 7–10 after the reminder letters and second batch of the questionnaires were sent out in week 6 following the initial distribution date. To control for the potential "no- response bias," Mann-Whitney ranked test was run to compare the mean scores of the questionnaires returned in weeks 2–6 and weeks 7–10, which indicated no particularly significant differences.

7. In China the government has run accreditation programs for various technical or professional titles (designations) such as engineers, economists, accountants, auditors, statisticians, asset appraisers, and so on. Varied ranks at junior, intermediate and senior levels are offered within each designation. As the professional titles and ranks reflect technical proficiency and seniority, associated with varied levels of compensation and benefits, the award of those titles or ranks are mainly determined by seniority on job. The holders of the professional titles or ranks at an intermediate level should normally have 6–10 years of work experience, while over 15–20 years of experience is required for the senior ranks.

8. For the frequency scores, the "strongly agree" is combined with "somewhat agree" into one category of "agree" (favorable); while the scores for "strongly disagree" and "somewhat disagree" were combined as "disagree"(unfavorable) category for analysis.

9. The frequency scores listed in the bracket are expressed as the percentages of respondents who held "agree" versus "disagree" views, respectively, to the survey question in concern, e.g. 54% of the respondents were in favor of question 1.3; while 41% were not in favor of the question. The percentage of respondents who expressed neutral views is omitted. This format of presentation is consistently applied in the paper.

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A COMPARATIVE ANALYSIS OF AMERICAN AND FRENCH FINANCIAL REPORTING PHILOSOPHIES: THE CASE FOR INTERNATIONAL ACCOUNTING STANDARDS

Ahmed Naciri and Christian Hoarau

ABSTRACT

Two very dominant financial reporting systems compete today in the international accounting arena: the Anglo-Saxon model of financial reporting and the continental European model. Adopted and extended by the American financial reporting system, the Anglo-Saxon model is riding the wave of world market globalization and it is consolidating its presence on the international scene. On the other hand, the European model, at least in its Latin-German school, strives to maintain its own international position and tries even hardly to grow beyond its own traditional boundaries. Both models, rooted in a rich history and a strong cultural environment, differ at both substantive and philosophical levels. The impact of the industrial revolution and the protestant thinking is more visible in the Anglo-Saxon financial model, while the impact of law and the major wars is more noticeable in the continental European model. This paper uses the American financial reporting model to represent the Anglo Saxon

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model and the French reporting model to represent the dominant European model. It questions the ability of either of these models to respond to the needs of international users for financial information and advocates that the most viable alternative to these models lies in a strong commitment to worldwide standards.

INTRODUCTION

The evolution of financial reporting has always been dictated by social needs and economic development, i.e. financial reporting has evolved at the rhythm of the economic and social advances of concerned societies. Actually, the more developed an economic environment the more sophisticated its financial reporting system. Although the first complete financial record-keeping system can be traced back to Genoa of the 13th century, many societies have contributed to the building of the financial reporting model as we know it today.[1] This system was based on the entity concept and recorded items in monetary terms (Arpan & Radebaugh, 1985).

Today, the international financial environment is mainly characterized by its globalization and most managers and investors find themselves confronted with new challenges in the area of financial reporting. Far more important is the challenge of getting accustomed to the financial practices and regulations of other societies.

Gray (1988) identified 10 country groupings by cultural area. Most of these cultural areas descend from either an Anglo-Saxon influence or from a Continental Europe influence. Table 1 summarizes Gray's classification that goes from the most transparent and optimistic system (the Anglo-Saxon

Table 1. Accounting Systems Measurement and Disclosure.

	Country grouping
1	Anglo-Saxon
2	Nordic
3	Asian Colonial
4	African
5	Less developed Asian
6	Germanic
7	More developed Latin
8	Japan
9	Near Eastern
10	Less developed Latin

group) to the most secret and conservative system (the less-developed Latin group).

Salter and Niswander (1995) found that the inclusion in Gray's model of variables such as the development of financial markets and the level of taxation could enhance its explanatory power. As can be seen from Gray's model, the Anglo-Saxon and the European systems stand at extremes. As part of the more developed Latin and Continental European group, France holds the seventh position in Gray's classification and it is mainly characterized by its secrecy and the lack of transparency. In the other extreme, the Anglo-Saxon financial reporting model, embodied by the American system, is found in the first position and it is mainly characterized by its transparency. Both systems play a major role in the international arena and the use of both systems has international historical ramifications. Missing from Gray's classification, however, is the International Accounting Standards Committee's (IASC) model.

According to Chandler and Holzer (1984):

> The condition of the accounting establishment in a particular country will depend on many environment factors. One of the most important is the influence on accounting exercised by former colonial powers. Thus, we find that most countries that were formerly British colonies have been greatly influenced by British models of accountancy education, financial reporting, the accountancy profession, and government accounting. A similar influence can be found in countries that were formerly part of the French colonial empire (pp. 457–458).

Thus, a broader classification would divide the world of accounting into two main groups: those of Anglo-Saxon influence and those of Continental European influence. As expected, these two worlds of accounting keep struggling to save their supremacy in their traditional environment and at the international level. Besides these two systems, the IASC has tried over many years to come to consensus on an accounting conceptual framework and a set of accounting standards, which are emerging as a credible alternative to both U.S. General Accepted Accounting Principles (GAAP) and European GAAP.

An average user of financial reports of multinational enterprises (MNE), especially those from a non-Anglo-Saxon country, may believe that they are familiar with American financial reports because most non-Anglo-Saxon MNEs now publish consolidated financial statements in conformity with either American GAAP or with International Accounting Standards (IAS). These users may not, however, understand all the subtleties underlying the American system. In the same vein, an American user may get annoyed by the excessive rigidity of most Continental European financial reports, their lack of space for personal judgment, and their constraining tax orientation. As one may expect, both the Anglo-Saxon and the EU financial reporting models are the product of their economic and historical environment. Furthermore, evidence suggests that

national differences in accounting and financial reporting are, to a considerable extent, a function of differences in national priorities concerning domestic needs. Those needs are themselves the product of a variety of environmental factors of an economic, political, and cultural nature. The obvious consequence is, of course, different financial reporting philosophies in both European and Anglo-Saxon countries. Understanding the differences in financial reporting philosophies in those two groups of countries may prove to be helpful for anyone who is in favor of international harmonization of financial reporting.

This paper uses the American and the French models of financial reporting as proxies for the Anglo-Saxon and European models, respectively, and challenges ability of either of these models to respond to the needs of international users for financial information. The American model is chosen because of its leadership in the Anglo-Saxon world and the French model was chosen because it represents the dominant EU continental model.[2]

AMERICAN AND FRENCH REPORTING PHILOSOPHIES

Both the American and French philosophies of financial reporting have been shaped by the historical evolution of both nations. Understanding the American philosophy of financial reporting requires an understanding of American history. Like most economic powers of the 19th century with a huge infrastructure and industrial projects, the financing needs of the economic activity suddenly became very important in the U.S. While other economic powers, mainly European, were using bank financing, companies in the U.S. were opting for the corporate form of business organization that uses equity financing. Such an orientation quickly created a specific financial environment in the U.S. It contributed to the early emergence of mass shareholding and increased the search for an adequate and useful financial reporting system. Such a system became even more of a necessity, given that most shareholders had only very limited skill to process raw financial information. Consequently, financial reporting has been regulated in the U.S. since the beginning of the 20th century, when in the 1930s, the American Congress empowered the Security Exchange Commission (SEC) to regulate financial reporting. According to Wolk and Tearney (1989), the SEC has always allowed the accounting standard setting role to remain in the private sector. Simultaneously, tax laws in the U.S. have remained independent from national accounting requirements and have always been favorable to financial statements prepared for different purposes.

The French system, on the other hand, is highly influenced by legal concepts. In fact, like most of Continental Europe, the law plays a decisive role in France.[3]

The French government is associated with the establishment of every financial reporting standard and the legal system significantly affects accounting rules and the interpretation of financial principles and reporting practices. The only relief came from the introduction by the Fourth European Directive (FED) of the "true and fair view". More importantly, the introduction of income taxes in France in 1920 gave birth to a new fiscal accounting doctrine. Since then, fiscal administration has progressively occupied the whole field of financial reporting and the French accounting model is today totally shaped by fiscal considerations. The supremacy of fiscal income over economic income, is still today regrettably obvious in French financial reporting, i.e. fiscal policy leads and assigns public finance objectives to private accounting. Tax law defines methods of evaluation, methods of recording business transactions, and financial statement presentation because of their affects on taxable income. The tax law in France has ended up imprisoning accounting within a rigid framework. For instance, for an expense to be deductible for tax purpose, it has to be registered formerly in accounting.[4] Finally, the French accounting system is completely run by the French General Chart of Accounts or Plan Compatable Général (PCG). The objective of the PCG is to facilitate better government decision making. In fact, all corporations are covered by the PCG and must follow identical procedures and formats for accounting reports. Thus, national economic policies are easy to implement and inter-sectors comparison is possible. At the beginning, the PCG was essentially a general chart of accounts. As weaknesses in the PCG have been identified or opportunities to change the PCG have arisen, the government has reacted and even changed the PCG. Thus, the PCG has become the main source for helping to understand the theoretical foundation of the French accounting system. Despite several revisions, however, this general chart is still far from representing an accounting conceptual framework in the American sense.

In the U.S., the need for a formal framework capable of regulating financial reporting and establishing a theoretical foundation for financial reporting was felt very early in the 20th century. In fact, the search for such a framework started at the beginning of the thirties, following the stock market crash (Naciri & Bloom, 1987). The lack of a sound accounting framework during most of the 20th century, also opened the door to the strong financial market to engage in the crucial activity of regulating the financial reporting for registered corporations.[5] According to Naciri and Tremblay (1985), the supremacy of the market can also be explained by its efficiency. In fact, market efficiency has completely revolutionized the American financial reporting system, although, both strength of the market and its efficiency have been challenged by many academicians.[6] Actually, the market has imposed itself as regulator of financial information and as a guarantee of its veracity. The SEC, for instance, is also legally empowered

to regulate accounting reporting practices for corporations registered on stock exchanges, although, it has as matter of policy, been supportive of private sector standard setting (Wolk & Tearney, 1989).

AMERICAN AND FRENCH THEORETICAL FOUNDATIONS

As indicated previously, accounting has evolved in France without any conceptual foundations and bookkeeping still today its main objective. For this reason, accounting fields of investigation are still limited to methods of processing financial transactions and to the organization of the chart of accounts. French accounting seems to have given itself rules without conceptual foundations.

It seems that in the U.S., market strength and its efficiency have led to the development of an American accounting conceptual framework. Although early attempting to dote the American financial reporting with a conceptual – framework can be traced back well early in the 20th century, it is only in 1985 that the first formal accounting conceptual framework was adopted by the American standard setter.[7] It is worth noting that such an initiative has taken more than a decade to develop and has cost over $80 million. The development of the American accounting conceptual framework has accentuated the particularity of the American concept of financial reporting.

On the other hand, French accounting objectives are unknown or at best, not well defined. In fact, French accounting has been assigned a range of objectives. Many are fiscally motivated, others are politically or governmentally initiated and very few are managerially oriented. Moreover, such diverse objectives are always contradicting each other. In the U.S. the objectives of financial reporting are well defined and specifically oriented towards financial decision making. This makes European academicians critical of the so-called objective narrowness of the American model (SFAC No. 1). The same level of precision can be found at the level of users of the financial information by American standards setter. Inspired by the advances in the discipline of finance, the Financial Accounting Standard Board (FASB) has opted for the investor as the main user of financial information. In France, the range of financial information users is as large as it is imprecise, as evident from the 1982 French PCG. The French PCG defines accounting as an organizational system of financial information, whose purpose is entering transactions and supplying diverse interested users, after appropriate processing, with data conformed to their needs.

French legal sources are neither precise as to whom the users of financial information are, nor do they give any indication of what their needs for financial

information might be. Consequently, financial reporting is condemned to responding to some undefined financial needs. Note that, despite expectations, the introduction of the EU's Fourth Accounting Directive did not clarify the situation. The Fourth Directive did not deal with the problem given the fact that it was mainly intended to harmonize corporate accounts within the Union.[8]

Because the range of financial information users keeps growing and accounting administrative requirements keep increasing, Boisselier (1992) sees an even worsening trend in France. Others like Esnault and Hoarau (1994), see some advantage to this situation. In this formal recognition of the multiplicity of users, they see a kind of enhancement of the specificity of the French system and a way of increasing its international competitiveness.

Finally, the peculiarity of the American system is also obvious from the characteristics it assigns to financial information. According to the American conceptual framework, the qualitative characteristics of financial information are fundamental qualities that make this information useful for financial decision-making by investors. More precisely, the American system indicates that accounting information must be judged in relation to its utility to the decision-making process (SFAC No. 2). There are, however, certain conditions to usefulness: useful accounting information is one that is published rapidly, which can help estimate future cash flows, or to confirm the previously released information. Useful information is reliable and verifiable. This means that accounting information must faithfully represent the business events from which it originates, and further, it must be independent from measurement subjectivity. Useful information is also comparable, not only from period to period, but also among comparable companies.

In France, the debate over the qualitative characteristics of financial information is a recent one. In fact, the EU Fourth Directive first introduced the concept of "true and fair view" into French legislation. As Arpan et al. (1981) indicate:

> The Fourth Directive does not, however, specify what it means by "true and fair view", although the concept was fundamental to financial statements in the United Kingdom for many decades. Precisely what it requires has been a matter of personal judgment. Generally management should provide all the information that a financial statement user needs to have the same view of a company's true position as does management.

The French Commercial Code, however, reaffirmed the principles of regularity and sincerity. Annual regular and sincere accounts, giving a true and fair view of the patrimony, of the financial situation and of the result of enterprise should be prepared (Code de Commerce, art. 1, al. 4). For financial statements to produce a "true and fair view" of the enterprise, accounting should satisfy, under the rule of prudence, the requirements of regularity and sincerity (PCG

(I.5)). Regularity is the conformity to the rules and procedures in use (PCG (I.5)). It is the conformity to the accounting law, or in the absence of such law, to GAAP. For financial information to be regular, it should satisfy to the obligation provided by law and competent professional organizations' jurisprudence. Regularity, however, is a necessary condition for good financial information, but not a sufficient one. The principle of regularity should always be completed by the principle of sincerity, meaning the application in good faith of accounting laws, rules and procedures (PCG (I.5)). Sincerity mean the good faith of the individual preparing the accounts, but also his worry of describing adequately, loyally, clearly, precisely and completely financial transactions and events. However, the principles of regularity and sincerity may contradict the "true and fair view" principle introduced in France by the Fourth Directive. It seems that the latter principle is used only in the absence of appropriate accounting law or when the application of such law is rather confusing because of possible choices permitted by the competing laws.

The American financial reporting model also differs from its French counterpart with regard to the elements of financial statements. It defines elements of financial statements as:

> . . . the building blocks with which financial statements are constructed – the classes of items that financial statements comprise. Elements refer to broad classes, such as assets, liabilities, revenues, and expenses. Particular economic things and events, such as cash on hand or selling merchandise that may meet the definitions of elements are not elements as the term is used in this Statement. Rather they are called items or other descriptives (SFAC No. 6).

Accordingly, the following ten elements of financial statements have been identified: assets, liabilities, shareholders' equity, investments by owners, dividends, comprehensive income, revenues, expenses, gains, and losses. Contrary to the French system, no formal format for financial statements is prescribed. In France, the PCG prescribes financial elements and even their nomenclature and numeration and suggests a double presentation of the balance sheet. One presentation considers the risk taken by the firm and another presents the firm under the assumption of continuity. It is, however, the second approach that determines the classification criteria of the balance sheet. Element of assets and liabilities are classified by reference to their destination or to their origin. Actually, they are attached to one of the three traditional functions of the firm: financing, investment and operation. The influence of French national accounting is evident. The balance sheet functional presentation was developed by research current with the objective of permitting a better financial diagnosis of corporations. Stable resources should cover stable uses, and the treasury should play a correcting role.

French financial statements are still strongly impregnated with patrimonial concepts. The French accounting legislative presentation and evaluations laws are, somehow, in contradiction with the functional approach. For instance, depreciation is considered as a measure for an irreversible loss of the value of assets, whereas in the case of functional depreciation, amortization joins stable resources, and it is defined as a self-financing component. In the same way, equities are composed of a large range of elements, some of them can only be justified on the basis of fiscal provisions. These examples and many others demonstrate the polymorphic aspect of the French balance sheet in its desire to satisfy many potential and often unidentified users. The balance sheet interpretation requires, therefore, many restating actions in order to reach a presentation that is suitable for logical analysis. The income statement is prepared, however, based on a certain economic logic. According to this statement, the corporation creates wealth and participates in its distribution and, of course, central to this logic is the concept of the value added. This concept originated from French national accounting system and it is used for the evaluation of the national wealth and is, in fact, a survivor of war economy measures. Consequently, the French income statement is affected by national accounting and it has to respect the classification of revenues and expenses by nature, related to industrial, commercial, financial and exceptional activities. Here again, fiscal and juridical considerations keep accounting representation from being useful for decision-making purposes. For instance, in order to be deductible, depreciation and provision expenses must be entered in the firm's accounting records and income taxes are seen as a distribution transaction, which justifies the taxes payable method and excludes different tax methods for financial reporting purposes. Among the most notorious perturbations, is the registration of fiscal depreciation fixed by law and allowing the anticipation of tax credits but ignoring the economic reality that depreciation is supposed to convey and the list of such aberrations is far from being short. These fiscal provisions and many others lead to a real pollution of the French financial statements.

Since the introduction of the Fourth Directive in the eighties, the principle of "true and fair view" dictates the search for qualities in the French financial statements.[9] This principle tries, with many difficulties, to find an appropriate application for itself in a system mainly characterized by its constraining regulations. According to Gray and Coenenberg (1984), although the Fourth Directive has increased substantially the level of information disclosed, it does not emphasize the principle of substance over the form, which is still completely ignored in the French system. This situation is mainly explained by the patrimonial and fiscal approaches of French accounting documents and it is even

exacerbated by the excessive conservatism on the part of French corporations which very often opt for the minimization of reported taxable income.

Even though the American conceptual framework has ended up adopting a functional approach "à la française", it still emphasizes future economic income over reported income. The American conceptual framework has also introduced the risk component to investors' decision-making processes. Indirectly, the conceptual framework imposes pricing of assets based on market value. If it were not so difficult to apply, the FASB would probably allow revaluation of assets and liabilities based on current value.

This is, of course, the natural way of doing things, given the definitions of assets and liabilities by the American conceptual framework. The American accounting framework defines assets as possible future benefits, received or controlled by the economic entity, following past transactions or events, and liabilities as possible future sacrifices of economic benefits from actual obligations of a given economic entity. In order to do so, however, a clear definition of cash flows along with a precise method of calculating risk was needed. The FASB has always had serious difficulties establishing a practical calculation of both future cash flows and risk, although such objectives are attainable theoretically. Each time, however, the prediction of future cash flows becomes possible, market evaluation of assets and liabilities was always used in practice, e.g. the evaluation of leases, long-term debt, options and transactions of consolidation. Actually, the dynamic of presenting financial statement based on market values is already at work and will surely continue in the future.

The coherent American conceptual framework is also beneficial to accounting education in the U.S. It gives future professional accountants in American an advantage over their French counterparts. It allows them a better understanding of practice, given that practice is no longer viewed as "just a series of ad hoc, arbitrary rules", but as a detailed application of a structure of coordinated concepts. According to Amernic and Lemon (1984), not only does a conceptual framework have a potentially important role to play in education, but it can also serve to provide support for accountancy's claim to hold professional status.

AMERICAN AND FRENCH STANDARD SETTING PROCESSES

American and French financial reporting systems differ also in their standards setting approaches and this is obvious at different levels of their processes. At the level of standard setting organizations, the accepted concept of the homogeneity of users of financial information allows the American system to

have clarity and simplicity with regard to the financial standard setting process. In France, the reverse has occurred and the plurality of users of financial information users brings a lot of confusion to the French standards setting process. One needs only study the composition of the American organization responsible for standard setting and the composition of its French counterpart to be convinced.

The Financial Accounting Standard Board (FASB), as an autonomous institution, is composed of seven full time members, whereas the French Conseil National de la Comptabilité, (CNC), as a public organization, is composed of fifty part time members coming from different constituencies and headed by the Ministry of Finance. Such heterogeneity can only produce consensus and political accounting standards, rather than rational accounting standards. The CNC seems to be the place where negotiation and consensus are always taking place. It seems also to be the place of continuous struggles.

On other hand, the mandate of the FASB is very clear and simple: to develop adequate accounting standards. The mission of the CNC is diffused: to expand and update the General Chart of Accounts, to advise and make recommendations over all accounting matters, to suggest appropriate measures concerning the use of financial statements either by private corporations or government agencies, to give advice on international accounting standards and to coordinate accounting research.

The American and the French systems are also different at the level of their standard setting philosophy. The American system is mainly characterized by its transparency and its due process, whereas the French system is characterized by its secrecy. The American system has always demonstrated its flexibility and its capacity to react either globally or to specific financial events, while the French system reacts mainly through charts of accounts. The first chart of accounts was approved in 1947, revised in 1957, 1982 and 1983. French accountants like to think of their standard setting system as one that has been adapted to the specific needs of France. The CNC has always maintained that the French standard setting process can only be judged with regard to the events that encouraged its establishment and the economic disorders following the Second World War. For this reason, the normalization by chart of accounts allows aggregation at the level of the national accounting and permit enforcement of economic policies.

The conceptual approach chosen by the U.S. allows them to develop accounting standards based on a structure of "coordinated concepts". The absence of such a conceptual approach results in the French standard setting system dealing with accounting issues using a "situation-by-situation approach" creating "inconsistent accounting recognition for similar events". Thus, the CNC lacks a conceptual

framework that can ensure the public that consistent approaches are always followed in the process of standardization. Given the absence of such a framework, "politic" has become a dominant factor in the French standard setting process, as predicted by some academicians like Solomons (1978).

The absence in France of an agreed upon accounting framework and the rigidity of the chart of accounts approach combined with wholly-controlled government standardization, have had vicious effects, not only on the French standard setting system, but also on French accounting education. In the U.S., accounting is regarded as a scientific discipline like any other science, such as economics and law, while accounting in France is hardly considered a scientific discipline. In France, there is still not a single undergraduate or graduate program in accounting. Rather, accounting is taught as a technical discipline in some continuing education institutions. In the U.S., accounting is a scientific field of inquiry, having its own paradigms, theories, research fields and educational programs, both at the graduate and undergraduate levels. In the U.S., thousands of university award baccalaureate, masters and doctoral degrees in accounting, while in France, accounting education still under the supervision of business programs, where knowledge of accounting can only be achieved through the choice of an accounting specialization. Accounting curricula in the U.S. also reflect the scientific dimension of accounting, while in France, accounting curricula reflect mainly the bookkeeping side of accounting.

AMERICAN AND FRENCH ACCOUNTING METHODS

An analysis of some accounting standards allows us to shed more light on the peculiarities of the American philosophy of financial reporting with respect to the French philosophy of financial reporting. In the U.S., for instance, appreciation of fixed assets is not permitted, except in merger cases, while in France, appreciation of fixed assets is permitted under the following specific conditions:

(1) Appreciated fixed assets should be evaluated by their present value,
(2) Evaluation difference should be reported to equity, and
(3) The transaction should be explained and justified in a note to the financial statements.

Accounting for debts and receivables should be reported in the U.S. at their present value while, in France, they are reported at their acquisition cost.

The accounting for leases is fundamentally different in the U.S. "A statement that transfers substantially all of the benefits and risks incident to the ownership of property should be accounted for as acquisition of an assets and

the bearing of an obligation by the lessee and as a sale or financing by the lessor" (SFAS No. 13, 1976). Other lease agreements should be accounted for as rental agreements. In France, all lease agreements are accounted as rental contracts.

Deferred income tax is yet another area where the American and the French systems diverge. The FASB, for instance, maintains that deferred taxes are real assets and liabilities, therefore they should be recorded while, in France, the supremacy of fiscal law is very strong and it was decided that the real tax is the one calculated for tax purposes. For this reason deferred income tax is unknown in France, except for consolidated financial statements.

Consolidation is also another area of divergence. In the U.S., when a company acquires control over one or more others through the acquisition of a majority of the outstanding voting rights the entire group is considered as a unified whole and it is appropriate to present consolidated financial statements. In France, although some corporations prepare consolidated financial statements, only individual financial statements have legal value. In fact, the provisions of the Seventh European Directive that introduced financial statement consolidation continue to be subject to controversy and debates. Because of the relative newness of consolidations as a legal requirement, member states of the EU were given wide latitude and numerous options exist for the incorporation of the Seventh Directive into their individual national company law.

The previous list of differences between the American and the French accounting systems is far from exhaustive, but divergences can also be mentioned in other areas of accounting like accounting for contingencies, long term contracts, accounting in foreign currencies, research and development expenses, etc.

CALL FOR WORLDWIDE ACCOUNTING STANDARDS

Judging by the differences in the philosophies of financial reporting philosophies of the Anglo-Saxon and the European financial models that have created controversies surrounding issues such as group accounting, accounting for intangibles, and accounting for foreign currency, it seems certain there is much to be resolved internationally as far as external reporting is concerned. Neither the Anglo-Saxon nor the European model seems have gained sufficient acceptance to serve as a basis for international harmonization of financial reporting. For this reason, there is an urgent need for a universal international model for financial reporting. While benefits of a sound financial reporting model at the national level are well established, the urgency of an

international model seems to be short of proponents. While reporting requirements at the national level have become more detailed and complex, particularly in the U.S. and to some extent in Europe, it may well be that in practice there is now less, rather than more, effective information disclosure, contrary to popular belief, specially concerning international transactions and operations (Radebaugh & Gray, 1997). In fact, due to market globalization, international operations have grown tremendously and MNEs have become ever larger and more powerful. This raises the question about the lack of an adequate international financial reporting system capable of matching the ever-growing complexity of international operations.

At least at the regional level, there is no doubt that the long-term goal is to remove market imperfections and to have a serious commitment to eliminating regulatory barriers. At the international level, however, there seems to be an entirely different story. In fact, regional groups and their governments appear to be more concerned with protecting the interest of their own business communities and promoting their own reporting model internationally than encouraging an international financial reporting system. To a considerable extent, such regional models are a function of differences in priorities concerning domestic needs and that such needs are mainly the product of a variety of environmental factors of an economic, political, and cultural nature. There is a need, therefore, for developing an external financial reporting model free from regional considerations that can cope with the complexity of operations at the global market, as well as tackle problems concerning the feasibility and extent of international harmonization.

The hoped for international harmonization model cannot be a copy of the Anglo-Saxon model that is difficult to implement for most economies of the world, at least in the short run. It cannot be a copy of the European system either because of its non-managerial orientation and it legal constraints. An international harmonization model could be, however, a combination of the two models and the mandate for developing it can only be entrusted with an international organization such as the IASC whose two main objectives are:

(1) To formulate and publish in the public interest accounting standards to be observed in the presentation of financial statements and to promote their worldwide acceptance and observance, and
(2) To work generally for the improvement and harmonization of regulations, accounting standards, and procedures relating to the presentation of financial statements.

Although the IASC has issued more than three-dozen standards as well as a number of revised standards, some recent empirical research suggests that the IASC has little discernible impact on practice to date (Evans & Taylor, 1982; Nobes, 1990). These standards cover a wide range of issues including the disclosure of accounting policies, consolidated financial statements, funds statements, segmental reporting, accounting for changing prices, accounting for leases, accounting for the effects of changes in foreign exchange rates, and related party disclosures. The IASC has also developed its own conceptual framework and published it in July 1989 and a number of exposure drafts are currently under consideration.[11] International standards should be general with an orientation objective to accommodate country differences. There should be, for instance two levels of implementation: one level for multinational corporations and big national corporations and another level for small corporations. They should not be developed with special reference to some influential countries. International standards should become mandatory and should not allow members to "use their own endeavors" to follow where this is considered desirable or feasible.

Unfortunately, the efforts of the IASC have not received sufficient positive widespread responses that one would have hoped for. The reasons for such a relative failure can be found in the lack of any universal commitment to worldwide financial reporting. It seems that MNEs are not interested in standards that may curb their freedom of action and domestic corporations, with no significant international operations or financing, have little incentive to be concerned with worldwide standards. Moreover, in most Continental Europe and Japan, professional accounting organizations that may favor international harmonization do not have the responsibility or authority to set accounting and reporting standards – such matters being largely the responsibility of governments and the law. This may be contrasted with the position in most Anglo-Saxon countries where the accountancy profession is much more influential in the standard-setting process.

Consistent back up should be given to the IASC or to any chosen international agency entrusted with international harmonization of accounting standards. For instance, the Security Exchange Commission (SEC) in the U.S. has already shown some support for the IASC by not requiring foreign companies whose securities are registered with SEC to prepare reconciliation to U.S. GAAP if they already follow international accounting standards for such items as cash flow statements, amortization of goodwill, and treatment of business combinations. Other countries also allow IAS-based financial statements for foreign listings with additional requirements that are unique to each country and its exchanges (Jeter & Chaney, 2001).

CONCLUSION

This paper demonstrates how the American and the French philosophies of financial reporting diverge from each other and shows how each one is strongly influenced by its country's historical and social evolution. While the American system was influenced by the very positive financial and economic environment of the 19th century, the French system was impacted by political and war considerations of the 20th century.

The American environment can be described by:

(a) Mass shareholding,
(b) A strong need for formal financial reporting based on scientific foundations,
(c) The development of financial markets capable of regulating transactions and guaranteeing the quality of financial information, and
(d) A strong faith in the system.

In France, however, the philosophy of accounts was always characterized by:

(1) A strong legal emphasis,
(2) Steady governmental intervention,
(3) Quasi-domination of the constraining fiscal law, and
(4) The rigidity of the General Chart of Accounts.

The final result is that the American system is a system of the future with an image of cohesion and rationality, at least in appearance. Real world facts tend, however, to confirm this situation. The French system seems unable to remove itself from the shadow of the past and from the legalistic and tax approach imposed on it despite some inclination for independence and autonomy on the part of several interested parties. The French chart of accounts still does not seem very concerned with this new trend. Analysis of the French financial reporting system still confirms its multiplicity, combining tax, patrimonial, economical and financial considerations. Although the European harmonization of accounting standards has been successful in increasing the quality of information disclosure in France, it seems to have made little progress in diminishing the legalistic orientation which has handicapped the French system. Even the introduction of the so-called "true and fair view" principle does not seem to have had an immediate effect on the French financial reporting.

Encouraged by the influence of their colonial past, both the Anglo-Saxon and the European models of financial reporting aspire to a certain level of universality. In our opinion, neither the former, nor the latter, could pretend to have attained such a status, mainly because each one of them is the real product of its own environment. A commitment to worldwide financial reporting is

necessary and a consensus has to be reached and should be clearly independent from both the Anglo-Saxon and the European sphere of influence. This should not keep an international financial reporting system from finding inspiration and guidance from both the Anglo-Saxon and European models. There are even many reasons to believe that both systems can be very helpful in forging the projected international harmonization model.

NOTES

1. Record keeping has been traced back a far as 3600 BC, and accounting concepts such as depreciation were even evident during Greek civilization. However, accounting can also be found in other civilizations around the Mediterranean, like the Egyptians, the Phoenicians, or the Arabs.
2. Note, however, that two school of thought may be found within the EU model: the first school is that of France, Germany and other Latin members, basically a legalistic school and highly codified approach; the other is that of the U.K., Ireland and the Netherlands which is essentially a true and fair view approach.
3. Most basic accounting laws are contained in the French Code de Commerce or the French Code Général des Impôts.
4. Le Code Général des Impôts (Art. 54) asks taxpayers to produce a complete and verifiable accounting able of justifying the declared income for tax purposes. The French tax law suggests depreciation of licenses over a five-years period. In order to benefit from such a provision, however, the accounting depreciation should correspond to the tax depreciation.
5. As matter of fact the Security Exchange Commission, SEC releases have as much power as accounting standards.
6. Dopuch and Sunder (1983). Some authors do not think that the market is efficient at all, Wyatt (1983) and Briloff (1966). Others have shed light inconstancies in the Capital Assets Evaluation Model, CAPM, Roll (1977).
7. ARS No 1: The Basic Postulates of Accounting, (1961), APB No 4: Basic Concepts and Accounting Principles Underlying Financial Statement of Business Enterprises, (1970), Statement of Financial Accounting Concept, FASB, SFAC No. l.
8. This Directive specifies that the annual financial statements must include a balance sheet, an income statement, and notes to financial statements. The main requirement is for financial statements and their footnotes to communicate a "true and fair view" of a company financial position and results of its operations.
9. For discussion of the "true and fair view" principle, see Gray and Coenenberg (1993).
10. The professional accountant in France, the "expert comptable" must meet a rigorous high educational requirements and work under a supervision of an "expert comptable" for three years.
11. The IASC recently went through a restructuring process in order to increase its effciency, and have developed a core of standards that covers a wide range of issues going for general like the presentation of financial statement, to particular like borrowing costs, or employees benefits. The IASC tries to supply international users with a complete set of world accounting standards, and in the same vein to impose itself as the world accounting standards setters.

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