ADVANCES IN INTERNATIONAL ACCOUNTING

VOLUME 20

J. TIMOTHY SALE

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ADVANCES IN INTERNATIONAL ACCOUNTING

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VOLUME 20

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THE EFFECT OF VOLUME OF INTRAFIRM TRANSFERS ON MARKET METRICS

Kingsley Onwunyiri Olibe and Zabihollah Rezaee

ABSTRACT

In this paper, we examine the relationship between international intrafirm area transfers and market metrics as measured by market-to-book value and systematic risk. Intrafirm transfers – the amount that multinational corporations charge one another for the transfer of goods, intellectual property, and services – have become an increasingly important issue for policymaking, managerial, financial, and tax purposes. This paper also examines whether international intrafirm intergeographic area transfers are attributed to corporate tax. We find that firms with a sizable volume of international intrafirm transfers have higher systematic risk than comparable firms without these transfers. We show cross-sectionally that firms engage in international transfers have a higher market-to-book ratio, suggesting that transfers add value through their effect on earnings and taxes. Consistent with Mills and Newberry (2003) and Collins, Kemsley, and Lang (1998), we document that U.S. (global) income tax is positively (negatively) related to intrafirm transfers, implying that U.S. multinational firms shifted taxable income to the United States from 1995 to 1999.

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INTRODUCTION

This paper investigates the relationship between international intrafirm transfers and market metrics as measured by market-to-book ratio (hereafter MTB) and systematic risk (hereafter BETA). The extant literature on intrafirm transfers suggests that tax-motivated income considerations are a key factor in cross-border transfer decisions (Klassen, Lang, & Wolfson, 1993). However, there is little direct empirical evidence on the relation between intrafirm transfers and MTB as well as BETA. Incidental to the primary objective, we also address the effect of transfers on the corporate tax burden as a validation of prior research (e.g., Klassen et al., 1993; Harris, 1993; Mills & Newberry, 2003). Specifically, we examine whether the 1994 Internal Revenue Code (IRC) final Section 482 has any discernable effect on the income-shifting behavior of U.S. multinational corporations (MNCs) by creating a disincentive for them to shift income out of the United States.[1] This is important because U.S. policymakers and the U.S. General Accounting Office (GAO, 1995) are concerned that MNCs undermine U.S. income tax receipts by managing international intrafirm transfers.[2]

Our results indicate that: (1) BETA is an increasing function of international intrafirm transfers, suggesting that the net effect of international transfers is an augmentation of BETA; (2) firms that engage in international transfers have higher MTB, implying that transfers are value-additive through their effect on earnings and taxes; and (3) U.S. (global) income tax is positively (negatively) related to intrafirm transfers in the sense that foreign tax credit limitations and incentives to report income in the United States for MNCs with a sizable volume of transfers seem stronger than the corresponding incentives to transfer income out of the United States. Nonetheless, aside from income tax considerations, firms may shift profit/cash to other countries in order to improve financial reports to their shareholders in an unconsolidated reporting system. Our results are robust after controlling for other firm characteristics (size, multinationality, operating performance, and leverage). Overall, the findings support our hypotheses that important informational effects occur with intrafirm transfers and that these effects lead to increases in MTB and BETA.

This paper contributes to the existing literature in three ways. First, it provides insights into the empirical relation between transfers and MTB by documenting that investors consider intrafirm transfers when assessing firm value. Second, it extends prior research by showing cross-sectionally that the net effect of transfers is an augmentation of BETA. Third, it

provides a framework for forecasting U.S. and global taxes paid, and it improves our understanding of the relationship between taxes and foreign operations. Although other studies (e.g., Jacob, 1996; Klassen et al., 1993) document that U.S. firms shifted income into the United States in response to the 1986 Tax Reform Act (TRA), existing literature has not directly examined the relationship between transfers, BETA, and MTB. Our results have implications for investors, policymakers, and standard-setters as they attempt to improve the reliability and transparency of business segment disclosures and to establish tax policy and transfer price regulation.

MOTIVATION OF THE STUDY

The theoretical justification of the possible impact of intrafirm transfers on BETA is provided in Gomes and Ramaswamy (1999), who argue that international operations could have both positive and negative impacts on performance. The positive impacts are expected to originate from the MNCs' ability to leverage scale economies, access new technologies, and arbitrage factor cost differentials across multiple locations. Differences in government regulations (e.g., taxes, accounting, subsidies) can also create potential gains for the MNCs through cross-border arbitrage. As Lessard (1983) points out, the motivation for diversifying internationally is to improve the reward-to-risk tradeoff by taking advantage of the relatively low correlation among returns on assets of different countries.

Furthermore, Bodnar and Weintrop (1997) and Bodnar, Tang, and Weintrop (1999) document that international diversification creates additional options, including the ability to transfer profits or losses within MNCs to take advantage of international tax differences and to arbitrage temporary international market imperfections. To the extent that management is able to take advantage of these options by managing transfer pricing, investors will earn a higher return on their investment. Levy and Sarnat (1970) showed that imperfect correlations between separate national securities markets create a potential investor gain from holding an internationally diversified portfolio. Restrictions on capital movements and other market imperfections make it prohibitively costly for individual investors to maintain efficient international portfolios. Investment in an MNC is seen as an alternative means of securing diversification benefits without incurring the excessive transaction costs of international portfolio management.

Alternatively, although MNCs can exploit sources of competitive advantage that are not available to domestic firms, they are also exposed to additional costs and risks (e.g., geographic concentration risk, market and political risk).[3] As Madura (1992) pointed out, MNCs are more affected by exchange rate variations relative to domestic firms, implying that MNCs may have riskier cash flows. The economic impact of currency exchange rate changes is complex because such changes are often linked to variability in real growth, inflation, interest rates, governmental actions, and other factors. Moreover, currency depreciation and inflation are very often a joint occurrence with a common cause, such as an increase in market risk. MNCs, in comparison with domestic firms, may face more scrutiny from investors, more pressure to provide enhanced guidance, and increased scrutiny from policymakers on tax and earnings issues. The cultural differences, geographic constraints, differing legal systems, and language barriers increase the complexity of international operations, thus increasing the risk profile of the firm. In summary, investments in foreign operations involve additional risks due to changes in currency exchange rates, unfavorable political and legal developments, and economic and financial instabilities.

The business literature states that the primary purpose of U.S. corporations is to create sustainable shareholder value. Transfer prices for intergeographic area transfers affect consolidated financial reporting income through income tax expenses. In general, using transfer prices to minimize tax expense would result in a minimization of taxes payable. This reduction, in turn, results in a direct increase in cash flows. If international intrafirm volume of trade alters the profile of earnings and after-tax cash flows, then we expect that MTB will reflect that revision in profitability. Since over- or under-invoicing of transfer price amounts will have an impact on earnings and a firm's tax position, managers may be able to signal to the market about the firm's potential earnings and tax position through the volume of transfers. Therefore, this paper investigates the role of intrafirm transfers in market valuation, including the assessment of BETA.

This paper examines the following three research questions:

1. Is the volume of intrafirm transfers within firms related to the systematic risk of the firms measured by the BETA of firms' stocks?
2. Is the volume of intrafirm transfers associated with firms' MTB?
3. Is the volume of intrafirm transfers related to firms' U.S. and global tax burdens?

The answers to these questions shed light on the use of the volume of intrafirm transfers as a proxy for returns enhancement, income shifting, and/or tax minimization. The evidence of such a relationship is important for U.S. policy issues and managers, who are evaluated by market performance and earning streams. Intrafirm intergeographic area transfers should, ceteris paribus, affect the firm's BETA because foreign operations involve additional risks due to changes in currency rates as well as unfavorable political and economic instabilities. Furthermore, U.S. MNCs are subject to non-U.S. accounting and financial reporting standards, and public information may not be as available as it is in the United States. Foreign settlement procedures may also involve additional risks for the MNCs. The liquidity of these foreign investments may be lower than that of U.S investments.

Given that investors value assets on an after-tax cash flow basis, the effect of the volume of intrafirm transfers on MTB rests on its ability to alter beliefs regarding the future cash flow prospects of the firm. MTB and BETA indicate not only the investors' assessment of a firm's asset valuations and expectations for future operating performance, but also a firm's investing and financing decisions. Thus, these tests provide indirect evidence about the link between international intrafirm transfers and MTB. Such evidence will be useful for the analysis of financial statements containing intrafirm transfers, and it complements evidence based on BETA specification. As firms engage in intrafirm sales, cash flows at some future date will be affected. By observing the cash flows as they are realized, the market should eventually become as well informed as the manager. If cash flows generated by intrafirm transfers are positive (negative), then, ceteris paribus, investors are likely to assign a higher (lower) valuation to the firm's shares. Investors may also attach positive value to transfers since it may bring rent to the firm. Thus, any driver, such as intrafirm transfers, that affects the reported cash flows and taxes potentially impacts the firm's value.

The market is rational and is likely to price intrafirm transfers positively since it improves the predictability of earnings to reflect the economic value of the firm. However, manipulation of intrafirm transfers may increase the complexity of earnings prediction, and, if investors are functionally fixated, they are likely to assign a lower valuation multiple to the MTB. In either case, whether the stock markets are efficient or inefficient, and as long as some investors are functionally fixated to reported earnings, we expect to observe a positive relation between intrafirm intergeographic area transfers and BETA. However, if firms employ opportunistic transfer prices to distort

operating performance and taxes, then rational investors will price these transfers negatively. Research has shown that investors' risk perception directly influences their investment decision-making process (Weber, 2004), so knowledge of the effect of international intrafirm transfers on BETA is important to managers and to those interested in foreign investments. The risk of foreign investment is evaluated by financial analysts, who will then assist investors in understanding the potential impact of overseas investments on shareholder value, which is becoming more important as more U.S. firms expand overseas. Appendix describes the relation between BETA and the market return. MTB and risk issues are addressed together because the evidence on each issue is informative about the other. To minimize taxable income, MNCs may attempt to manipulate their transfer prices for intrafirm transactions. The direction of manipulation (e.g., upward, downward) depends largely on: (1) the corporate governance structure of MNCs, (2) differences in tax rates among affiliated companies in different countries, and (3) any relevant product tariffs (Swenson, 2001). Thus, we also analyze the relationship between taxes (U.S. and global) and intrafirm transfers. Tax-planning strategies affect the quality and content of financial reports.

SAMPLE SELECTION AND DATA SOURCES

Since data on unit transfer pricing are unavailable, the dollar value reported in the annual report or 10-K is used as a surrogate for intrafirm transfers. To avoid characterizing all intrafirm flows as intrafirm sales, we focus on data referred as intersegment geographic sales in the annual report or 10-K. To test the effect of the volume of intrafirm transfers on BETA, MTB, and the U.S. and global taxes paid by these firms, annual data were collected from Compustat PC, which reported U.S. and non-U.S. operations including identifiable assets and U.S. and non-U.S. income taxes paid from 1995 to 1999. Systematic risk (BETA) that measures undiversifiable risk for each firm for each year is calculated using the market model (see Eq. (A.1)). The monthly market return used is the equally weighted market return of the CRSP database. Firms were deleted from the original sample if: (1) the firm's returns, tax data, global income, or evidence of multinationality were missing; or (2) the intrafirm transfer amount was unavailable in the annual reports or lacked verifiability.

Focusing on intrafirm intergeographic transfer data has its limitations. Most firms do not report or decompose transfer amounts into those made

Table 1. Sample Selection Procedure (Fiscal Years 1995–1999).

	Firms
Initial sample obtained from COMPUSTAT	494
Unable to locate intrafirm intergeographic area transfers	71
Missing or unable to locate U.S. corporate income tax	33
Firms without identifiable foreign sales or assets	25
Firms without earnings per share, return, and BETA data	13
Final sample	352

for tax motivation and those made for economic incentives. Firms in regulated industries generally have different incentives than those in nonregulated industries, and therefore, we excluded financial institutions (SIC codes 6000–6999), utilities (SIC codes 4800–4999), other quasi-regulated industries (SIC codes 4000–4499), and other industries with SIC codes 8000 or higher. The initial sample consisted of 494 U.S. MNCs. Applying these filters resulted in 352 firm observations, as shown in Table 1. We also deleted extreme observations for the top and bottom 1% of firm-year observations to mitigate the effects of potential outliers. Thus, our final sample varied across tests.

HYPOTHESES DEVELOPMENT, RESEARCH DESIGN, AND EMPIRICAL RESULTS

In this section of the paper, we describe the relation between international intrafirm transfers and a firm's BETA, MTB, U.S. tax, and global tax. Prior studies (Goldberg & Heflin, 1995; Reeb, Kwok, & Baek, 1998) document that international diversification increases MNCs' exposure to economic factors (e.g., currency risk and political risk) as well as regulatory intervention, which, in turn, increases earnings volatility. Furthermore, where purchasing power parity does not hold perfectly, the exchange rate variations make cash flow riskier (Madura, 1992). Operations of MNCs may also be affected by political factors, including host government appropriation, domestic and international regulations, and the differences in governmental and cultural attributes. In summary, factors such as differences in regulatory and cultural attributes, political risk, currency risk, and legal and monitoring systems may increase the risk of MNCs relative to domestic firms. This paper's analysis does not rule out the possibility

that international intrafirm transfers are simply acting as a proxy variable for international diversification.

Impact of Intrafirm Transfers on Systematic Risk

Hypothesis Development

The analysis of the relation between intrafirm transfers and BETA is motivated in the sense that estimates of BETA have a direct effect on security valuation. In general, the higher the BETA, the lower the valuation in order for investors to earn higher returns for bearing risks. A firm may experience an increase in BETA if an increase in its return variance is greater than the decrease in the correlation coefficient between its security and that of the market. Intrafirm transfers within geographic areas themselves could increase the risk of the firm because of: (1) an increase in market or political risk; (2) the risk of audits of transfer prices from tax authorities; or (3) predicting earnings becoming difficult due to transfer price manipulation. Alternatively, currency risk appears to be negatively associated with BETA. For example, if U.S. currency loses value, then foreign currency gains value. This should, ceteris paribus, reduce the BETA of the firm. When firms are involved in international transfer pricing, they are inherently faced with various factors affecting BETA, such as foreign exchange rates, political factors, agency/monitoring problems, and asymmetric information (Reeb et al., 1998).

Certain political factors also increase BETA, such as the possibility of government appropriation, cultural practices, and changes in governmental control. Managers of international operations serve as agents for MNCs; however, domestic managers are faced with additional costs and risks related to the monitoring of those agents. These additional agency risks and costs result in increased BETA. Likewise, foreign competitors may have different information sources than the MNC, resulting in additional risk for MNCs. In summary, when firms internationalize, they face additional risk, such as international investment risk and concentration risk, and they are subject to different accounting and financial reporting standards that domestic firms do not face. Thus, our first hypothesis regarding systematic risk (in the alternative form) is as follows:

Hypothesis 1. Intrafirm transfers are significantly positively associated with a firm's systematic risk (BETA).

Research Design

We examine the relationship between intrafirm intergeographic area transfers and BETA by estimating the following regression:

$$\begin{aligned}\mathrm{BETA}_{it} = {} & \beta_0 + \beta_1\left(\frac{\mathrm{TP}_{it}}{\mathrm{TOSA}_{it}}\right) + \beta_2\mathrm{LnTA}_{it} \\ & + \beta_3\mathrm{MN}_{it} + \beta_4\mathrm{DEBT}_{it} + \beta_5\sum\mathrm{INDM}_{it} \\ & + \beta_6\sum\mathrm{YDM}_{it} + \varepsilon_i \end{aligned} \tag{1}$$

where for firm i and year t: BETA_{it}, the equally weighted systematic risk of firm i in year t deflated by total assets, which defines the relation of risk to return for any particular security investment[4]; $\mathrm{TP}_{it}/\mathrm{TOSA}_{it}$, the dollar value of intrafirm transfers for firm i in year t standardized by total sales[5]; LnTA_{it}, the natural log of total assets for firm i in year t; MN_{it}, ratio of foreign sales to total sales for firm i in year t, a proxy for multinationality; DEBT_{it}, the total debt for firm i at time t deflated by total assets; INDM_{it}, a vector of industry variables; YDM_{it}, a vector of year variables from 1995 to 1999; and ε_i, the random error term.

The ratio of intrafirm intergeographic area sales to total sales revenue of the firm, TP/TOSA, is used as a proxy for the amount of intrafirm international transfers of goods and services.[6] Financial Accounting Standards Board Statement (SFAS) No. 131 requires firms to disclose the amount of intrafirm sales between geographic areas and to account for them on the basis used by the firm to price the intracompany sales. All independent variables, except for size, are deflated to alleviate the observed skewness of raw data and to minimize the effect of heteroscedasticity. Given that MNCs are exposed to higher risk than domestic firms, we predict the coefficient for TP/TOSA (β_1) to be positive.

The inclusion of the control variable (e.g., size, MTB, MN) in Eq. (1) is explained in the following paragraphs. Consistent with Reeb et al. (1998), the analysis includes the natural log of assets (LnTA) to: (1) control for potential size-related effects on BETA; (2) control for the information environment of the firm; and (3) obviate the problem of omitted variables.[7] Ceteris paribus, large firms should have lower BETA due to economies of scale. Hence, β_2 is expected to be negative. We log transform size to mitigate the effect of skewness in the data.

Beaver, Kettler, and Scholes (1970) argue that unexpected profits arising from growth opportunities erode as competition enters the marketplace. As

a result, unexpected earnings derived from growth opportunities have a higher risk than "normal" earnings, thereby generating a positive association between growth and risk. La Porta (1996) provides empirical evidence of such an association by documenting that high expected-growth stocks have higher standard deviations of returns and higher market BETAs than low expected-growth firms. We include the MTB ratio as a proxy for growth opportunities because growth firms have greater risk exposure.

The degree of multinationality (MN) is included to control for the possibility that the level of risk exposure from foreign operations differs from that of the United States. It has been reported by Fabozzi and Francis (1979) that industry effects explain a substantial proportion of variation in the degree of systematic risk (BETA). Industry dummy (IND) membership is included to control for interindustry differences in risk and for a possible spurious correlation between international diversification and BETA. We include year dummy variables to control for changes in year-to-year microeconomic activities.

Empirical Results

Table 2 provides summary descriptive statistics on the means, standard deviations, minimums, and maximums for all dependent and independent variables. Several observations can be made from Table 2. The four dependent variables – MTB, BETA, USTAX, and GLOTAX – show positive mean values, whereas the minimum, MTB, USTAX, and GLOTAX are negative. The minimum negatives of USTAX and GLOTAX may be attributable to income shifting by MNCs to minimize both the U.S. and global tax burden. MTB ratio, a measure of growth and risk (Collins & Kothari, 1989; Fama & French, 1992), ranges from a minimum of 1.1546 to a maximum of 10.2301 with a standard deviation of 1.734404. The natural log of assets (LnTA) of the sample firms ranges from a minimum of 7.4110 to a maximum of 355,935.00 with a standard deviation of 42,509.175434, suggesting a dispersed sample.

Table 3 provides the Spearman's correlation coefficients between the independent variables and indicates that in some cases the variables are correlated.

Table 4 shows the regression results using Eq. (1). This table reveals that TP/TOSA are, on average, significantly and positively associated with BETA (*t*-statistic = 2.119), which indicates that firms with substantial amounts of transfers have a higher BETA. We infer that the net effect of international diversification as a proxy for intrafirm transfers is an augmentation of BETA. The positive relation possibly confirms that management's engagement in international operations is exposed to various risks (e.g., political and market

Table 2. Descriptive Statistics for Sample (Fiscal Years 1995–1999).

Variables	N[a]	Minimum	Maximum	Mean	Standard Deviation
Dependent					
BETA	312	0.04	3.44	1.0768	0.5147
MTB[b]	326	1.1546	10.2301	3.467501	1.734404
USTAX[b]	212	−0.0356	0.1968	3.428E–02	3.03884E–02
GLOTAX[b]	352	−0.0204	0.1468	3.923E–02	2.66562E–02
Independent					
TP/TOSA[b]	285	0.0200	0.4138	0.131689	9.47487E–02
LnTA[b]	352	7.4110	355935.00	15442.283	42509.175434
MN[b]	341	0.0534	0.6938	0.381762	0.140650
OPINC	323	−0.23	0.17	0.0190	1.613088
DEBT[b]	241	0.13	0.95	0.5641	0.1740
GLOINC[b]	351	−0.0825	0.3376	0.113850	7.36419E–02

Note: BETA is the systematic risk. MTB is the market-to-book value for firm i at time t, risk and growth proxy. $USTAX_{it}$ is the U.S. taxes paid by MNCs scaled by U.S. assets. $GLOTAX_{it}$ is the global taxes paid by MNCs scaled by global assets. $TP/TOSA_{it}$ is the dollar value of intrafirm area transfers for firm i at time t scaled by total assets. LnTA is the logarithm of total assets for firm i at time t in millions of dollars, a proxy for firm size. MN is the ratio of foreign sales to total sales, a proxy for multinationality. OPINC is the change in operating income for firm i at time t scaled by total assets. GLOINC is the global pretax income for firm i at time t scaled by total assets.

[a]Due to missing data and outlier deletions, number of firm-year observations (N) ranges from 212 to 352.

[b]All measures are based in U.S. dollars.

Table 3. Spearman's Correlation Matrix for Independent Variables.

Variable	TP/TOSA	LnTA	MN	GLOINC	OPINC	DEBT
TP/TOSA	1.000					
N	285					
LnTA	0.079	1.000				
N	254	352				
MN	0.401**	0.059	1.000			
N	254	341	341			
GLOINC	−0.090	0.083	0.175**	1.000		
N	249	351	341	351		
OPINC	0.055	0.043	0.141**	0.620**	1.000	
N	253	349	351	351	323	
DEBT	−0.056	0.485**	−0.137*	−0.432**	−0.324*	1.000
N	199	357	346	347	355	357

*Correlation is significant at the 0.05 level (two-tailed).

**Correlation is significant at the 0.01 level (two-tailed).

Table 4. Regression Results Based on Systematic Risk.

$BETA = \beta_0 + \beta_1(TP/TOSA) + \beta_2 LnTA + \beta_3 MN + \beta_4 DEBT + \beta_5 \sum INDM + \beta_6 \sum YDM + \varepsilon$

Variable	Predicted Sign	Coefficient	Standard Error	*t*-Value
Intercept	?	0.535	0.240	2.231**
TP/TOSA	+	0.798	0.377	2.119**
LnTA	–	−0.069	0.025	2.744***
MN	+	0.339	0.249	1.359
DEBT	?	−1.031	0.234	−4.396***

$N^a = 158$
Adjusted $R^2 = 0.188$
F-value = 6.02
Durbin–Watson = 1.900

Note: Regression model includes untabulated industry and year variables. Standard errors are computed using White's heteroscedasticity-consistent covariances in cases where null homoscedasticity was not rejected. N^a is the number of firm-year observations in the regression model. N is not equal in each regression because of the asymmetric reductions in sample due to missing observations or outliers.
**denote significance at the 0.05 level.
***denote significance at the 0.01 level.

risks, agency problems, international market imperfections, asymmetric information). The positive relation also suggests that parents or subsidiaries can engage in risk shifting through transfers (Anctil & Dutta, 1999). Alternatively, intrafirm transfers symbolize growth options, and firms with growth options are likely to have higher systematic risk (BETA).

Regarding control variables, the logarithm of total assets (LnTA) is significantly negative. This suggests that large firms are more likely to reduce their systematic risk (BETA) compared to smaller firms. Multinationality (MN) has an insignificant positive association with BETA. This result is subject to two different interpretations. First, it could mean that multinationality (MN) is not a significant factor for systematic risk (BETA). Second, it could mean that there are conflicting effects going on within a firm's foreign activity that cancel each other out when firms engage in international operations. Contrary to our expectation, the coefficient on leverage (DEBT) is negative and statistically significant at the 1% level (t-statistic = −4.396). This is surprising in light of the view that firms with higher levels of debt may have higher systematic risk.[8] However, the negative coefficient is consistent with that of Thompson (1985) and Reeb et al. (1998).

Impact of Intrafirm Transfers on Market-to-Book Ratio

Hypothesis Development

In this section, we focus on the direction and magnitude of MTB for firms that systematically engage in international intrafirm transfers. If investors' perceptions are that international intrafirm transfers have an incremental effect on their claims to company resources, as disclosed by the company, then we should find a significant positive association between intrafirm transfers and MTB. On the other hand, if U.S. MNCs try to shift income to the United States because of a relatively stable environment and/or national loyalty, as opposed to trying to save on taxes, investors are likely to underweight the value of firms in such a position. While it is clear that there are several costs associated with venturing overseas, it can be argued that foreign expansion generates significant performance benefits to the firm for a variety of reasons, such as the ability to leverage scale economies (Grant, 1987). Thus, investors might positively (negatively) assess a firm's MTB when there is a large volume of intrafirm transfers, which may actually increase (decrease) the quality and quantity of future earnings via differential tax costs. Therefore, international operations provide both advantages and disadvantages for the MNC. Our second hypothesis addresses the relationship between transfer pricing and returns as follows:

> **Hypothesis 2.** Intrafirm transfers are positively and significantly associated with MTB.

Research Design

The following regression is estimated to examine the relationship between transfer pricing and MTB value:

$$\begin{aligned} \mathrm{MTB}_{it} = {} & \beta_0 + \beta_1\left(\frac{\mathrm{TP}_{it}}{\mathrm{TOSA}_{it}}\right) + \beta_2\mathrm{MN}_{it} \\ & + \beta_3\mathrm{OPINC}_{it} + \beta_4\mathrm{DEBT}_{it} \\ & + \beta_5\mathrm{LnTA}_{it} + \beta_6\sum\mathrm{INDM}_{it} \\ & + \beta_7\sum\mathrm{YDM}_{it} + \varepsilon_i \end{aligned} \tag{2}$$

where for firm i at year t: MTB_{it}, MTB of common equity for firm i in year t deflated by total assets; $\mathrm{TP}_{it}/\mathrm{TOSA}_{it}$, the dollar value of intrafirm transfers for firm i in year t standardized by total sales; MN_{it}, ratio of foreign sales to total sales for firm i in year t, a proxy for multinationality; OPINC, firm i's

global operating income deflated by total assets; $DEBT_{it}$, total debt for firm i at time t scaled by total assets; $LnTA_{it}$, the natural log of total assets for firm i in year t; $INDM_{it}$, a vector of industry dummy variables corresponding to two-digit SIC codes; YDM_{it}, a vector of year variables from 1995 to 1999; and ε_i, the random error term.

MTB reflects not only investors' assessments of firms' asset values and expectations about future performance, but also the valuation implications of managements' financing and investing decisions. Consistent with Collins, Kemsley, and Lang (1998), pretax global operating income divided by global assets (OPINC) is included to control for cross-sectional differences in profitability. This global (consolidated) income reflects the weighted aggregate of unmanaged U.S. and foreign pretax income and, thus, is not distorted by cross-jurisdictional income shifting. We add leverage to the cross-sectional regression because Beaver and Ryan (2000) show that this variable explains some variation in the market value of equity. Since leverage can be positive or negative, no prediction is made on the sign coefficient. Other variables remain as previously defined. Assuming that international transfers provide value to the firm, we predict the β_1 coefficient to be positive.

Empirical Results

The results, presented in Table 5, indicate that firms with sizable international intrafirm transfers appear to have higher MTB than similar firms without these transfers. The coefficient on TP/TOSA is positive and statistically significant at the 1% level (t-statistics = 3.088), after controlling for the effects of earnings, financial leverage, multinationality, size, industry, and year dummy variables. This finding suggests that investors factor in international transfers when valuing a firm. Given our MTB specification, this study does not rule out that international intrafirm transfers could be viewed as a proxy for some nontax factors that may affect MTB. For example, international transfers could capture the degree of interaction between U.S. and foreign operations.

The control variables OPINC and DEBT are, on average, significantly and positively associated with MTB (t-statistics = 4.258 and 2.201, respectively), suggesting that earnings and financial leverage are important contributors to a firm's growth. Alternatively, the leverage results suggest that highly leveraged firms have higher growth and risk exposure. Size (LnTA) proxy, while statistically significant, is of the wrong sign (t-statistic = −9.543). We have no explanation for this curious finding given the conventional argument that large firms have higher MTB. The

Table 5. Regression Results for Market-Based Tests.

$MTB = \beta_0 + \beta_1(TP/TOSA) + \beta_2 MN + \beta_3 OPINC + \beta_4 DEBT + \beta_5 LnTA + \beta_6 \sum INDM + \beta_7 \sum YDM + \varepsilon$

Variable	Predicted Sign	Coefficient	Standard Error	t-Value
Intercept	?	0.012	0.002	5.704***
TP/TOSA	+	0.008	0.003	3.088***
MN	?	−0.002	0.002	−0.939
OPINC	+	0.016	0.004	4.258***
DEBT	?	0.004	0.002	2.201**
LnTA	?	−0.002	0.000	−9.543***

$N^a = 193$
Adjusted $R^2 = 0.427$
F-value = 15.388
Durbin–Watson = 1.992

Note: Regression model includes untabulated industry and year variables. Standard errors are computed using White's heteroscedasticity-consistent covariances in cases where null homoscedasticity was not rejected. Because of the inclusion of lagged variables in the specification, Durbin-H is shown instead of Durbin–Watson. N^a is the number of firm-year observations in the regression model. N is not equal in each regression because of the asymmetric reductions in sample due to missing observations or outliers.
**denote significance at the 0.05 level.
***denote significance at the 0.01 level.

association between intergeographic intrafirm transfers and MTB provides indirect evidence of the relationship between transfers and market-based performance, and complements evidence from systematic risks specification. If we re-estimate Eq. (2) for MTB excluding industry and year dummy variables, we find that the adjusted R^2 decreases from 0.427 to 0.442, and the F-value increases from 15.388 to 46.757. In addition, the relationship between intrafirm intergeographic transfers and MTB becomes significant at the 5% level, whereas size and multinationality lose their statistical significance.

Impact of Intrafirm Transfers on U.S. Income Taxes Paid

Hypothesis Development

Prior research (Hines, 1996; Kemsley, 1998) documents that corporate income taxation significantly affects firms' operating, investment, and financing activities, including research and development (R&D), foreign direct investment, dividend and royalty payments, and transfer pricing. The manipulation of transfer prices allows firms to have some control over their

corporate income tax liability.[9] MNCs accomplish this control by manipulating the prices attached to intrafirm transfers and by shifting pretax profits to the country with the lowest potential tax rates. If the corporate objective is tax minimization, then the transfer prices for tangible goods, services, and intangible assets have to be set in such a way that, in effect, profits are shifted from a higher tax to a lower tax country. By employing arbitrary transfer pricing, an MNC can shift taxable income to its affiliates to maximize earnings, net of taxes. Many countries, including the United States, have tax policies to discourage profit shifting through transfer pricing. For example, U.S. regulations on transfer pricing (U.S. Department of the Treasury, 1994, p. 34940) require that "taxpayers clearly reflect income attributable to controlled transactions, and prevent the avoidance of taxes with respect to such transactions" by identifying an arm's-length price for each transaction between related parties. The "arm's-length" regulations of IRC 482 require the calculation of an MNC's transfer price to be comparable to a transaction with an independent party.[10] However, it is difficult to identify comparable, uncontrolled transactions. The pervasiveness of transfer pricing as a tax manipulation vehicle encouraged the IRS to revise its Advanced Pricing Agreement (APA) program in November 1996.

Firms are more likely to report their taxable income to the United States to mitigate the risk of an IRS audit, earnings apportionment, and the likelihood of a protracted court case. Additional motivation is the relatively stable economic and political environment of the United States and the relatively low U.S. tax rate, compared to other countries. National loyalty may also play an important role, as these firms shift their income to the country of incorporation (United States). The U.S. government has regulations aimed at curbing the transaction breach due to the arbitrary transfer pricing policy of the MNCs. Under these regulations, the IRS can impose penalties if a firm is determined to be in violation of the regulations. These penalties, contained in IRC 6662 (e)(3), should induce an increase in the MNC tax compliance level. This leads to our third hypothesis (in the alternative form).

Hypothesis 3. Intrafirm transfers are significantly positively associated with U.S. tax costs.

Research Design

To assess whether U.S. MNCs shifted income into or out of the United States through international intrafirm transfers, the following cross-sectional

regression equation is estimated:

$$\begin{aligned} \text{USTAX}_{it} = \beta_0 + \beta_1\left(\frac{\text{TP}_{it}}{\text{TOSA}_{it}}\right) + \beta_2\text{LnTA}_{it} \\ + \beta_3\text{MN}_{it} + \beta_4\text{GLOINC} \\ + \beta_5 \sum \text{INDM}_{it} + \beta_6 \sum \text{YDM}_{it} + \varepsilon_{it} \end{aligned} \quad (3)$$

where for firm i at year t: USTAX_{it}, the dollar value of U.S. taxes paid by firm i at time t scaled by U.S. assets; GLOINC_{it}, global profit for firm i in year t deflated by total assets. Consistent with Jacob (1996), global profitability is included as a control for income. Other variables remain as defined.

Empirical Results

Table 6 shows that the coefficient on TP/TOSA, which proxies for the volume of international intrafirm transfers, is positive and significant at the 5% level or better during the time periods examined. Consistent with Mills and Newberry (2003) and Collins et al. (1998), this study provides additional evidence that firms reported higher income in the United States, probably in response to relatively low U.S. tax rates, compared to other countries. Additionally, the results may be attributable to the IRS's heightened

Table 6. Regression Results for U.S. Taxes Paid.

$\text{USTAX} = \beta_0 + \beta_1(\text{TP/TOSA}) + \beta_2\text{LnTA} + \beta_3\text{MN} + \beta_4\text{GLOINC} + \beta_5 \sum \text{INDM} + \beta_6 \sum \text{YDM} + \varepsilon$

Variable	Predicted Sign	Coefficient	Standard Error	t-Value
Intercept	?	0.019	0.011	1.673*
TP/TOSA	?	0.034	0.017	2.040**
LnTA	+	−0.003	0.001	−2.823***
MN	−	−0.007	0.012	−0.598
GLOINC	+	0.330	0.021	16.067***

$N^a = 172$
Adjusted $R^2 = 0.574$
F-value = 33.184
Durbin–Watson = 2.060

Note: Regression model includes untabulated industry and year variables. Standard errors are computed using White's heteroscedasticity-consistent covariances in cases where null homoscedasticity was not rejected. N^a is the number of firm-year observations in the regression model. N is not equal in each regression because of the asymmetric reductions in sample due to missing observations or outliers.

*denote significance at the 0.10 level.

**denote significance at the 0.05 level.

***denote significance at the 0.01 level.

scrutiny to prosecute and penalize firms that evade U.S. taxes via transfer price manipulation. Our findings suggest that firms with a high volume of international intrafirm transfers appear to have paid more U.S. tax than similar firms without these transfers, perhaps reflecting the lower U.S. tax rate. Alternatively, the coefficient estimate of the intrafirm transfers variable may be reflecting that firms with larger volumes of intrafirm transfers are more profitable than firms without these transfers.

The proxy for firm size (LnTA) has a negative and insignificant association with U.S. taxes paid by MNCs. This result is in accordance with the GAO (1995) study that finds U.S. controlled MNCs are more likely to pay U.S. income taxes than foreign controlled firms. Multinationality (MN) is significantly negative, suggesting that operating in more than one tax jurisdiction may actually reduce a firm's tax burden. Global income (GLOINC) has a significantly positive relationship to U.S. taxes paid by these firms. The differing results may be due to the different time periods examined. Jacob (1996) examined the periods before and after the Tax Reform Act of 1986 (TRA86), while this analysis covered a period of five years (1995–1999), post-IRS Code 482.

Impact of Intrafirm Transfers on Global Tax Paid

Hypothesis Development

When a U.S. firm has income in a foreign country, it has the option to permanently reinvest the income abroad or remit the income to the parent company in the United States. This decision depends on investment opportunities available to the firm at home and abroad, the tax implications or benefits of repatriation, political costs, and the cash requirements of the parent company and overseas subsidiary. Firms have an incentive to shift income into the United States because U.S. tax rates tend to be comparatively lower relative to global rates. The IRS is often reputed to be a "particularly tough regulator," so U.S. firms may choose to shift income to the United States. Thus, if U.S. MNCs are using international intrafirm transfer pricing to relocate income into the United States, ceteris paribus, one would expect a negative relationship between transfer prices of these firms and global taxes paid by these firms. Alternatively, if U.S. MNCs use these international intrafirm transfers to shift income out of the United States, one would expect an inverse relationship between transfer prices and global taxes paid by these firms.

This leads to our fourth hypothesis (in the alternative form).

Hypothesis 4. Intrafirm transfers are significantly negatively associated with global tax costs.

Research Design

If U.S. firms use international intrafirm transfers to shift income to minimize global taxes, then firms with sizeable volumes of transfers should, ceteris paribus, pay lower global tax. To examine this possibility, the following regression is estimated:

$$\begin{aligned} \text{GLOTAX}_{it} = {} & \beta_{it} + \beta_1 \left(\frac{\text{TP}_{it}}{\text{TOSA}_{it}} \right) + \beta_2 \text{LnTA}_{it} \\ & + \beta_3 \text{MN}_{it} + \beta_4 \text{GLOINC}_{it} \\ & + \beta_5 \sum \text{INDM}_{it} + \beta_6 \sum \text{YDM}_{it} + \varepsilon_i \end{aligned} \tag{4}$$

where for firm i at time t: GLOTAX_{it}, the dollar value of the global tax burden of firm i in year t scaled by total assets; $\text{TP}_{it}/\text{TOSA}_{it}$, the dollar value of intrafirm intergeographic area transfers for firm i in year t standardized by total sales; LnTA_{it}, the natural log of total assets for firm i in year t; MN_{it}, ratio of foreign sales to total sales for firm i in year t, a proxy for multinationality; GLOINC, firm i's global operating income deflated by total assets; INDM_{it}, a vector of industry variables corresponding to two-digit SIC codes; YDM_{it}, a vector of year variables from 1995 to 1999; and ε_i, the random error term.

A profitability measure (GLOINC_{it}) is included since the levels of taxes paid depend on earnings. The proxy for the degree of multinationality of the firm (MN) controls for the possibility that the average tax rate abroad for firms could systematically differ from the U.S. corresponding figure, i.e., global taxes might depend on the extent of foreign operations. Size (LnTA) controls for the influence of firm size on taxes paid. Other variables remain as previously defined.

Empirical Results

Table 7 shows that the coefficient on transfers (TP/TOSA) is negative and statistically significant at the 5% level or better during the time period examined (t-statistic = −2.24). This result provides support that firms with substantial transfer prices appear to pay less global taxes than firms without these transfers, suggesting that the net effect of transfers is a reduction of the firm's global taxes, subject to certain constraints (e.g., cash management and risk profile of the firm). Regarding the control variables, Table 6 reveals that size is significantly negatively related to the total MNC taxes paid. This

Table 7. Regression Results for Global Taxes Paid.

$$\text{GLOTAX} = \beta_0 + \beta_1(\text{TP/TOSA}) + \beta_2\text{LnTA} + \beta_3\text{MN} + \beta_4\text{GLOINC} + \beta_5 \sum \text{INDM} + \beta_6 \sum \text{YDM} + \varepsilon$$

Variable	Predicted Sign	Coefficient	Standard Error	*t*-Value
Intercept	?	1.910E−02	0.005	4.061***
TP/TOSA	−	−1.880E−05	0.000	−2.240**
LnTA	−	−1.225E−03	0.000	−2.663***
MN	+	−1.154E−03	0.003	−0.383
GLOINC	+	0.426	0.015	29.067***

$N^a = 299$
Adjusted $R^2 = 0.751$
F-value = 151.456
Durbin–Watson = 1.1317

Note: Regression model includes untabulated industry and year variables. Standard errors are computed using White's heteroscedasticity-consistent covariances in cases where null homoscedasticity was not rejected. N^a is the number of firm-year observations in the regression model. N is not equal in each regression because of the asymmetric reductions in sample due to missing observations or outliers.
**denote significance at the 0.05 level.
***denote significance at the 0.01 level.

result is consistent with the political-clout hypothesis which states that larger firms are better equipped to reduce their tax burden (Gupta & Newberry, 1997, p. 21). Table 6 also reveals that global income (GLOINC) has a significant positive relationship to MNCs' global taxes paid. Multinationality (MN) is insignificant and has a negative sign. These results suggest that capital providers and other financial statement users may not distinguish tax-planning-based interruptions in the time series process of earnings recognition from real changes underlying profitability.

STATISTICAL AND ECONOMETRIC ISSUES

An obvious question that arises is the extent to which the results might be influenced by collinearity among the variables in the models. For each regression condition indexes, which Belsley, Kuh, and Welsch (1980) advocate as the primary measure for detecting collinearity, were computed. Belsley et al. suggest that potentially severe multicollinearity exists if the condition index is over 30. The highest condition index obtained in this study was 20. As a precautionary measure, both variance inflation factors and eigenvalues for each regression were calculated. The critical values,

indicating severe multicollinearity from these statistics, are 10 and 10. There were no circumstances in which the variance inflation factor and eigenvalue were greater than 4.367. Based on these diagnoses, multicollinearity does not appear to constitute any problem for each multivariate regression. Several analyses were performed on the residuals from each regression. These included checks for normality and considerations of various scatter-plots. A null hypothesis of normality could not be rejected at the 0.01 level in all cases. Durbin–Watson was used to test for serial correlation. The results suggest the absence of serial correlation in the residuals.

CONCLUSIONS

This paper investigates whether intrafirm transfers, scaled by total sales, are associated with a firm's market metrics (specifically, MTB and BETA). This study finds that the volume of intrafirm transfers is positively associated with the MTB and BETA. One explanation for the significantly positive association between intrafirm transfers and MTB is that transfers are viewed by market participants as a tax cost savings and/or value-additive variable. This explanation seems plausible since the market capitalizes future tax cost savings, which arguably increase earnings. The detected relationship between the volume of intrafirm transfers and BETA suggests that international diversification increases exposure to other pervasive economic factors, such as political risk, currency risk, agency problems, and asymmetric information.[11] We also find, consistent with Harris (1993), Jacob (1996), Collins et al. (1998), and Mills and Newberry (2003), but not consistent with Gramlich and Wheeler (2003), that intrafirm transfers are, on average, positively (negatively) associated with U.S. (global) taxes paid by MNCs.[12] These findings indicate that the practice of tax-motivated income shifting, through transfer prices by U.S. MNCs, is probably independent of tax rate differentials. Our inferences are robust after controlling for other firm characteristics such as size, multinationality, and earnings. Our results have implications for management earnings objectives and government tax policies as they are affected by and will affect intrafirm transfers.

There are a few caveats to this study. First, we investigate transfer pricing strategies of U.S. firms, which may not be generalized on a global scale. Second, we simplify the relation between transfers, foreign operations, BETA, and MTB. Although simplifying assumptions is justified in this paper and should not negate interest in our findings, other factors such as

the legal structure of the firm's foreign operations, international financing arrangements, currency risk, agency problems, political risk, and foreign operations' tax policies should be considered in future research. Finally, managers should recognize that the efficient organizational form is not necessarily the one that minimizes transaction costs, nor it is necessarily the one that minimizes tax costs. Rather, simultaneous consideration should be made of both tax and transaction costs. There are additional factors to consider beyond transfer pricing in analyzing systematic risk of a firm, degree of market capitalization, and corporate tax burden. Existing transfer pricing models and literature, notably Harris (1993), Klassen et al. (1993), Borkowski (1999), and the present analysis, make assumptions of linear relationships between transfer pricing and operating and market performance measures, and between transfer pricing and corporate tax burden. It is potentially important for future inquiry to examine whether these relationships are nonlinear.

NOTES

1. IRC Section 482 has been in place since 1917 and was expanded in 1928, which applies to all intracompany trade, both tangible and intangible. However, in 1994, U.S. Congress passed the final regulation of IRC 482, which was intended to discourage MNCs from shifting income out of the United States.
2. Large MNCs do not use transfer pricing alone to accomplish international tax-planning objectives; they also use complex financial and organizational form-based strategies in their tasks of minimizing global tax burden.
3. Firms may invest a substantial amount of their assets in a single country or in a limited number of countries. If a firm concentrates its investments in this manner, it faces the possibility that the economic, political, and social conditions in those countries will affect its risk exposure.
4. Using the value-weighted index did not alter our results. Since BETA are constrained to have an average of 1, over the whole market in every period, we re-examined BETA specification, excluding year and industry dummies. The results of this alternative estimation remain unaffected except for a slight decrease in adjusted R^2.
5. We define intrafirm transfers as the amount that affiliated members of MNCs charge each other for transfers of goods, intellectual property, services, and loans.
6. Information environment is defined broadly to include all sources of information relevant to assessing risk. It includes government reports on macroeconomic conditions, trade association publications, firm-specific news in the financial press, and reports issued by analysts and brokerage houses, in addition to accounting reports, hedging activity, vertical and intraindustry information transfers through sales, and industry reports.
7. Firms with higher levels of debt may have higher levels of systematic risk. To assess this possibility, a robust test was conducted to control for leverage effects by

using the ratio of total debt to total assets. The *F*-value decreases substantially with the inclusion of leverage in the risk specification.

8. The dollar amount of intrafirm intergeographic volume of trade is used as a proxy for the level of transfer pricing activity. Underlying this choice is the assumption that transfers are an appropriate measure for the purpose of earnings and tax costs valuation.

9. The tax analysis does not incorporate the effect of implicit taxes on returns. Implicit taxes reflect the extent to which tax-favored assets bear lower pretax returns relative to tax-disfavored assets of identical risk.

10. Shackelford (1993) discusses why U.S. MNCs may not respond to income-shifting tax incentives. Unlike the Collins et al. (1998) study that used a data set from 1984 to 1992, when the U.S. statutory tax rate varied from 46% to 34%, we focus our study using data from 1995 to 1999, post-IRS Code 482. Given our focus on the efficacy of IRS Code 482, we do not incorporate average foreign tax rates in our tax analysis.

11. A firm's goal to maximize the present value of its after-tax cash flows is also affected by the magnitude of its net operating loss (NOL). The ability of transfers to explain significant relation is reduced to the extent of a firm's NOL. As in Klassen et al. (1993), the empirical tests do not capture the effect of this tax shelter.

12. While we find positive relation between intracompany transfers and risks, we do not suggest this relation should encourage MNCs to decrease their volume of transfers. Our aim is to provide a better understanding of how transfer pricing affects systematic risk.

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APPENDIX. NATURE OF SYSTEMATIC RISK

The total risk of a firm can be divided into two parts: systematic risk and unsystematic risk. Unsystematic risk can be thought of as firm-specific risk. With a sufficient portfolio, investors can diversify away this portion of total risk. Systematic risk (BETA) is derived from Sharpe's (1963) market model:

$$\bar{R}_{jt} = \alpha_j + \beta_j \bar{R}_{\mathrm{m}t} + \varepsilon \tag{A.1}$$

where $\bar{R}_{jt}$ is the return on the jth security in period t; $\bar{R}_{\mathrm{m}t}$ the same period return on a market portfolio; $\beta_j = \mathrm{COV}(R_{jt}, R_{\mathrm{m}t})/\mathrm{VAR} \cdot R_{\mathrm{m}t}$ the systematic risk for security j; α_j a constant; and ε_{jt} a random error with zero mean and zero covariance with the other variables.

The variance of the relationship can be written as:

$$\sigma_j^2 = \beta_j^2(\sigma_{\mathrm{m}}^2) + \sigma_\varepsilon^2 \tag{A.2}$$

In this format, $\beta_j^2(\sigma_{\mathrm{m}}^2)$ corresponds to systematic risk and σ_ε^2 corresponds to unsystematic risk. Because the variance of the market return is constant across firms, the primary determinant of systematic risk is β. Since international diversification may increase a firm's exposure to other pervasive economic factors, this may increase the standard deviation σ_j^2 of a firm. Using Eq. (A.1), β for each firm for each year is calculated using monthly return data of five consecutive years (the current year plus four previous years). The monthly market return used is the CRSP value-weighted market return. The risk-free rate employed is the one-month return on the treasury bill index.

INTERNATIONAL ACCOUNTING STANDARDS AND FINANCIAL REPORTING UNIFORMITY: THE CASE OF TRINIDAD AND TOBAGO

Anthony R. Bowrin

ABSTRACT

The paper has two purposes. First, it describes the financial reporting environment of Trinidad and Tobago before and after the adoption of International Accounting Standards (IAS) (currently called International Financial Reporting Standards (IFRS)) as the national standards of Trinidad and Tobago. Second, it examines the association between the adoption of IAS as the national standards of Trinidad and Tobago and the degree of uniformity of financial reporting among public companies. This study is useful because of the dearth of research on financial reporting in the English-speaking Caribbean and the effect of IAS on the degree of financial reporting uniformity within a country. Using an ex post facto research design, the financial statements of 18 publicly traded firms for the year immediately prior to the adoption of IAS (1987) and four years during the period following the adoption of IAS (1995, 1999, 2002 and 2003) were subjected to content analysis. Overall, the uniformity of financial reporting practices among publicly traded firms in Trinidad and Tobago increased following the adoption of IAS. This finding was fairly uniform across all the financial statement items examined though the

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magnitude of the change varied. It was directly attributed to the adoption of IAS for only three financial statement elements.

INTRODUCTION

Several developing countries have adopted the standards issued by the International Accounting Standards Board (IASB) for the preparation of general-purpose financial statements in their respective jurisdictions. Supporters of this decision have argued that developing nations are generally unable to allocate the financial and technical resources needed to develop high-quality, indigenous accounting standards (Cairns, 1990; Fenton, 1985; Mendez, 1987; Peasnell, 1993; Saudagaran, 2001). Supporters also argued that even where resources can be allocated to the development of indigenous standards, the process may be long and drawn-out and prone to repeating the mistakes already experienced by developed nations (Larson, 1993; Nobes, 1991).

Other advocates of adopting International Accounting Standards (IAS) asserted that by adopting the standards, developing nations will gain early access to the benefits associated with high-quality financial reporting including more efficient capital markets, better relations with development agencies, easier and cheaper access to international capital and ultimately enhanced economic development (Hoyle, Schaefer, & Doupnik, 1998; Staking & Schulz, 1999). These benefits are expected to flow from increased consistency and uniformity among financial reports prepared in accordance with IAS and the resultant improved understandability and perceived credibility of financial disclosures (Staking & Schulz, 1999).

Much less attention has been focused on the potential effects of adopting IAS on the uniformity of financial reporting within a specific jurisdiction (domestic uniformity), and the understandability of financial disclosures made to domestic users (Nobes, 1990). This tendency is apparently based on the assumption that the introduction of the IAS into a jurisdiction that previously had no codified standards will inevitably result in more uniform financial accounting and reporting practices (Chen, Sun, & Wang, 2002).

This assumption is only guaranteed to hold if the IAS adopted by developing nations sanction fewer alternatives than were being employed when no codified standards were in place or if the IAS make the use of existing alternatives by firms conditional on the satisfaction of clearly specified and stringent criteria, what Wolk, Tearney, and Dodd (2001) called "relevant circumstances". Relevant circumstances are economically significant general conditions or factors associated with complex transactions

and events that may influence the incidence or timing of cash flows (Wolk et al., 2001, p. 291).

It is questionable whether either of these situations will occur in the case of the IAS given the widely acknowledged tendency for them to sanction multiple alternative treatments (Nobes, 1991; Ruechhoff, 1987). The IAS has recently undertaken a number of initiatives to reduce this tendency.

That being the case, the effect of adopting IAS on the degree of uniformity of domestic financial reporting practices is an open empirical question.

MOTIVATION FOR STUDY

Several studies have examined the effects of the IAS on the harmonization of international financial reporting (e.g. Evans & Taylor, 1982; Murphy, 2000; Nair & Frank, 1981; van de Tas, 1988). However, to the best of our knowledge, only two studies (Chen et al., 2002; Murphy, 2000) have explored the effects of the adoption of IAS on the degree of domestic uniformity.

This paucity of research on domestic uniformity is surprising for at least two reasons. First, given the IASB's stated position and ability with the aid of multilateral developmental agencies to persuade developing nations to adopt its standards, it is very likely that an increasing number of developing nations will adopt the IAS as their national standards. Second, when the financial reports of domestic firms in an adopting developing country reflect the IAS that are characterized by diversity (Hoyle et al., 1998; Ruechhoff, 1987), it is reasonable to fear that problems of understanding and interpretation may develop among the relatively unsophisticated local users of the said reports.

This paper helps to fill that gap in the international accounting literature by examining whether the adoption of the IAS as the national standards of Trinidad and Tobago was associated with an increase in the degree of uniformity of financial reporting practices among companies listed on the Trinidad and Tobago Stock Exchange (TTSE). To set the stage for this examination we first describe the nature of Trinidad and Tobago's financial reporting environment before and after the adoption of the IAS.

NATURE OF FINANCIAL REPORTING ENVIRONMENT IN TRINIDAD AND TOBAGO

In Trinidad and Tobago, as in most of the English-speaking Caribbean and other culturally dominated societies (Nobes, 1998), the legislative

framework and the pronouncements of professional accountancy bodies are the major influences on financial reporting (Cooke & Wallace, 1990). Other factors identified in the international accounting literature, such as the corporate financing system in place when the accounting systems were developed, the level of education, the level of economic development, and the social, political and taxation systems of a country (Nobes, 1998), seem to have little unique explanatory power regarding the nature of financial reporting in Trinidad and Tobago. Consistent with Trinidad and Tobago's status as a satellite of the western metropolis (Wallace & Briston, 1993), both the legislative framework and the pronouncements of professional accountancy bodies are in turn influenced by the country's colonial legacy and its dominant economic and social ties.

The effects of these factors on the nature of the Trinidad and Tobago financial reporting environment are described below. The description focuses on the two discrete time periods examined in the empirical analysis, pre- and post-1988.

Pre-1988 Financial Reporting Environment

Prior to the adoption of IAS as the national standards of Trinidad and Tobago on February 24, 1988, neither the Institute of Chartered Accountants of Trinidad and Tobago (ICATT) nor the government of Trinidad and Tobago had officially prescribed any accounting standards for Trinidad and Tobago.[1] As a result, members of the ICATT, the Trinidad and Tobago accounting profession as a whole, and corporate issuers of financial reports selected generally accepted accounting principles (GAAP) from several jurisdictions based, in part, on the preferences of auditors and the outcome desired by the management of the reporting entity.

The pre-1988 period can be further divided into two segments, pre- and post-independence. During the pre-independence period (pre-1962), the financial reporting environment faced by publicly traded companies in Trinidad and Tobago (standards and legislative framework) was greatly influenced by the country's colonial legacy as an agricultural outpost of the wider British economy (Annisette, 1999). First, the 1939 Trinidad and Tobago Companies Ordinance, which was the only legislation governing financial reporting by companies prior to the enactment of the Securities Industry Act (SIA) in 1981, was for all intents and purposes a replica of the 1929 UK companies legislation (minus Table A of the UK legislation which

dealt with matters relating to accounts and audits) imposed on the country while under British rule.

The 1939 Companies Ordinance of Trinidad and Tobago (Sections 121–126) required companies to prepare audited financial statements for presentation to the annual general meeting of shareholders and prescribed some of the basic content of the financial statements. However, the 1939 Companies Ordinance was silent on the form of the statements, the level of detail needed and the measurement and disclosure policies to be employed in the preparation and audit of financial statements.

The pre-independence period was also characterized by two practices, which reinforced the British influence on the local financial reporting environment. The first was the importation of British accountants to perform required financial reporting and auditing functions (Annisette, 1999). Second, in order to help Trinidad and Tobago prepare for independence, the British government established an Accountancy Training Scheme (ATS) that allowed Trinidad and Tobago nationals to pursue accounting qualifications in Britain (Annisette, 1999). These practices, and the heavy British influence on the Trinidad and Tobago financial reporting environment, continued in the post-independence period.[2]

The post-independence segment of the pre-1988 period also saw the introduction of a new, potentially powerful entity into the financial reporting environment of Trinidad and Tobago, the ICATT. ICATT was incorporated by an Act of Parliament (#33) in 1970 and was vested with the authority to develop or specify accounting standards for Trinidad and Tobago companies.

However, ICATT did not do so prior to 1988 and external forces (mainly British and North American qualifying institutes) continued to dominate the financial reporting environment. ICATT's members continued to look toward the pronouncements of these countries, where they were educated for accounting guidance.

On the surface, the externally dominated, laissez-faire state of affairs described above changed when the SIA came into effect in 1981 establishing the TTSE and providing guidance on accounting and auditing practices for member companies. The Act made it mandatory for public companies operating in Trinidad and Tobago to adopt standards approved by the ICATT in the preparation of their financial statements and for auditors to use the ICATT standards as GAAP.

Unfortunately, at the time of the enactment of the SIA in 1981, ICATT had not officially prescribed any accounting standards. Therefore, publicly traded companies and their auditors continued to enjoy a great amount of

discretion in the choice of accounting policies. This is vividly illustrated by the findings of Lucie-Smith (1986) that publicly traded firms used many conflicting accounting bases and methods and almost totally disregarded the provisions of the IAS when preparing their financial statements. As a result, the laissez-faire nature of financial reporting in Trinidad and Tobago continued throughout the entire pre-1988 period.

Post-1988 Financial Reporting Environment

The nature of the financial reporting environment faced by publicly traded companies in Trinidad and Tobago changed in February 1988 when ICATT adopted the first 26 IAS issued by the IASC (the predecessor body of the IASB) as the accounting standards of Trinidad and Tobago. According to Mendez (1987), the adoption of IAS as Trinidad and Tobago accounting standards (TTAS) may have been influenced by the following three factors: (1) the perception of ICATT members (decision-makers) that its members lacked the necessary knowledge and skills in standard-setting, (2) the failure of ICATT to fully appreciate the political nature of the IASB's standard-setting process and the situatedness of the current IAS and (3) the imposition of too many, varying responsibilities on the new, resource-strapped institute. Additionally, Bowrin (2001) drawing on the work of Nobes (1998) suggested that international lending agencies might have played a role in ICATT's decision to adopt the IAS.

ICATT also established a standards committee to review and comment on drafts of new IASC standards. When a standard is issued by the IASC, it is adopted by ICATT after a change of name to TTAS with minimal involvement from the local political, legal, social and business sectors (Raggay, 2000). This procedure was changed in 2003. ICATT now adopts the IAS without changing the name.

The adoption of IAS by ICATT effectively meant that publicly traded companies and their auditors were legally required to comply with IAS in their published financial statements and marked the end to the laissez-faire nature of the Trinidad and Tobago financial reporting enviro nment.

The post-1988 period also saw the enactment of new Companies and Securities Industry Legislation in Trinidad and Tobago. The 1995 Companies Act, which superseded the 1939 Companies Ordinance, took effect in April 1997. Sections 153–159 of the 1995 Companies Act require

companies to prepare comparative financial statements on both an interim and annual basis. Additionally, the Act reinforced the requirement of the 1981 SIA for Financial Statements to be audited by practicing members of the ICATT who are obliged to use standards approved by ICATT in the performance of their professional duties. Therefore, the introduction of the 1995 Companies Act did not significantly alter the financial reporting environment faced by public-traded companies in Trinidad and Tobago.

The new Securities Industry Legislation was also enacted in 1995 and took effect in May 1997. While it specifies in greater details the expected content of the published financial statement, especially the Income Statement, most of the financial reporting requirements found in the 1981 SIA were maintained. For instance, like the 1981 SIA, the 1995 SIA requires publicly traded companies to use standards adopted by ICATT when preparing their financial statements and to disclose and explain any non-compliance. As a result, the 1995 SIA had the effect of maintaining the status quo in the financial reporting environment faced by publicly traded Trinidad and Tobago companies.

RESEARCH METHODOLOGY

Procedure Used to Select Public Companies and Years Examined

The financial statements of 18 publicly traded corporations were subjected to content analysis to determine their financial reporting practices. The degree of uniformity of financial reporting practices was operationalized using two measures. The first measure comprised two components. The first component focused on the range of alternative methods/bases used by firms to account for a given financial statement element in a reporting period (Tay & Parker, 1990). The second component captured the distribution of firms across the alternative methods/bases used to account for a particular financial statement element.

The second measure was an adaptation of the Herfindahl Index (H) that is frequently used to operationalize industry concentration (Stigler, 1968). This index was suggested by van de Tas (1988) as an appropriate tool for measuring the concentration of financial reporting practices and was used by Murphy (2000) to measure financial reporting uniformity by Swiss, Japanese, U.S. and UK companies.

The results of these analyses suggest that the adoption of IAS was generally, but not universally, associated with increasing uniformity of domestic financial reporting.

The entire population of companies listed on the TTSE was eligible for inclusion in the study. A list of these companies was obtained from the TTSE. There were 21 firms listed on the TTSE in 1987 and that number had risen to 24 in 1995, 26 in 1999, 30 in 2002 and 32 in 2003. Using this list, all 21 firms trading on the TTSE in 1987 (the year prior to the adoption of IAS) were identified. Then, all 1987 firms that were still trading in 1995, 1999, 2002 and 2003 (the comparison years) (18 firms) were included in the study (see Table 1 for a listing of these firms).[3]

Only five years' financial statements were examined due to difficulties experienced in obtaining the financial statements for the entire period, the budgetary constraints under which the study was conducted and the labor-intensive nature of the data collection process.

The year 1995 was chosen as the first comparative year because the effect of the IASB's comparability project on IAS requirements would have already been reflected in published statements and, therefore, would not confound the analysis. The year 1999 was chosen as the second comparative year because it was the most recent financial year for which a full set of financial statements was available at the commencement of the study. The study was updated as additional years' financial data (2002, 2003) became available.

Table 1. Sample Companies.

Agostini's Limited
Angostura Holding Limited
ANSA McAl Limited
Barbados Shipping and Trading Company Limited
Berger Paints Limited
Flavorite Foods Limited
Furness Trinidad Limited
Lever Brothers (West Indies) Limited
L.J. Williams Limited
Neal and Massy (Holdings) Limited
Point Lisas Industrial Port Development Corporation (PLIPDECO)
Readymix (West Indies) Limited
Trinidad Publishing Company Limited
West Indian Tobacco Company Limited
Royal Bank (Trinidad and Tobago) Limited
Republic Bank (Trinidad and Tobago) Limited
Scotia Bank (Trinidad and Tobago) Limited
CIBC (West Indies) Holding Limited.

Procedure Used to Examine Financial Statements and Collect Data

The following six financial statement elements that are governed by the IAS adopted by Trinidad and Tobago were selected for analysis:

1. Expense Recognition for Retirement Benefit Plans;
2. Depreciation of Property Plant and Equipment;
3. Valuation of Property Plant and Equipment; Valuation of Short-Term Investments;
4. Valuation of Associated Companies; and
5. Inventory Cost Flow Assumptions.

These financial statement elements were chosen based on their being identified as areas prone to diversity in prior studies, and the perceived likelihood of the permitted alternative accounting treatments having a material effect on asset valuation and income determination (Hoyle et al., 1998; Street & Shaughnessy, 1998). Table 2 summarizes the changes in the IAS rules for the selected financial statement elements during the period of the study.

To establish the number of alternative bases/methods used for the selected financial statement elements, two reviewers examined the contents of the financial statements of each firm, for each year, independently. Each reviewer noted the practices used for the selected elements. Where the findings of the reviewers conflicted, the item in question was re-examined by both reviewers and a mutually agreeable decision reached.

Measures of Financial Reporting Uniformity

Two measures were used to operationalize financial reporting uniformity. The first measure was a composite of the number of different alternatives used to account for a specific financial statement element and the distribution of firms across the various alternatives used, during a given reporting period. The fewer the number of alternative methods used to account for a financial statement element and/or the greater the number of firms using a particular method to account for a financial statement element, the greater the degree of financial reporting uniformity, ceteris paribus. The second measure was an adaptation of the Herfindahl Index (H) that is frequently used to measure industry concentration. The Herfindahl Index may range in value from i/n (the number of allowed alternative accounting treatments for a specific financial statement element) to 1. The closer the computed value of H is to 1, the greater the degree of financial reporting uniformity.

Table 2. Evolution of Selected International Financial Accounting Standards.

IAS Number and Title	Key Dates	Effect on Financial Statement Elements Examined
IAS 19 – retirement benefit plans: expense recognition by employers (for post-employment benefit plans and other long-term benefits)	Initially effective – January 1, 1983	Allowed: – Cash basis (pay-as-you-go) method – Terminal funding method – Accrual methods[a]
	Revised effective – January 1, 1999	Allowed: – Accrual methods
IAS 4 – depreciation accounting. Superseded by IAS 16 – accounting for PPE	Initially effective – January 1, 1977 Effective – January 1, 2000	Allowed: – A variety of systematic allocation methods but chosen method(s) must be applied consistently
IAS 16 – accounting for PPE (valuation/measurement subsequent to initial recognition)	Initially effective – January 1, 1983	Allowed: – Historical cost – Market (fair) value (for an entire class of assets each time or basis of selection of asset for revaluation should be systematic) and periodically
	Revised 1993 and 1998 (effective – July 1, 1999)	– No substantive change in valuation bases but entire class of assets *must* be revalued when market value chosen
IAS 26 – accounting for investments (short-term equity securities) superseded by IAS 19 – financial instruments: recognition and measurement	Initially effective – March 1, 1986 Effective – January 1, 2001 (could be adopted as early as March 1999)	Allowed: – Market value – Lower of cost or market – Breaks equity investments into trading and available-for-sale (AFS) categories both valued at market in periods subsequent to acquisition (gains and losses on trading securities to profit and loss, those on AFS to equity)

Table 2. (*Continued*)

IAS Number and Title	Key Dates	Effect on Financial Statement Elements Examined
IAS 2 – inventories (cost flow assumptions)	Initially effective – January 1, 1976	Allowed: – First-in-first-out; weighted average; last-in-first-out; base stock; specific identification; next-in-first-out (NIFO)
	Revised effective – January 1, 1995	– NIFO and base stock methods barred
IAS 28 – accounting for investments in associates (in consolidated companies)	Initially effective – January 1, 1990	Allowed: – Equity method – Historical cost (under specific limited circumstances)
	Reformatted 1994, 1999, 2000	– No substantive changes

[a]As used here "accrual methods" include plans calculating periodic expense based on either the accrued benefits or projected benefits methods.

While the range and distribution measure is clearly more judgmental than the adapted Herfindahl measure, it is also more descriptive of the changing pattern of financial reporting uniformity following the adoption of IAS as TTAS.

DATA ANALYSIS

Uniformity Measure #1 (Range of and Distribution Across Alternatives Used)

The analysis of the range of, and distribution across, alternative accounting treatments used was done in three phases. First, the number of alternative methods/bases used to account for each financial statement element was tabulated for the five years under review. Next, the results of the tabulation process for 1995, 1999, 2002 and 2003 were compared with that for 1987 (the base year) to determine the nature of the trend in the number of alternative methods/bases used to account for the selected financial statement elements.

Table 3. Weighting of Preliminary Harmonization Findings.

Nature of Preliminary Findings	Classification	Assigned Weight
Decrease in the number of bases/methods used to account for or report on a selected financial statement element over the years examined	Favorable change	+1
Increase in the number of bases/methods used to account for or report on a selected financial statement element over the years examined	Unfavorable change	−1
No change in the number of bases/methods used to account for or report on a selected financial statement element over the years examined	Neutral	0
Increase in the number of firms using only one basis/method to account for a selected financial statement element over years examined	Favorable change	+1
Decrease in the number of firms using only one basis/method to account for a selected financial statement element over years examined	Unfavorable change	−1
No change in the number of firms using only one basis/method to account for a selected financial statement element over years examined	Neutral	0

In the second phase of the analysis, tables were constructed to show the distribution of firms across the range of alternative methods/bases used to account for/report on each financial statement element over the three years examined. These tables were then examined to determine the nature of the trend in each distribution.

Finally, the results of the stage one and two analyses were assigned the weights specified in Table 3 and summed to derive an overall uniformity score for each financial statement element under the range and distribution measure.[4]

Uniformity Measure #2 (Adapted Herfindahl Index)

A second analysis was conducted using an adapted version of the Herfindahl Index (H). The index is expressed symbolically as follows:

$$H = \sum_{1}^{n} (\text{Share}_{\text{alternative treatment } i})^2 \qquad (1)$$

where $\text{Share}_{\text{alternative treatment } i}$ is equal to the number of firms using allowed alternative treatment "*i*" for the specific financial statement element, divided

by the total number of firms reporting on the specific financial statement element.

If a firm used more than one allowed alternative treatment to account for the same financial statement element, the weight of each allowed alternative in the numerator of the $\text{Share}_{\text{alternative treatment } i}$ formula was determined as a fraction with numerator 1, the alternative treatment whose share is being computed, and denominator n being the number of alternative treatment actually used by the firm to account for the financial statement element. That is, if a firm used three different depreciation methods, then in computing the share of each depreciation method in the $\text{Share}_{\text{alternative treatment } i}$ formula the firm was weighted by 1/3 for each of the three methods it used to account for depreciation.

The maximum value possible for the Herfindahl Index is 1. If all firms reporting on a specific financial statement item use the same allowed alternative treatment, H will equal 1 (perfect uniformity). The minimum possible value of the index is $1/n$ when all allowed alternatives have a share of $1/n$ of all reporting firms. In general, as the number of allowed alternative treatments for a financial statement item increases, ceteris paribus, H decreases.

The computation of the index began with the tables constructed in stage one of the range and distribution analysis. This information was recast as shown in Table 4 along with the computed H values.

RESULTS

Stage One Analysis – Trend in the Number of Methods/Bases Used

The comparison of the number of alternative methods/bases used by firms which were publicly listed in 1987, the base year, to the number of alternative bases used by these same firms in 1995, 1999, 2002 and 2003 is presented in Table 5 and reveals favorable results. More than 40% of the firms reporting on Retirement Benefit Expense did not disclose the basis used to do so in the first three years examined. This indicates a high level of non-compliance with IAS and is the focus of a related study. This situation changed drastically in 2002 and 2003 when all 18 firms provided this disclosure.[5]

First, for two of the six financial statement items selected, Inventory Cost Flow Assumption, and the Valuation of Property Plant and Equipment, there was no change in the number of alternative bases/methods used after

Table 4. Determination of Adapted Herfindahl Index.

Financial Statement Element and Allowed Alternative	Number of Firms Using Allowed Alternative *i*				
	1987	1995	1999	2002	2003
Retirement benefit plans – expense recognition					
Cash	1	0	0	0	0
Accruals	3	4	4	4	4
Total number of firms reporting	4	4	4	4	4
Adapted Herfindahl Index value	0.625	1.000	1.000	1.000	1.000
Property, plant and equipment – depreciation					
Straight line	11.5	10.5	11	11.5	11.5
Declining balance	3	4	4	3.5	3.5
Units of production	0.5	0.5	0	0	0
Total number of firms reporting	15	15	15	15	15
Adapted Herfindahl Index value	0.631	0.562	0.609	0.642	0.642
Property, plant and equipment – valuation					
Historical cost	9.50	9.50	9	11.50	11.50
Independent valuation	5	5	5.5	3	3.5
Directors' valuation	0.5	0.5	0.5	0.5	0
Total number of firms reporting	15	15	15	15	15
Adapted Herfindahl Index value	0.513	0.513	0.496	0.629	0.642
Short-term equity investments – valuation					
Historical cost	3	2.83	2.83	0	0
Lower of cost or market	1	0.83	0.83	0	0
Market value	0	0.34	0.34	4	4
Total number of firms reporting	4	4	4	4	4
Adapted Herfindahl Index value	0.625	0.551	0.551	1.000	1.000
Inventory cost flow assumption					
First-in-first-out	4	3.5	3.5	3	3
Weighted average	4	4.5	4.5	5	5
Total number of firms reporting	8	8	8	8	8
Adapted Herfindahl Index value	0.500	0.508	0.508	0.531	0.531
Associated companies – valuation (in consolidated statements)					
Historical cost	2	0	0	0	0
Equity	2	4	4	4	4
Total number of firms reporting	4	4	4	4	4
Adapted Herfindahl Index value	0.500	1.000	1.000	1.000	1.000

the adoption of the IAS. Note, however, that in the case of the Valuation of Property, Plant and Equipment the number of bases used fluctuated over the period examined. Second, for the remaining four financial statements elements – Valuation of Interest in Associated Companies, Valuation of

Table 5. Number of Bases/Methods Used for Selected Financial Statement Elements.

Financial Statement Element	1987	1995	1999	2002	2003	Trend
Retirement benefit plans – expense recognition	2	1	1	1	1	Favorable
Property, plant and equipment – depreciation	3	2	2	2	2	Favorable
Property, plant and equipment – valuation	2	3	3	3	2	Neutral
Short-term equity investments – valuation	2	2	3	1	1	Favorable
Inventory – cost flow assumption	2	2	2	2	2	Neutral
Associates companies – valuation of interest	3	3	3	1	1	Favorable

Short-Term Equity Investments, Expense Recognition for Retirement Benefit Plans, and Depreciation of Property, Plant and Equipment – the number of bases/methods used decreased following the adoption of the IAS.

Stage Two Analysis – Trend in Distribution among Methods/Bases Used

As noted above, the second phase of the analysis involved an examination of the number and percentage of firms using each alternative method/basis to account for the selected financial statement elements before and after the adoption of the IAS. Only firms that disclosed the bases/methods used to account for each financial statement elements being examined in all five years studied were included in the stage two analyses. This decision reduced the likelihood of the trends identified being confounded by changes in the level of compliance with IAS over the years examined.

Table 6 summarizes the distribution of firms across the bases used to recognize Retirement Benefit Expense during the five years examined. Overall, 18 firms reported on this financial statement element in some of the five years examined. However, 14 firms failed to disclose the basis used to do so for at least one year. The four firms reporting on Retirement Benefit Expense disclosed two different bases – cash and accruals. The percentage of firms using only the accrual basis to recognize Retirement Benefit Expense increased from 75% in 1987 to 100% in 1995, 1999, 2002 and 2003. This finding suggests that the adoption of IAS was associated with a favorable trend in the distribution of firms across the alternatives used to recognize Retirement Benefit Expense.

Table 7 summarizes the distribution of firms across the bases used to recognize Depreciation on Property, Plant and Equipment during the five years examined. Overall, 17 firms reported on this financial statement

Table 6. Bases Used by Firms to Recognize Retirement Benefit Plans Expense.

Recognition Basis	1987 Firms		1995 Firms		1999 Firms		2002 Firms		2003 Firms	
	No.	%	No.	%	No.	%	No.	%	No.	%
Cash	1	25	0	0	0	0	0	0	0	0
Accruals	3	75	4	100	4	100	4	100	4	100
Total	4	100	4	100	4	100	4	100	4	100

Table 7. Bases Used to Recognize Depreciation on Property, Plant and Equipment.

Depreciation Method	1987 Firms		1995 Firms		1999 Firms		2002 Firms		2003 Firms	
	No.	%	No.	%	No.	%	No.	%	No.	%
Straight line (SL)	9	60	8	53	8	53	10	67	10	67
Declining balance (DB)	1	7	2	13	1	7	2	13	2	13
SL/DB	4	26	4	27	6	40	3	20	3	20
SL/units of production	1	7	1	7	0	0	0	0	0	0
Total	15	100	15	100	15	100	15	100	15	100

element in some of the five years examined. However, two firms failed to disclose the basis used to do so for at least one year. Adoptions of IAS seem to have been associated with a favorable change in the distribution of firms across the alternatives used to recognize depreciation expense on Property, Plant and Equipment. The percentage of firms using more than one depreciation method increased from 33.33% in 1987 and 1995 to 40% in 1999, but fell to 20% in 2002 and 2003. Also, the percentage of firms that used only the straight-line method of depreciation fluctuated during the period, declining from 60% in 1987 to 53.33% in 1995 and 1999, but then increased to 66.67% in 2002 and 2003. The percentage of firms that used only the declining balance method fluctuated during the period examined but it was higher at the end of the period (13.33%) than at the beginning (6.67%).

The distribution of firms across the bases used to value Property, Plant and Equipment is summarized in Table 8. Overall, 17 firms reported on this financial statement element in some of the five years examined. However, two firms failed to disclose the basis used to do so for at least one year. The percentage of firms using more than one basis to value Property, Plant and

Table 8. Bases Used to Value Property, Plant and Equipment.

Valuation Basis	1987 Firms		1995 Firms		1999 Firms		2002 Firms		2003 Firms	
	No.	%	No.	%	No.	%	No.	%	No.	%
Historical cost (HC)	4	27	4	27	3	20	8	53	8	53
HC/independent valuation (IV)	10	67	10	67	11	73	6	40	7	47
Directors' valuation (DV)/HC	1	7	1	7	1	7	1	7	0	0
Total	15	100	15	100	15	100	15	100	15	100

Table 9. Bases Used to Value Short-Term Equity Investments.

Valuation Basis	1987 Firms		1995 Firms		1999 Firms		2002 Firms		2003 Firms	
	No.	%	No.	%	No.	%	No.	%	No.	%
Historical cost (HC)	1	25	3	75	4	100	0	0	0	0
Lower of cost or market/cost (LCM)	3	75	1	25	0	0	0	0	0	0
Market value	0	0	0	0	0	0	4	100	4	100
Total	4	100	4	100	4	100	4	100	4	100

Equipment increased from 67.67% in 1987 and 1995 to 73.33% in 1999 but then declined to 40% in 2002 and 46.67% in 2003. This suggests that the adoption of IAS may have been associated with a favorable change in the distribution of firms across the bases used to value Property, Plant and Equipment. Similarly, the percentage of firms using a single basis (historical cost) to value Property, Plant and Equipment increased from 26.67% in 1987 and 1995 to 53.33% in 2002 and 2003. This finding suggests that the adoption of the IAS may have been associated with a favorable trend in the distribution of firms across the alternative bases/methods used to value Property, Plant and Equipment.

The distribution of firms across the bases used to value Short-Term Investments is summarized in Table 9. Overall, nine firms reported on this financial statement element in some of the five years examined. However, five firms failed to disclose the basis used to do so for at least one year. The percentage of firms using a single basis to value Short-Term Investment in Equity Securities (historical cost in 1999 and market value in 2002 and 2003) increased from 25% in 1987 to 100% in 1999, 2002 and 2003. This finding suggests that the adoption of the IAS may have been associated with a favorable trend in the distribution of firms across the alternative bases/ methods used to value Short-Term Equity Investments.

Table 10. Inventory Cost Flow Assumptions Used.

Cost Flow Assumption	1987 Firms		1995 Firms		1999 Firms		2002 Firms		2003 Firms	
	No.	%	No.	%	No.	%	No.	%	No.	%
First-in-first-out (FIFO)	2	25	2	25	2	25	2	25	2	25
Weighted average (WA)	2	25	3	38	3	38	4	50	4	50
FIFO/WA	4	50	3	38	3	38	2	25	2	25
Total	8	100	8	100	8	100	8	100	8	100

Table 11. Bases Used to Value Interest in Associated Companies.

Valuation Bases	1987 Firms		1995 Firms		1999 Firms		2002 Firms		2003 Firms	
	No.	%	No.	%	No.	%	No.	%	No.	%
Historical cost (HC)	2	50	0	0	0	0	0	0	0	0
Equity (EQ)	2	50	4	100	4	100	4	100	4	100
Total	4	100	4	100	4	100	4	100	4	100

Table 10 summarizes the distribution of firms across the two Inventory Cost Flow Assumptions disclosed by the eight firms reporting on Inventories during the five years examined. Overall, 14 firms reported on this financial statement element in some of the five years examined. However, six firms failed to disclose the basis used to do so for at least one year. The percentage of firms using only one Inventory Cost Flow Assumption (FIFO or weighted average) increased from 50% in 1987 to 62.5% in 1995 and 1999 and to 75% in 2002 and 2003. This finding suggests that adoption of IAS may have been associated with a favorable trend in the distribution of firms across the alternative Inventory Cost Flow Assumptions used by publicly listed firms.

Table 11 summarizes the distribution of firms across the three bases used by the 10 firms to value their Interest in Associated Companies during the five years examined. Overall, 18 firms reported on this financial statement element in some of the five years examined. However, 14 firms failed to disclose the basis used to do so for at least one year. The percentage of firms using only the equity method to value their Investments in Associated Companies increased from 50% in 1987 to 100% in 1995, 1999, 2002 and 2003. This finding suggests that adoption of IAS may have been associated with a favorable trend in the distribution of firms across the alternative bases/methods used to value Investments in Associated Companies.

STAGE THREE ANALYSIS – OVERALL UNIFORMITY SCORE (MEASURE 1)

The findings of the first two stages of the analysis are summarized in Table 12. As the table indicates, four of the six financial statement elements show a favorable trend in the number of alternative bases/methods used and two elements show a neutral trend. The table also indicates that all of the six financial statements elements show a favorable distribution of firms across alternative bases used. Considering both trend and distribution, all six financial statement elements show an overall favorable uniformity score. The results suggest that adoption of IAS as the national standards of Trinidad and Tobago was generally (six of six financial statement elements) associated with an increase in the degree of uniformity of financial accounting and reporting practices for the selected financial statement elements.

Adapted Herfindahl Index

For each financial statement element examined, the computed values of the Herfindahl Index for 1995, 1999, 2002 and 2003 were compared with the computed value for 1987 to determine the change in the degree of financial reporting uniformity following the adoption of the IAS. This information is summarized in Table 13.

All six selected financial statement elements exhibited increasing uniformity of financial reporting following the adoption of the IAS. However, two of the six elements – Depreciation of Property, Plant and Equipment and Valuation of Property, Plant and Equipment – experienced fluctuating levels of financial reporting uniformity. The overall pattern of change in financial reporting uniformity following adoption of IAS is consistent with the thesis that unless, by design, coincidence or otherwise, IAS sanction fewer, free choice alternative accounting treatment than are being used in the adopting jurisdiction before the IAS is introduced, the effect on financial reporting uniformity may be minimal at best, a priori. This argument is further supported by two facts.

First, in the two cases where IAS ‘‘outlawed’’ an alternative that was previously used by publicly traded firms, use of the cash basis to recognize Retirement Benefit Expense and use of historical cost (lower of cost or market (LCM)) to value Short-Term Equity Investments, the degree of financial reporting uniformity increased substantially following adoption of

Table 12. Overall Uniformity Score – Measure 1 (Number and Distribution of Allowed Alternatives Used).

Details	Retirement Benefit Plans Expense Recognition	Property, Plant and Equipment Depreciation	Property, Plant and Equipment Valuation	Short-Term Equity Investments Valuation	Inventory Cost Flow Assumptions	Associated Companies Valuation of Interest
Trend in the number of alternative bases/methods used (A)	Favorable +1	Favorable +1	Neutral 0	Favorable +1	Neutral 0	Favorable +1
Distribution of firms across alternative bases used (B)	Favorable +1	Favorable +1	Favorable +1	Favorable +1	Favorable +1	Favorable +1
Overall [(A) + (B)]	Favorable +2	Favorable +2	Favorable +1	Favorable +2	Favorable +1	Favorable +2

Table 13. Summary of Adapted Herfindahl Index Scores.

Financial Statement Element/Allowed Alternative	1987	1995	1999	2002	2003
Retirement benefit plans – expense recognition	0.625	1.000	1.000	1.000	1.000
Property, plant and equipment – depreciation	0.631	0.562	0.609	0.642	0.642
Property, plant and equipment – valuation	0.513	0.513	0.496	0.629	0.642
Short-term investments – valuation	0.625	0.551	0.551	1.000	1.000
Inventory cost flow assumption	0.500	0.508	0.508	0.531	0.531
Associated companies – valuation	0.500	1.000	1.000	1.000	1.000

IAS. This is due in part to the small number of firms that disclosed the bases used to account for these elements of the financial statements.

Second, the only other financial statement element that experienced substantial and consistent increases in financial reporting uniformity, Valuation of Interest in Associated Companies, is an item where IAS requires firms to meet clearly specified "relevant circumstances" to qualify to use the various alternative treatments permitted by the governing IAS.

The financial statement elements that are governed by the IAS did not reduce the number of acceptable alternative bases/methods. Valuation and Depreciation of Property, Plant and Equipment and Inventory Cost Flow Assumption, all experienced very modest uniformity improvements and or fluctuating uniformity scores.

Supplementary Analysis

The financial statement elements that exhibited substantial and consistent increases in the degree of financial reporting uniformity were examined to determine the reason for the change. This examination involved the detailed review of all the available post-1987 financial statements of the firms that had changed its method of accounting/reporting for the affected financial statement element to ascertain the documented reason(s) for the change.

In the case of the Valuation of Short-Term Equity Investments, all four firms switched from using either historical cost or LCM between 1987 and 1999 to using market value in 2002 and 2003. The change actually took place in 2001 after the removal of the LCM as an acceptable valuation basis in IAS 39; further all four firms indicated that the change was made to comply with the IAS.

Similarly, in the case of Expense Recognition for Retirement Benefit Plans, one firm switched from using the cash basis in 1987 to using the

accrual basis in 1995, 1999, 2002 and 2003. The change, which took effect in 1993, was probably a result of the adoption of IAS as TTAS since IAS 19 (revised 1993) does not permit the cash basis of expense recognition for Retirement Benefit Plans.

For the third financial statement element that experienced an increase in financial reporting uniformity following the adoption of the IAS, Valuation of Interest in Associated Companies, two firms switched from the historical cost method to the equity method. Here again, the changes reflected the need to comply with IAS. Therefore, adoption of IAS was responsible for the increases in financial reporting uniformity of all three financial statement elements that exhibited substantial and consistent improvements.

SUMMARY AND CONCLUSIONS

This study examined whether adoption of IAS as the national standards of Trinidad and Tobago was associated with an increase in the degree of uniformity of financial reporting practices for selected financial statement elements among publicly listed companies. As a supplementary objective it examined whether any observed increase in financial reporting uniformity was attributable to the adoption of the IAS. The findings can be summarized as follows:

- Adoption of IAS was associated with an increase in the degree of uniformity of financial reporting practices for all six financial statement elements examined.
- The magnitude of the changes in financial reporting uniformity was modest and the pattern of the changes in financial reporting uniformity fluctuated for Inventory Costing and the Depreciation and Valuation of Property, Plant and Equipment.
- Adoption of IAS seemed to be responsible for the observed increase in financial reporting uniformity for the three financial statement elements that exhibited substantial and consistent increases in uniformity – Expense Recognition for Retirement Benefit Plans, Valuation of Short-Term Equity Investments and Valuation of Interest in Associated Companies.

This causal attribution is supported by the fact that there were no changes in either the intensity with which financial regulations were enforced by the TTSE or the overall institutional environment governing financial reporting by public companies during the period examined. Additionally, we have no

reason to believe that auditors' preferences for particular accounting practices changed in a systematic way following adoption of IAS as public accountants continued to be trained by the same set of extra-regional professional accountancy bodies.

A closer examination of Table 12 reveals that more of the gains in uniformity were due to changes in the distribution of firms among the alternative bases/methods used to account for the selected financial statement items (all six items examined experienced favorable change on this measure), rather than a reduction in the number of alternative bases/methods used by firms (four of the six elements examined experienced favorable change on this measure). This finding taken together with the fact that the methods/bases used by sample firms were, with only one exception, sanctioned by IAS suggest that future improvements in uniformity may require that either local standard-setters in developing countries or the IASB further reduce the number of free choice alternatives permitted in the IAS.

LIMITATIONS

The findings of this study are subject to a number of limitations. First, because only 5 years were examined from the 17 year period 1987–2003, it is possible that the actual pattern of change in the degree of uniformity may be different from that presented. Second, the operational definition of "uniformity" was a bit narrow. Key elements of the construct such as accounting terminology, statement formats (Choi, 1998) and the reliability of the information provided (Zarzeski, 1996) were not systematically examined. Notwithstanding these limitations, the findings of this study provide several potentially valuable insights about the relationship between adoption of IAS as the national standards of Trinidad and Tobago and the degree of uniformity in the financial reporting practices of publicly traded firms.

IMPLICATIONS

One of the more notable findings is the different magnitude of the increases in financial reporting uniformity. This pattern of results suggests that individual IAS is not equally effective at enhancing the degree of uniformity of domestic financial reporting. An examination of the standards revealed that this was due, in part, to the varying number of alternatives allowed in IAS and the extent to which reporting entities can freely choose from among

the allowed alternative treatments. As was previously noted, the only items that exhibited direct relationships between the degree of financial reporting uniformity and adoption of IAS were Expense Recognition for Retirement Benefit Plans, Valuation of Interest in Associated Companies and Valuation of Short-Term Equity Investments, three items for which the number of allowed alternative treatments was reduced following adoption of IAS. To the extent that this is true, developing states that choose to adopt IAS without modification may inadvertently institutionalize financial reporting diversity (unless the IASB reduces the number of allowed alternatives in the individual IAS).

The high percentage of firms that provided little or no disclosure about the methods/bases used to account for the recognition of Retirement Benefit Expense (prior to 2002), and to a lesser extent Inventory Costing and the Valuation of Short-Term Investments, clearly indicates some combination of faulty monitoring of financial reporting and/or low quality external auditing. This quality gap did not directly impact the degree of financial reporting uniformity among the companies included in this study since in all but one case the methods disclosed were in conformity with IAS. However, quality gaps definitely contributed to the small number of firms that qualified for inclusion in the second phase of the study and if improved has the potential to further illuminate the relationship examined.

SUGGESTIONS FOR FUTURE RESEARCH

The findings of this study suggest a number of avenues for future research. First, the differing magnitudes of changes in financial reporting uniformity point to the need for further examination of the factors that may determine whether the adoption of a specific IAS will have a positive or negative effect on the degree of financial reporting uniformity in the adopting country. Second, future studies can be broadened to include other developing countries that have security exchanges and have adopted the standards issued by the IASB. Any such studies should ideally include both states that have favored wholesale adoption (e.g. Barbados) and those that have chosen to customize the IAS to their local environment (e.g. Jamaica and Nigeria).

Third, future studies could examine other dimensions of quality such as the timeliness of financial reporting, compliance with IAS requirements and the quality of audit work before and after the adoption of the IAS. An examination of the quality of financial reporting by publicly listed firms is an

especially pressing need given the high level of non-disclosure by firms involved in this study.

Additionally, the reliability of the results may be enhanced by examining the financial statements of a larger number of years before and after the adoption of the IAS.

NOTES

1. Prior to February 1988, ICATT's policy regarding IAS was to adopt individual IASs as appropriate after conducting a detailed review of each IAS, and making modifications as necessary to suit local peculiarities (Raggay, 2000; Lucie-Smith, 2002). Interviews with three past presidents of ICATT (Messrs. Colin Soo Ping Chow, William Lucie-Smith and Vishnu Maharaj) failed to indicate when this policy began and which IASs were adopted under this policy. However, the results of these interviews did suggest that Mendez's (1987) assertion that Trinidad and Tobago had adopted all IASs that had been issued at that time was inaccurate. This conclusion is supported by Lucie-Smith's (1986) finding that there was an almost total disregard for IAS among publicly traded firms.
2. The post-independence period also saw North America exerting increasing influence on the Trinidad and Tobago financial reporting environment due to shifting economic linkages and immigration patterns (Mendez, 1987).
3. When the fact that ICATT may have adopted a few individual IAS prior to February 1988 is taken together with the possibility that some publicly traded companies may have voluntarily adopted individual IAS prior to 1988, they potentially reduce the statistical power of the ex post facto research design employed in this study.
4. We used this procedure to enhance the transparency and objectivity of what is essentially a subjective analytical procedure. As the 18 firms in the study effectively constitute the population of publicly traded firms in Trinidad and Tobago (21) at the commencement of the study in 1987, it was not considered necessary to perform probabilistic statistical analyses to test the research question.
5. All the methods/bases used by the firms are currently sanctioned by the IAS except for cash basis expense recognition for retirement benefits and the use of historical cost to value investment in Short-Term Equity.

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AN EMPIRICAL INVESTIGATION INTO THE IMPORTANCE, USE, AND TECHNICALITY OF SAUDI ANNUAL CORPORATE INFORMATION

Abdulrahman Al-Razeen and Yusuf Karbhari

ABSTRACT

This study examines the perceptions of the users of annual corporate reports in Saudi Arabia. The focus is on the use, importance, and technicality of the different sources of corporate information contained in Saudi annual reports. Our sample comprises five major user groups, namely individual investors, institutional investors, creditors, government officials, and financial analysts. In comparison with previous research efforts elsewhere around the world, this study found that the balance sheet and the income statement are the most important sections of the annual report to most of the Saudi users' groups. The board of directors' report was found to be the least popular. Individual investors were found to place much less importance on the cash flow statement, a finding that is similar to what has been reported in previous literature. Concerning the technicality of the language of Saudi annual corporate information, individual investors indicated that the language of most of the sections of the annual reports is fairly complicated. Although our findings do not

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indicate a serious problem with the technicality of the language of the report's sections for most of the user groups, a more simplified report would be beneficial to the individual investors.

INTRODUCTION

Public limited companies play a major role in the economy since they are able to absorb and invest large amounts of capital. The success of such companies rest, at least in part, on the desire of the public to invest in these companies. The public and their agents therefore need sufficient information before making investments. This has led researchers to undertake studies about corporate disclosure practice in general and users' perceptions about such practice in particular. In a Saudi Arabian context, public limited companies have grown both in number and size from 14 companies in 1975 to 75 companies by December 2004. This has generated significant interest by the public in such companies. If companies provide quality information then this may well induce the interest of the general public. Continuous research efforts are needed to determine both the informational needs of the external interested parties as well as how such needs can be fulfilled.

This study attempts to discover the most important sources of information about corporations with particular emphasis on the corporate annual report. After all, the annual report is regarded as the main medium by which companies disseminate information to the external users (Firth, 1979). Such reports also assist market participants in making informed decisions, assuming these reports reflect the commercial reality of the reporting entities (Samuels, 1993). Even in the more sophisticated markets, where there are other reliable corporate sources of information, annual reports are considered the main source of information about public limited companies (Botosan, 1997; Epstein & Pava, 1993). In the context of Saudi Arabia, the annual corporate report gains even more prominence since it is the only official source of information about company performance.[1]

In addition, the history of the official Saudi stock market dates back only to 1985, which means that it is still in its early stage of development. Besides, the first mandatory disclosure requirement was only issued in 1990 and the first professional accounting body (Saudi Organisation for Certified Public Accountants (SOCPA), 1994, 1999) was established in 1993. It is also noteworthy that the 5-year Saudi development plans (Ministry of Planning, 1990, 1995, 2000) concentrated on the government's intention to privatise the state-owned enterprises. If this is to be successfully achieved, then privatisation

should be made attractive to the investing public by appropriate disclosure practices and clear transparency about the plans and performance of these enterprises. Therefore, research studies that identify the needs of the stakeholders will help both regulators and preparers to improve such reports.

The aim of this study is to enhance our understanding of the financial reporting environment in Saudi Arabia by seeking the opinions of the main parties that are expected to be affected by such an environment. Our objective is to discover the importance of the different sections of the corporate annual report. Fulfilling this objective might increase our understanding of the behaviour of the different interested parties and reveal the relative importance of the annual report as a source of corporate information. In addition, one of the issues that may concern the users of the annual corporate reports is the style of language with which such reports are written. Depending on which group the user belongs to, the style of language may have a material effect on the readership and the understandability of the information contained in the different sections of the report (Epstein & Pava, 1993). Such a study might also shed light on how corporate report preparers and regulators can improve the current corporate reporting practices as well as provide richer descriptions of some aspects of financial accounting and its environment in Saudi Arabia. Although the subject of this study is not a new one, it is handled more thoroughly and has a broader scope than previous research attempts. For instance, we include more user groups and we apply a higher level of statistical analysis to reach better inference from the available data.

PREVIOUS LITERATURE

It is widely accepted that corporate annual reports are prepared primarily for external users and that such reports should be designed, in form and content, according to the needs of the external users (Pijper, 1993). Users should therefore be contacted frequently to assess their perceptions about various aspects of the reporting practices of public companies since their views will provide the main feedback to improve the communication function of corporate reports (Epstein & Pava, 1993).

One of the pioneering studies to have attempted to discover the information needs and sources of such information was undertaken in the United States by Baker and Haslem (1973). The authors found that the majority of the individual investors rely heavily on stockbroker's advice as their main source of information about companies. Financial statements,

however, were found to be a source of information by only a minority of individual investors. Regarding other information items that are expected to be disclosed by companies, Baker and Haslem (1973) highlight that individual investors attach a great deal of importance to the information about the future expectations of the company. At the same time, individual investors attached a much lower degree of importance to information regarding dividends.

In the United Kingdom, Lee and Tweedie (1975) found the chairman's report to be the most widely read followed by the profit and loss account. This was attributed to the simplicity of the chairman's report, which elucidates the more technical information contained in other parts of the report. Bartlett and Chandler (1997) re-examined the private shareholders' usage of annual corporate reports and justified their study by the fact "that much has changed within the financial reporting environment" since the Lee and Tweedie (1975) study (Bartlett & Chandler, 1997). The authors found that the most widely read section of the annual corporate report is the chairman's statement, a result similar to that found by Lee and Tweedie some 20 years ago. Interestingly, the auditor's report was read the least by individual shareholders. There was also a noticeable decline found in the shareholders' interest in the profit and loss account and balance sheet since the Lee and Tweedie (1975) study. An expected result of the Bartlett and Chandler's (1997) study is the association between the rate of usage and degree of importance that individual shareholders place on each section of the annual report. Bartlett and Chandler also disclose that the majority of respondents in their sample desired less information in the form of a summary report rather than the annual report itself.

Anderson (1981) focused on institutional investors in Australia and found that Australian investors relied mostly on the annual report when making their investment decisions followed by visits to the companies. Regarding the annual corporate report itself, the most readable sections of the annual report were perceived to be the balance sheet, profit and loss account, notes to the accounts, and the chairman's statement, respectively. The profit and loss account, however, was perceived to be more important than the balance sheet. However, the author failed to perform any statistical test to determine whether there is a significant difference between the users' usage of the annual report sections on the one hand and the perceived importance of such sections on the other hand. Anderson (1981) also documents the external users' desire for additional information to be provided in the annual corporate report such as information about the company's product, current value of long-term assets, and remuneration of directors.

Epstein and Pava (1993) examined the perceptions of US investors about various aspects of annual corporate reports. One of the main objectives of their study was to measure the change in the shareholders' perceptions about annual corporate reports over two decades. The authors did this by comparing the result of their study with the earlier results of the Epstein (1975) study, which used the same methodological approach to measure individual investors' perceptions about the quality of annual corporate reports. Epstein and Pava (1993) found that individual investors significantly rely on the annual reports more than they did some 20 years ago and rely significantly less on the advice of stockbrokers. Regarding the different sections of the annual report, the authors reveal that American individual investors read and use the income statement and balance sheet more than other parts of the annual report. Finally, Epstein and Pava (1993) document the individual investors' demand for more financial disclosure in the annual reports. For example, they demand disclosure of any pending litigation, unasserted claims, budgeted income for the coming year, and restating statements using current values. They also demand more non-financial information, such as independent evaluation of management's effectiveness, reasons for the change of auditor, and statement of audit committee responsibility.

Anderson and Epstein (1995) extended their research by providing a useful investigation on Australia. The authors highlight the directors' report to be the most thoroughly read followed by the income statement. Nevertheless, their respondents did perceive the income statement to be more useful than the directors' report in making an investment decision. However, Anderson and Epstein (1995) do not make an attempt to statistically determine whether the difference between the pattern of readership of the annual reports' sections and the perceived usefulness of such sections is of any significance in the Australian environment. Respondents had also expressed a desire for the simplification and more explanation of the balance sheet, statement of cash flow, and the income statement. Finally, the authors highlight the Australian investors' demand for additional disclosure in the annual reports; such as pending litigation, unasserted claims, management audit, and information on change of auditors.

In the context of Saudi Arabia, several researchers have provided a valuable insight into the individual investors' usage of the annual corporate reports (see e.g., Abdelsalam, 1990; Al-Mubarak, 1997; Ba-owaidan, 1994). They all confirm that the annual corporate report is the primary source of corporate information and their findings are in line with those found in developed countries. However, differences were detected in terms of the

other information provided in the annual corporate report. For instance, Abdelsalam (1990) reports that the vast majority of respondents in his survey indicated that they read the annual reports and that the profit and loss account was the most important part of the annual report. Focusing on what is important to Saudi investors, Abdelsalam (1990) highlights that it is information about the future of the company as well as information about directors that was perceived to be important. Ba-owaidan (1994) also found the profit and loss account to be the most influential part of the annual report followed by the balance sheet. Ba-owaidan (1994) reports that the vast majority of respondents in his study encountered some difficulty in understanding the content of the annual reports.

In another Middle Eastern environment, Jordan, Abu-Nassar and Rutherford (1996) undertook a study to discover the view of external users of annual corporate reports. The authors targeted different groups of external users, namely individual shareholders, institutional shareholders, bank loan officers, stockbrokers, and academics. In terms of the usage of the annual report, Abu-Nassar and Rutherford (1996) found bank loan officers to be the heaviest users of the annual reports in Jordan while individual shareholders and academics were found to be the least. They also found the income statement and balance sheet to be the most widely read parts of the annual corporate report by all the users. The authors documented the low degree of users' satisfaction about many qualitative characteristics of corporate reports in Jordan. In terms of the importance of the various sources of corporate information, Abu-Nassar and Rutherford (1996) argue the annual corporate report to be the most important source of information for all user groups. The only exception being the bank loan officers who indicated that the most important source of information to them was to personally visit companies followed by an independent examination of the annual report itself.[2]

RESEARCH METHODOLOGY

Study Hypotheses

The aim of this research is twofold.

1. To empirically examine the perceptions of the main users of annual corporate reports to ascertain whether they have similar or different

views on the level of importance of the various sections of the annual corporate report in Saudi Arabia.
2. To evaluate issues that may concern the users of annual corporate reports in terms of the style of language with which such reports are written. Depending on which group the user belongs to, the style of language may have a material effect on both the readership and the understandability of the information contained in the different sections of the report.

To facilitate our analysis, the following hypotheses were developed and are stated in their null form:

H1. The different external user groups of annual corporate reports in Saudi Arabia hold similar views on the importance of the various parts of the annual corporate report to their decision-making process.

H2. The different external user groups of annual corporate reports hold similar views on the level of technicality of the language with which the different sections of the annual reports are currently written in Saudi Arabia.

Data Collection

To test the hypotheses, a questionnaire was designed to fulfill the research objective. An extensive review of the literature was undertaken (e.g., Babbie, 1998; Bartlett & Chandler, 1997; Abu-Nassar & Rutherford, 1996; Ibrahim & Kim, 1994; Epstein & Pava, 1993; Oppenheim, 1992; Chow & Wong-Boren, 1987) to ensure that no important point was omitted. Drawing on the literature and considering the Saudi environment, five groups of external users of annual corporate reports were identified which include (1) individual investors, (2) institutional investors, (3) creditors, (4) government officials, and (5) financial analysts.[3] Before distribution, the questionnaire was pre-tested during pilot interviews with 13 individuals comprising both academicians and practitioners. All of our pilot interviewees had either researched this area to some extent or were aware of the financial reporting practices in Saudi companies. Each was asked to respond critically on any aspect of the design of the questionnaire. Their comments proved invaluable in improving the content of the questionnaire.

As Table 1 indicates, a total of 636 questionnaires were distributed to the five groups in our sample. A total of 303 usable responses were received generating a response rate of 48%. This response rate is perceived to be

Table 1. Distribution and Collection of Questionnaires.

Group	Questionnaires		Response Rate (%)
	Distributed	Returned	
Individual investors	339	116	34
Institutional investors	47	32	68
Creditors	113	52	46
Governmental officials	59	49	83
Financial analysts	78	54	69
Total	636	303	48

Table 2. Kronbach's Alpha for Individual Groups and Entire Sample.

Group	Kronbach's Alpha
Individual investors	0.92
Institutional investors	0.72
Creditors	0.87
Governmental officials	0.90
Financial analysts	0.92
All groups	0.90

good since previous researchers (such as Al-Kassim, 1996; Al-Jabr, 1995; Al-Rughaib, 1995) have all stated that average response rate to questionnaire surveys in Saudi Arabia tends to be very low, being in the average of 30–40%. Interestingly, the 116 questionnaires that were returned by the individual investors had all stated that they at least read the annual reports. However, 18 of these had indicated making investments according to the direction of the prices in the market or according to advice from peers and friends and were thus excluded from the sample.

We also employed the Cronbach's alpha technique to statistically measure the internal consistency and reliability of our research instrument (see e.g., Botosan, 1997; Huck & Cormier, 1996). Cronbach's alpha takes a value between 0 and 1 where 1 indicates perfect correlation between the parts of the instrument. While there is no test of significance for the alpha, the literature suggests 0.70 as an acceptable level with the preferable amount being 0.80 or above (Botosan, 1997; Bryman & Cramer, 1995; Huck & Cormier, 1996). In this study, the Cronbach's alpha was calculated for each user group as well as for the whole sample. The results for the five separate user groups shown in Table 2 were all above 0.70 suggesting a relatively high

amount of internal consistency of the responses generated by each of the user groups.

Statistical Tests

We asked respondents to rate the importance of the seven possible sources of information by using a 5-point Likert-type scale where 1 is 'not important' and 5 is 'very important'. Since users may perhaps perceive some information sources to be important in absolute terms, we further asked them to clarify their perceptions by ranking the different sections in terms of their priority. Thus, respondents were also asked to rank the different sections in annual corporate reports in terms of their importance to their decision-making needs by assigning a 1 to 'the highest and most important' source and a 7 to 'the least in priority'.

When the question is about ranking something such as the importance of the different sections in corporate annual reports, we calculate the Kendal's coefficient of concordance for each group of respondents and for the sample as a whole. This coefficient, known as W, quantifies the amount of agreement among the members of a group regarding their evaluation of a set of items (see e.g., Moroney, 1967, p. 338; Siegel & Castellan, 1988, p. 262; Huck & Cormier, 1996, p. 82). The value of the coefficient, known as W, varies from *zero*, where there is no agreement among the respondents, to *one* where there is total consensus among the respondents.

As the number of groups in this study is five, these groups can be analysed in pairs or collectively because each group has a different number of cases. The groups are independent of each other and their perceptions were measured on an ordinal scale. Also, since there are more than two independent groups, we used the Kruskal–Wallis one-way analysis of variance by ranks (commonly called the Kruskal–Wallis H test) to test whether the different independent samples under consideration come from the same or identical populations. The rejection of the null hypothesis (within any specified α) means that there is a significant difference between, at least, one pair of the groups considered in the test. This test, however, cannot determine which pair, or pairs, of groups have the significant differences. To do that, a post hoc analysis needs to be performed in each pair of groups.

We also use the Mann–Whitney U test to examine whether the two independent samples under consideration come from the same or identical population. The rejection of the null hypothesis (within any specified α) means that there is a significant difference between the groups considered in the test.

RESULTS AND ANALYSIS

It was mentioned earlier that the aim of this study is to measure the importance of seven different sections of the annual corporate report in Saudi Arabia (i.e., the board of directors' report, the auditors' reports, the balance sheet, the income statement, the statement of retained earnings, the cash flow statement, and the notes to the financial statements).

Table 3 shows that individual investors attached a higher level of importance to the income statement, balance sheet, and the auditor's report, respectively. However, institutional investors reported the balance sheet to be marginally more important than the income statement. All the users in our sample, except governmental officials, regarded the board of directors' report as the least important. The largest difference is also shown to be between individual investors and creditors. When attention is turned to the auditor's report, the governmental officials attached significantly higher importance to this than any of the other groups did. The general belief that auditors are the guardians of the public against malpractice in society and the assumed formality of relationship between the governmental officials and companies may lend some explanation of the higher importance of the auditor's report to such officials as compared with other types of users. The creditors also attached more importance to the auditor's report than the institutional investors did. The nature of the creditors' relationships with companies, as compared to the institutional investors, may lend some explanation to this result.

Table 4 shows that all five user groups ranked the balance sheet as the most important section of the annual corporate report (institutional investors ranked the balance sheet and the income statement of equal importance) followed by the income statement which was ranked as next most important by three of the user groups (individual investors, creditors, and financial analysts) and third most important by one user group (government officials). The auditors' report was ranked as second most important by governmental officials; third most important by individual investors, creditors, and financial analysts; and fourth most important by institutional investors. The statement of retained earning, the statement of cash flows, and the notes to the financial statements were ranked from fourth to sixth most important by the five user groups with the exception of institutional investors who ranked the statement of cash flows as the third most important section of the annual corporate report and government officials who ranked it the least important section. Finally, the board of directors' report was ranked as the least important section of the annual

Table 3. Users' Rating of Importance of Different Sections of Annual Corporate Report.

Group	Board of Directors' Report	Auditor's Report	Balance Sheet	Income Statement	Statement of Retained Earnings	Statement of Cash Flow	Notes to Financial Statements
Individual investors							
Mean[a]	4.082	4.400	4.681	4.809	4.159	4.165	4.321
S.D.	.847	.880	.631	.528	.902	.877	.890
N	110	110	113	115	107	109	106
Institutional investors							
Mean	3.906	4.219	4.969	4.906	4.469	4.531	4.500
S.D.	.995	.941	.177	.296	.621	.671	.762
N	32	32	32	32	32	32	32
Creditors							
Mean	3.686	4.635	4.788	4.865	4.180	4.608	4.654
S.D.	1.029	.687	.572	.486	.774	.750	.738
N	51	52	52	52	50	51	52
Governmental officials							
Mean	4.062	4.878	4.918	4.837	4.163	3.959	4.600
S.D.	.909	.331	.277	.373	.825	1.020	.539
N	48	49	49	49	49	49	45
Financial analysts							
Mean	4.018	4.444	4.870	4.926	4.296	4.574	4.585
S.D.	.713	.816	.339	.264	.816	.716	.633
N	54	54	54	54	54	54	53
All groups							
Mean	3.980	4.508	4.803	4.854	4.223	4.322	4.493
S.D.	.892	.797	.502	.437	.826	.866	.765
N	295	297	300	302	292	295	288

[a]Mean: 5 = very important; 1 = not important at all.

Table 4. Users' Ranking of Importance of Different Sections of Annual Corporate Report.

Group	Board of Directors' Report	Auditor's Report	Balance Sheet	Income Statement	Statement of Retained Earnings	Statement of Cash Flow	Notes to Financial Statements
Individual investors							
Mean[a]	4.175	3.262	2.253	2.317	4.175	4.544	4.202
S.D.	2.073	2.097	1.591	1.562	1.868	1.940	2.096
N	80	80	83	82	80	79	79
Institutional investors							
Mean	5.182	4.087	2.087	2.087	4.348	3.826	4.809
S.D.	2.085	1.905	1.505	1.276	1.369	1.557	1.990
N	22	23	23	23	23	23	21
Creditors							
Mean	5.800	2.738	2.071	2.167	5.231	3.128	3.947
S.D.	1.682	2.220	1.276	1.057	1.564	1.866	1.902
N	40	42	42	42	39	39	38
Governmental officials							
Mean	4.103	1.929	1.833	2.190	4.425	5.225	4.158
S.D.	2.210	1.455	1.167	1.330	2.099	1.888	2.020
N	39	42	42	42	40	40	38
Financial analysts							
Mean	5.250	3.444	1.822	2.089	4.422	3.978	4.295
S.D.	1.894	2.180	1.093	1.258	1.936	2.072	2.007
N	44	45	45	45	45	45	44
All groups							
Mean	4.760	3.043	2.047	2.201	4.467	4.234	4.227
S.D.	2.095	2.099	1.372	1.348	1.854	2.009	2.017
N	225	232	235	234	227	226	220

[a]Mean: 1 = the highest and most important of all; 7 = the least in priority.

corporate report by three of the five user groups (institutional investors, creditors, and financial analysts) and fourth most important by two of the user groups (individual investors and government officials).

Both Tables 3 and 4 reveal that the difference relating to the cash flow statement is high especially under the ranking method, where the largest difference comes from creditors. Individual investors also assigned a lower importance to the statement of cash flows than creditors under both assessment methods (rating and ranking); also they assigned lower importance to this statement than institutional investors and financial analysts under the rating method.

As shown in Table 5, we also calculated the Kendall's coefficient of concordance, *W*, for each user group of respondents and for the sample as a whole regarding the ranking of the importance of the different sections of the corporate annual report in Saudi Arabia.

Table 5 reveals that the whole sample as well as individual user group's were found to be significant at the 0.001% level, each group shows at least a moderate amount of agreement in their ranking of the importance of the different sections of the annual reports. No benchmark, however, is found in the previous literature about the acceptable level of agreement. Table 5 also shows that creditors and governmental officials have higher coefficients than the other groups. On the other hand, the individual investors are the least to agree with each other in their views of the importance of the various sections of the annual report. These statistics provide a general picture of the users' rating of the different sections of the annual report in Saudi Arabia.

The next step is to determine whether there is a significant difference among and between the different user groups. Table 6, therefore, highlights whether the different user groups are homogenous or heterogeneous in their utilisation of corporate information in Saudi Arabia.

Table 5. Kendall's Coefficient of Concordance of Users' Ranking of Importance of Different Sections of Annual Corporate Report.

Group	Kendall's Coefficient
Individual investors	0.205*
Institutional investors	0.356*
Creditors	0.411*
Governmental officials	0.416*
Financial analysts	0.346*
All groups	0.267*

*Significant at $p < .001$.

Table 6. Level of Significance and Direction of Difference Among User Groups and Between Each Pair of User Groups Regarding Their Rating and Ranking of Importance of Different Sections of Annual Report.

		All Groups	Group									
			1 vs. 2	1 vs. 3	1 vs. 4	1 vs. 5	2 vs. 3	2 vs. 4	2 vs. 5	3 vs. 4	3 vs. 5	4 vs. 5
Board of directors' report	Rating	.199	+.200	+.01*	+.500	+.200	+.190	−.240	−.390	−.030	−.090	+.220
	Ranking	.000**	−.022*	−.000**	+.450	−.003**	−.140	+.030	−.470	+.000**	+.100	−.009*
Auditor's report	Rating	.000**	+.102	−.041	−.000**	−.390	−.006*	−.000**	−.092	−.018*	+.102	+.001**
	Ranking	.000**	−.036	+.042	+.000**	−.380	+.004**	+.000**	+.105	+.130	−.052	−.001**
Balance sheet	Rating	.006**	−.003*	−.079	−.005**	−.027	+.039	+.180	+.066	−.120	−.330	+.220
	Ranking	.610	+.320	+.400	+.097	+.101	+.400	+.310	+.350	+.170	+.180	+.470
Income statement	Rating	.575	−.230	−.220	−.390	−.101	+.470	+.190	−.370	+.170	−.330	−.081
	Ranking	.970	+.390	+.400	+.380	+.320	−.270	−.450	−.490	−.420	+.250	+.400
Statement of retained earnings	Rating	.407	−.056	−.420	−.420	−.200	+.048	+.054	+.200	+.490	−.160	−.170
	Ranking	.043*	−.460	−.001**	−.200	−.220	−.006*	+.280	−.300	+.054	+.025*	+.450
Statement of cash flows	Rating	.000**	−.015*	−.000**	+.130	−.001**	−.180	+.004**	−.270	+.000**	+.380	−.001**
	Ranking	.000**	+.030	+.000**	−.017*	+.074	+.062	−.001*	−.360	−.000**	−.033	+.002**
Notes to financial statements	Rating	.071	−.160	−.004**	−.065	−.046	−.110	−.410	−.370	+.120	+.140	+.450
	Ranking	.570	−.110	+.220	+.430	−.44	+.045	+.105	+.160	−.280	−.210	−.390

Notes: The + and − signs preceding the numbers indicate the location of the mean of the first group as compared to the second group (i.e., plus sign means larger mean). Group 1 = Individual investors. Group 2 = Institutional investors. Group 3 = Creditors. Group 4 = Government officials. Group 5 = Financial analysts.

*For $\alpha \leqslant .05$: All groups = asymptotically significant levels of Kruskal–Wallis H test of all groups.

**For $\alpha \leqslant .01$: All groups = asymptotically significant levels of Kruskal–Wallis H test of all groups.

*For $\alpha \leqslant .025$: Groups = Asymptotically significant levels of Mann–Whitney U test of pairs of user groups.

**For $\alpha \leqslant .005$ (one-tailed test): Groups = Asymptotically significant levels of Mann–Whitney U test of pairs of user groups.

Essentially, Table 6 illustrates two pieces of information. One is the actual level of significance for the difference between the mean values. The second is the direction of the differences in mean ratings and rankings between the pairs of user groups. The direction is shown by the sign (+) and (−) preceding the *p* values. In each pair, the first named group mean is compared to the second. If the mean value of the first named group is greater, a plus sign is shown, and a minus sign, if it is smaller. It can be seen from Table 6, that the null hypothesis was rejected for most of the report sections on either the rating or ranking methods of assessing the importance of these sections to the various user groups. The exception is the income statement. The high importance given to the income statement and the absence of significant differences between the user groups suggest a high degree of consensus among the user groups as to the importance of such a statement to their decision-making process.

Table 6 further reveals that individual investors and the governmental officials, on the one hand, and the other groups, on the other hand, differ significantly in their rating and/or ranking of the importance of the statement of cash flow. Under both methods of assessing the importance of the statement of cash flow, governmental officials assigned lower importance to this statement than institutional investors, creditors, and financial analysts.

There also seems to be a high consensus between the user groups in their rating and ranking of the importance of the balance sheet and notes to the financial statements. The null hypothesis could not be rejected for most of the pairwise comparisons of user groups rating and ranking of these two statements. The minor exception was the individual investors, who assigned significantly lower ratings of importance to the balance sheet than those of the institutional investors and governmental officials. As suggested by Abu-Nassar and Rutherford (1996), the technicality of most of the information contained in the balance sheet may divert the individual investors away from reading such a statement. Individual investors also assigned significantly lower ratings of importance to the notes to the financial statements than the creditors did. The individual investors may not be able to digest the information contained in the notes as the creditors do. For both sections (i.e., the balance sheet and notes to the financial statements), however, the difference between the individual investors and the other groups of users was not significant under the ranking methods.

In addition, Table 6 shows that although the user groups attached relatively lower importance to the directors' report than the other parts of the annual report as reported in Table 4 earlier, some pairs of the groups still have significant differences in the pattern of their ranking of this report.

Specifically, the directors' report was assigned significantly a higher rank in terms of importance by individual investors than by the institutional investors, creditors, and the financial analysts. The simplicity of the directors' report to the individual investors may contribute to this result. The same report was given a significantly higher rank by governmental officials than the ones given by creditors, financial analysts, and marginally by the institutional investors. The governmental officials perhaps due to the formal relationship with the companies may place more importance on the directors' report than the other groups do even though such report is not audited. The statement of retained earnings was considered to be the least important of the annual report. Creditors ranked this statement lower than the other groups with the exception of governmental officials.

The finding that the income statement and the balance sheet were regarded as the most important by users is similar to the finding of Ba-owaidan (1994) and Abdelsalam (1990) whose surveys were based in Saudi Arabia. It is also consistent with the findings of Abu-Nassar and Rutherford (1996) who surveyed multiple groups of users of Jordanian annual corporate reports; the finding of Epstein and Pava (1993) who surveyed the American individual investors; and the finding of Anderson (1981) who surveyed the Australian institutional investors.

When attention is turned to the technicality of the language of the annual report, the descriptive statistics generated showed the auditor's report to be fairly complicated to the Saudi individual investors. This finding is somewhat different to most of the results found in previous literature. For example, the auditor's report was the easiest part to be understood by the Jordanian individual investors (Abu-Nassar & Rutherford, 1996). It was also amongst the least difficult for the Australian individual investors (Anderson & Epstein, 1995). However, for individual investors in the USA, the auditor's report was found to be more difficult to understand than the income statement (Epstein & Pava, 1993).

Table 7 reports the results of the test of differences among and between the user groups regarding their views on technicality of the language of the different parts of the annual report. As shown in Table 7, the null hypothesis was rejected for all the sections of the report where the individual investors have significantly different views on the technicality of the language of these sections than the other user groups. Essentially, the individual investors perceived all of the parts of the annual report to be, significantly, more complicated than the other groups did. The plausible explanation to the above results is that individual investors are the ones to have had the least amount of formal accounting education.

Table 7. Level of Significance and Direction of Difference Among User Groups and Between Each Pair of User Groups Regarding Their Rating of Degree of Technicality of Language Used in Annual Report Sections.

	All Groups	Group									
		1 vs. 2	1 vs. 3	1 vs. 4	1 vs. 5	2 vs. 3	2 vs. 4	2 vs. 5	3 vs. 4	3 vs. 5	4 vs. 5
Board of directors' report	.000**	+.001**	+.001**	+.003**	+.010*	−.200	−.120	−.060	−.360	−.210	−.320
Auditor's report	.000**	+.001**	+.000**	+.000**	+.000**	−.410	+.240	−.310	+.065	−.430	−.054
Financial statements	.000**	+.001**	+.000**	+.000**	+.001**	−.160	−.310	−.160	+.270	−.500	−.280
Notes to financial statements	.000**	+.012*	+.000**	+.000**	+.005**	+.250	+.280	−.450	+.480	−.170	−.200

Notes: The + and − signs preceding the numbers indicate the location of the mean of the first group as compared to the second group (i.e., plus sign means larger mean). Group 1 = Individual investors. Group 2 = Institutional investors. Group 3 = Creditors. Group 4 = Government officials. Group 5 = Financial analysts.

*For $\alpha \leqslant .05$: All groups = Asymptotically significant levels of Kruskal–Wallis *H* test of all groups.

**For $\alpha \leqslant .01$: All groups = Asymptotically significant levels of Kruskal–Wallis *H* test of all groups.

*For $\alpha \leqslant .025$: Groups = Asymptotically significant levels of Mann–Whitney *U* test of pairs of user groups.

**For $\alpha \leqslant .005$ (one-tailed test): Groups = Asymptotically significant levels of Mann–Whitney *U* test of pairs of user groups.

SUMMARY AND CONCLUSIONS

This study surveys the perceptions of 303 users of corporate annual reports in Saudi Arabia. The perceptions of the major corporate stakeholders were measured via a questionnaire survey both into the rating and ranking of the seven different sections of corporate information available in Saudi annual reports.

In comparison with previous research efforts elsewhere around the world, this study found that the balance sheet and the income statement are the most important sections of the annual report to most of the Saudi users' groups. The board of directors' report was found to be the least popular. As far as the cash flow statement is concerned, the individual investors were found to place much less importance to this statement, a finding that is similar to what has been reported in previous literature about investor behaviour in other areas of the world. However, the fact that the cash flow statement is a relatively new requirement might explain why individual investor's do not fully appreciate its importance. Perhaps the Saudi accounting authority (i.e., SOCPA) should raise more awareness about the importance of the cash flow statement. Concerning the technicality of the language of Saudi annual corporate information, the individual investors indicated that the language of most of the sections of the annual reports is fairly complicated. Although our findings do not indicate a serious problem with the technicality of the language of the report's sections for most of the user groups, a more simplified report would be beneficial to the individual investors.

Overall, the corporate disclosure process is a complex one. Many parties affect, and are affected by, this process. Therefore, continuous research efforts are needed to enhance such a process. A natural extension to this study would be an exploration of the specific informational needs of the external users of corporate information. Further research effort could be to examine current corporate reporting practices and whether such practices meet the users' demand. Research could also perhaps target the parties involved in the actual preparation of the annual report. One of the parties that are involved in this process is the audit committee, and these were first required in Saudi Arabia in 1994. An interesting study could focus on the effect of audit committee's on company disclosure practice.

NOTES

1. Companies in Saudi Arabia do not issue a preliminary announcement of their profits.

2. Abu-Nassar and Rutherford (1996) did not perform statistical tests to determine whether the differences in the perceptions of different users are significant, which form a basis to conclude whether such users are homogenous or heterogeneous.

3. Previous studies on users' information needs have excluded individual investors from their analysis (see for example Chandra, 1974; Firth, 1978; McNally, Eng, & Hasseldine, 1982). This exclusion may be justified on the grounds that individual investors are difficult to contact. Another implied reason for excluding individual investors from such studies might be that the individual investors are mainly investing according to the advice of financial analysts and brokers and are not utilising the information by themselves. However, this is not the case in Saudi Arabia since individual investors who sell and buy corporate shares dominate the Saudi stock market.

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MEASURING ACCOUNTING DISCLOSURE IN A PERIOD OF COMPLEX CHANGES: THE CASE OF EGYPT

Omneya H. Abdelsalam and Pauline Weetman

ABSTRACT

Significant changes in accounting disclosure are observed in periods of economic change such as those relating to emerging capital markets and programs of privatization. Measurement of the level of accounting disclosure should ideally be designed to capture the complexity of change in order to give insight and explanation to match the causes and consequences of change. This paper shows the added interpretive value in subdividing the disclosure checklist to reflect the requirements of national accounting regulations, the location of disclosure items in the annual report, and limitations on the availability of regulations in official translation to the local language. Defining targeted disclosure categories leads to significance testing of specific aspects of changes in accounting disclosure in the Egyptian capital market in the 1990s. Strong correlation of disclosure with the presence of majority government ownership of the company and the relative activity of share trading supports the applicability of political costs and capital need theories, respectively. The relation between International Accounting Standards (IASs) disclosure and the type of audit firm points to additional theoretical

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explanations, including relative familiarity with the legislation and compliance features identifiable with the emerging capital market. The approach described in this paper has the potential for enhancing understanding of the complexity of accounting change in other emerging capital markets and developing economies.

INTRODUCTION

In periods of significant economic change, such as a major program of privatization of state-owned enterprises, the pace of regulatory change may be rapid (EFG, 1996). In such a situation of rapid change where there is regulatory time pressure, it may be more convenient for regulators to introduce change through a new law, rather than revise an existing one (Abd Elsalam, 1999). For developing countries there may be an additional cost constraint that favors additional codification, rather than full integration of existing and new regulations in a consolidating law (ESCWA, 2003). The resulting parallel implementation of old and new regulations may cause some overlap and even confusion for the accounting practitioner (Abd Elsalam, 1999). Where the regulators superimpose new accounting regulations on existing laws, there is also a challenge to the researcher studying the impact of change. The new regulation may repeat requirements of the existing rules, as well as introduce entirely new requirements (Abd Elsalam, 2002). The researcher must separate old from new requirements in measuring the impact of change.

This paper examines the complex regulatory changes occurring in Egypt in the first half of the 1990s when the economic program of privatization was set in motion.[1] Revitalization of the Egyptian Stock Exchange was accompanied by a new Capital Market Law (CML) (1992).[2] Inter alia the new law introduced a significant body of accounting disclosure requirements, thus incorporating International Accounting Standards (IASs).

The research questions addressed in this paper are as follows:

1. To what extent did the introduction of the new accounting regulations improve *de facto* the previous disclosure practice of listed companies in Egypt?
2. What factors explain the relative implementation of regulatory change in the first accounting period after new accounting regulations became obligatory?

Our first question is designed to explore the impact of regulatory change through a comparison of annual reports before and after the regulatory

change.[3] Our second question takes a cross-sectional perspective to capture the implementation of regulation in the first period where application of IASs was fully mandatory.

PRIOR LITERATURE

Although the focus of our study is on mandatory disclosures, the circumstances justify drawing on the literature of voluntary disclosure for our theoretical framework.[4] Achieving full compliance with new laws in a developing economy may take time (World Bank, 2002). When new regulations are introduced the managers, accounting staff, and auditors need to be actively engaged in learning and applying the new rules (Abayo, Adams, & Roberts, 1993). Full implementation of new regulations in practice (de facto) may lag behind legal implementation (de jure) (Rahman, Perera, & Ganish, 2002), especially if financial or technical resources are not readily available. Lack of full compliance with mandatory rules of disclosure has been noted in other developing countries (Wallace, 1987; Tai, Au-Yeung, Kwok, & Lau, 1990; Nicholls & Ahmed, 1995). Previous research has regarded such incomplete compliance with mandatory legislation as a form of voluntary compliance (Wallace & Naser, 1995).

Studies of corporate accounting disclosure initially assessed overall disclosure (Cerf, 1961; Singhvi, 1968; Singhvi & Desai, 1971; Buzby, 1975; Belkaoui & Kahl, 1978; Firth, 1979a, 1979b; Kahl & Belkaoui, 1981; Firer & Meth, 1986; Chow & Wong-Boren, 1987). Subsequent studies distinguished mandatory from voluntary disclosure (e.g., Abayo et al., 1993; Wallace, Naser, & Mora, 1994; Nicholls & Ahmed, 1995; Wallace & Naser, 1995). A development of particular interest for our study has been the process of subdividing disclosure according to its nature (Gray, Meeks, & Roberts, 1995; Meek, Roberts, & Gray, 1995; Botosan, 1997; Cahan, Rahman, & Perera, 2005), its location in the annual report (Cooke, 1989; Ahmed & Nicholls, 1994; Nicholls & Ahmed, 1995; Inchausti, 1997; Patton & Zelenka, 1997; Schleicher, 1998), or particular standards (Street, Nichols, & Gray, 2000).

Researchers have analyzed the complexities of factors influencing disclosure in emerging markets. These include the adoption of IASs in Jordan (Solas, 1994) and in Bangladesh (Nicholls & Ahmed, 1995) and the rapid development of accounting laws in the Czech Republic (Patton & Zelenka, 1997). However, these studies did not focus on the detail of disclosure groupings and accordingly did not utilize disclosure checklists

that allowed for the interpretation of the effects of change in the regulatory regime.

Wallace et al. (1994) suggest that apparently inconsistent results of disclosure studies may be due to limitations of the data, the form of the regression equation, or the limitations of the disclosure checklist. Our study focuses on the construction of the disclosure checklist and controls for the potential effect of the regression equation by comparing the results of several regression procedures (Cooke, 1998).

In the period 1980–2000, many developing countries adopted privatization programs prescribed by the International Monetary Fund (IMF) or the World Bank (EIU, 1998). As a result, the emerging capital markets in these countries are more likely to experience change of regulations (Rathborne, Grosch, & Galloway, 1997). Consequently, when studying compliance by use of a disclosure checklist, disaggregation of the checklist into sub-sections representing types of disclosure (such as established/traditional) may assist the researcher in capturing the various factors affecting accounting disclosure. Disaggregation may additionally provide richer explanations in theoretical terms. In particular, this study extends the subdivision used by Rahman et al. (2002) who examined the association between accounting regulations and accounting practices by testing four types of requirements:

a. Required of all listed companies (requirements of the statutes, stock exchange listing requirements, and accounting standards)
b. Recommended or suggested by the statutes, stock exchange listing requirements, and accounting standards
c. Allowed or not required or not prohibited by the above requirements
d. Not permitted by the statutes, stock exchange listing requirements, and accounting standards

The capital market developments in Egypt in the 1990s provide an opportunity to study the effect of changes in regulation and economic policy.

CHANGES IN ACCOUNTING REGULATION

In 1991, the Egyptian government set out a major program of economic change in which more than 300 public sector enterprises were identified for privatization (Abd Elsalam, 2002). To enable the process of privatization, and to attract foreign capital investment, the Egyptian Stock Exchange, based in Cairo and Alexandria, was revitalized in 1992 (Mecagni & Sourial, 1999).

The public sector companies intended for privatization were given a stock exchange listing, but the majority of shares remained in government ownership (EIU, 1998).[5] The transfer to private ownership was expected to take place over a period of time (Mecagni & Sourial, 1999). These listed companies are hereafter referred to as 'public sector companies'. Other listed companies, held in full or majority private ownership, are referred to as 'private sector companies'.

To achieve international comparability in accounting disclosure by listed companies, the CML No. 95 was issued in 1992 (Mecagni & Sourial, 1999). Supported by Executive Regulations (ERs) issued in 1993, the CML introduced a comprehensive accounting disclosure package which included Statement 58, requiring listed companies to follow IASs in matters not specifically covered by the CML and its ERs. Because of transitional provisions, the CML did not become fully mandatory until 1995 (Abd Elsalam, 1999).

The Companies Act (CA) of 1981 remained applicable for listed companies for regulations not included in the CML, comprising mainly the disclosure items required in the report of the board of directors (Abd Elsalam, 2002).

The stock exchange in the mid-1990s had a relatively small number of listed companies whose shares were actively traded. According to Moore (1995) there were 700 companies quoted on the stock exchange, of which 545 were categorized as 'closed' companies. The shares of the closed companies were traded only among a relatively small selected number of original shareholders and were listed primarily to achieve tax exemptions.[6] Of the remaining 155 'public' companies, only around 100 were actively traded.[7]

The method of developing new regulations meant that the period of privatization and stock market revitalization coincided with having three separate but overlapping accounting regulations (CA, CML, and IASs) applicable to listed companies. Adding to the complexity, the CML included some IASs that were translated into Arabic (native language). However, other IASs were not translated into Arabic despite the requirement that listed companies were to comply with IASs in matters where national regulation was silent. Companies reacted to the new accounting regulatory regime at a varying rate, thereby providing an opportunity to evaluate the factors influencing the relative pace of change.[8]

The formal implementation of IASs in Egypt was a function of the CML. However, various Anglo–American influences had already had an impact on Egyptian accounting law and practice, resulting in some similarities with IASs (Abd Elsalam, 2002). For example, company law continued to reflect

the remnants of former British colonial influence (Samuels & Oliga, 1982). Additionally, the US Agency for International Development (USAID) carried out an extensive program of education and training in Cairo (Hegazy, 1991). There were also attempts in the late 1980s and early 1990s to prepare Egyptian accounting standards based on IASs (Abd Elsalam, 2002). At that stage, Egyptian standards did not carry the force of formal regulation (Abd Elsalam, 2002).

The economic changes of 1991–1992 can be contrasted with the previous era of central planning in Egypt where accounting was characterized by conservatism, secrecy, a relatively weak profession, and a tendency to respect law more than profession announcements or standards (ESCWA, 2003).[9] The move to IASs required a change of culture as well as a change of law (Abd Elsalam, 2002).

CULTURE CHANGE

After 1956, during the period described as the socialist era, the government sector controlled 80% of economic activities (EIU, 1998). Companies had to apply the Uniform Accounting System (UAS), which restricted the role of accountants to bookkeeping and producing UAS reports (Amer, 1969). Professional judgment was not allowed (Amer, 1969). Companies were required to report, in detail, to the Central Auditing Agency (Amer, 1969). Financial information disclosed to the public was brief (Elsadik, 1990). Notes to the financial statements were rarely disclosed (Mahrous, 1987; Tawfic, 1992). The period of nationalization and socialism eased after 1974 with an 'open door' policy to encourage foreign investment, but the revitalization of the capital market began in 1991 (Mecagni & Sourial, 1999). That marked the start of a privatization program in Egypt and a significant increase in stock exchange activities, both of which led to a wider spread of companies' ownership and a consequent increase in agency costs (HassabElnaby & Mosebach, 2005). This in turn resulted in more pressure to increase transparency and professionalism (World Bank, 2002). Additionally, the need for quality audit services has been highlighted (World Bank, 2002). In response to these changes, the Capital Market Authority (CMA) mandated IASs and International Standards of Auditing (ISAs) for listed companies (World Bank, 2002).

In emerging capital markets, the relative cost of non-compliance compared to compliance with accounting disclosures may be different from the position in developed capital markets. The effectiveness of financial

disclosure regulation in a country is a function of regulatory requirements and the degree of enforcement (Cooke & Wallace, 1990). Non-compliance costs originate in market pressures from shareholders and other users and in government-imposed sanctions or administrative pressures (Abayo et al., 1993). Compliance costs relate to training and updating personnel knowledge. In the Egyptian Stock Exchange, market pressures from shareholders and investors are not as strong as those in developed markets (Elsadik, 1990). Many of the investors are small investors who cannot form pressure groups like their counterparts in developed countries (Elsadik, 1990).

During the period covered by this research, employees of the CMA were only beginning to receive training in the new regulations and the IASs from one of the major international accounting firms (Abd Elsalam, 1999). For supervisory purposes, CMA was using a fairly basic disclosure checklist. Indeed, the checklist was less detailed than the one used in this research (Abd Elsalam, 1999). Accordingly, non-disclosure could easily escape the attention of the CMA staff. Mandating IASs in Egypt has required extensive training and updating for accountants, thereby resulting in relatively high costs of compliance (World Bank, 2002). Consequently, for rarely traded companies the non-compliance costs were not high compared with the compliance costs. It is therefore expected that rarely traded companies will likely not recognize the need to comply with disclosure regulations, especially if detection by the supervisory organization seems unlikely. In contrast, for actively traded companies, which include a large number of public sector companies earmarked for privatization and offering securities in the near future, market pressures were higher and so non-compliance costs were greater (Abd Elsalam, 1999). Therefore, a positive compliance culture is expected to satisfy the needs of investors and to reduce agency costs. However, while actively traded companies might be willing to comply with mandatory disclosure requirements; this does not necessarily guarantee that the practical steps taken to achieve compliance have been fully successful.

Accounting disclosure is expected to differ before and after the new regulations and change in disclosure is expected to vary between companies. Change in accounting disclosure is tested through the two hypotheses explained in the following section.

DEVELOPMENT OF HYPOTHESES

Two hypotheses are tested to enable us to illustrate the additional insight and interpretation available from analyzing sub-sections of a disclosure

checklist as opposed to looking only at overall or total disclosure level. The first represents longitudinal analysis and the second, cross-sectional analysis.

H_a1. The level of disclosure after mandating new accounting regulations in Egypt is significantly higher than the level of disclosure for the same companies preceding the new regulations.[10]

H_a2. In the first period (year) after the new regulations became effective, the level of disclosure is associated with various corporate characteristics.

Nine corporate characteristics are considered. Legal form, activity in share trading, audit firm, and IASs compliance note serve as the test variables. Expectations are based on prior literature and the situation in Egypt. Size, leverage, profitability, liquidity, and type of business are control variables commonly used in disclosure studies. For the control variables, expectations are based on evidence from prior literature.

TEST VARIABLES

Legal Form

Companies listed on the Egyptian Stock Exchange may be separated into public sector companies (with majority government ownership) and private sector companies (with majority private sector ownership). At the time of this research, public sector companies were regularly in the public eye through evaluation of the privatization program by the government, commercial agencies, and the public. This distinction in legal form of Egyptian listed companies is used in this research as a proxy of political sensitivity (political costs). The importance of the public sector companies listed on the Egyptian Stock Exchange suggests that the alternative hypothesis should be one-tailed.

H_a21. There is a significant positive association between the level of disclosure and public sector legal form (companies that have majority government ownership or are earmarked for privatization).

Activity of Share Trading

This variable, which distinguishes actively traded from non-active shares, is a reflection of capital need theory.[11] As explained previously, actively traded

companies are listed on the Egyptian Stock Exchange to raise capital. Alternatively, rarely traded companies retain a listing primarily to achieve the tax exemption offered to listed companies in Egypt. In most cases, rarely traded companies are joint stock companies in name but in reality they are owned by members of the same family or friends, which reflect the continuous effect of the previous economic era of central planning and an illiquid stock exchange.

In the context of the characteristics of listings in the Egyptian Stock market, the alternative hypothesis is framed as a one-tailed test.

H_a22. There is a significant positive association between the level of disclosure and the activity of share trading.

Audit Firm

Large audit firms have high reputational capital at stake. Consequently, they might insist that their clients comply with regulations and demand more disclosure (Ahmed & Nicholls, 1994; Inchausti, 1997; Dumontier & Raffournier, 1998; Street & Bryant, 2000).

Type of audit firm has been tested in previous studies with mixed results. For example, Malone, Fries, and Jones (1993) found no significant statistical association between financial disclosure and type of audit firm, while Craswell and Taylor (1992) found a statistically significant association.

From the above discussion, the following two-tailed hypothesis examines the relation between compliance with local regulations and the type of audit firm.

H_a23a. There is a significant association between CA/CML compliance and the type of audit firm.

At the time of this research, IASs were only recently mandated in Egypt by the CML and previously there had not been any great interest in the IASs. Therefore, it is expected that audit firms with an international relationship (the 'big six' at that time) would be more knowledgeable of the IASs because of their superior training and their international relations.[12] Consequently, we expect that companies audited by international firms would disclose relatively more information in respect of the IASs unavailable in the local regulations than would companies audited by other firms. We utilize a one-tailed hypothesis in relation to the implementation of IASs.

H_a23b. There is a positive association between IAS compliance and type of audit firm.

IASs Compliance Note

Listed Egyptian companies are simultaneously subject to various types of regulations (CA, CML, and IASs). Previous literature (Street & Bryant, 2000) suggests an association between the extent of IASs compliance and providing a compliance note. We utilize a one-tailed alternative hypothesis in relation to the IASs compliance note.

H_a24. There is a positive association between the presence of an IASs compliance note (either in the audit report or in a policy note) and the IASs disclosure levels.

Control Variables

Several factors have been identified by the extant literature as being relevant to the level of accounting disclosure and accordingly are included as control variables. These include size, three performance variables (leverage, profitability, and liquidity) and industry type.[13] A positive association between size and level of disclosure is expected based on the findings of Singhvi (1968), Chow and Wong-Boren (1987), Tai et al. (1990), Hossain, Tan, and Adams (1994), Patton and Zelenka (1997), Craig and Diga (1998), Owusu-Ansah (1998), and Naser (1998). Two measures are initially considered as surrogates for size: total turnover (sales) and total assets.

Leverage is included as a control variable based on the findings of Leftwich, Watts, and Zimmerman (1981), Hossain, Perera, and Rahman (1995), Craig and Diga (1998), Naser (1998), and Ferguson, Lam, and Lee (2002). Leverage is measured by the debt-to-equity ratio.

Empirical results are mixed concerning the effect of performance on disclosure. Cerf (1961), Singhvi and Desai (1971), Singhvi (1968), Owusu-Ansah (1998), and Naser (1998) found a positive association between profitability and disclosure. In contrast, Wallace and Naser (1995) found a negative association between profitability and disclosure. Profitability is included as a control variable and is measured as the ratio of return on equity (ROE).

Belkaoui and Kahl (1978) report a positive association between liquidity and level of accounting disclosure. Alternatively, Wallace et al. (1994) find a negative association. Liquidity is included as a control variable and is measured by the current ratio.

Prior research testing the relation between type of business (industry) and level of disclosure yields inconsistent findings. Stanga (1976) and

El-Modahki (1995) found industry to be a significant factor affecting accounting disclosure. In addition, Cooke (1989, 1991) found that industrial companies disclose more than non-industrial companies. Type of business is included as a control variable and is coded as "1" for manufacturing firms and "0" otherwise.

METHODOLOGY

The Model

In the current study, disclosure practices of listed Egyptian companies are represented by a number of disclosure scores. To provide empirical testing for the above hypotheses, the following model is constructed for each disclosure score:

$$\begin{aligned} \text{disclosure score}_j = {} & \beta_0 + \beta_1 \text{ legal form}_j + \beta_2 \text{ activity in share trading}_j \\ & + \beta_3 \text{ audit firm}_j + \beta_4 \text{ compliance note}_j + \beta_5 \text{ size}_j \\ & + \beta_6 \text{ leverage}_j + \beta_7 \text{ profitability}_j + \beta_8 \text{ liquidity}_j \\ & + \beta_9 \text{ type of business}_j + \text{e}_j \end{aligned} \tag{1}$$

where disclosure score_j denotes disclosure scores and sub-scores for companies ($j=1,\ldots, 72$); legal form, 1 for public sector companies and 0 for private sector companies; activities in share trading, 1 for actively traded companies and 0 for rarely traded companies; audit firm, 1 for international firms and 0 for local firms; compliance note, 1 for companies provided a note of IAS compliance and 0 for others; size = total assets; leverage = long term debt on capital employed; profitability = return on capital employed; liquidity = acid test ratio; type of business, 1 for manufacturing and 0 for others; and e_j = the residual.

Correlations between all independent variables show that legal form and size were highly correlated ($r=0.73$) and that audit firm and IASs compliance note were highly correlated ($r=0.70$). An examination of the correlations reveals no collinearity problems between the other independent variables. To address problems of collinearity, various combinations of independent variables were tested so that highly correlated variables were not included in the same model. The models with the highest explanatory power are reported in the results section.

Quantifying Disclosure

Accounting disclosure is measured by a checklist of 241 financial and non-financial items that a company may provide in its annual report. The disclosure list is based on a comprehensive analysis of the disclosure requirements of each of the regulations (CA of 1981, CML of 1992, and IASs). Three tests are then applied to every item.

1. Is the disclosure item jointly required by all three, two, or only one of the regulations?
2. In which section of the annual report is this item located?
3. Is the relevant regulation on this disclosure item available officially in the native language (Arabic)?

Our first test eliminates the effects of overlap where disclosure items are required by more than one type of regulation, thereby enabling us to distinguish newly introduced disclosures from those contained in new regulations that were also part of existing regulations. Utilizing the above three tests on the separate disclosure lists for the three regulations, we established five mutually exclusive sub-categories designating the type of regulation mandating the disclosure.

1. Disclosure items jointly required by all three regulations (old, new local, and new international).
2. Disclosure items required by new regulations only; local and international (CML and IASs only).
3. Disclosure items required by the local regulations only; old and new (CA and CML only).
4. Disclosure items required by the new local regulations only (CML only).
5. Disclosure items required by new international regulations only (IASs only).

Checklist items were also classified by location in the annual report (balance sheet, income statement, or notes to the accounts) (Cooke, 1989; Ahmed & Nicholls, 1994; Nicholls & Ahmed, 1995; Inchausti, 1997; Patton & Zelenka, 1997; Schleicher, 1998). This yielded nine sections in all (see Table 1).

All total and sub-scores were calculated separately from each company's annual report.[14] The analysis considers the entire annual report, which normally contains inter alia the report of the board of directors, the report of the auditors, the financial statements, and footnotes.

Previous research on Egypt reveals that, prior to changes in disclosure requirements, net profit, and dividends were the main items of interest to

Table 1. Nine Disclosure Sub-Scores of Disclosure Requirements of Egyptian Listed Companies.

Sub-Section	Components	Comment
Each of the following sections is the basis of a separate disclosure sub-score		
1	Balance sheet items jointly required by all three regulations (53 items)	Companies Act, CML, and IASs[a]
2	Income statement items jointly required all the three regulations (13 items)	Companies Act, CML, and IASs[a]
3	General information items jointly required all the three regulations (10 items)	Companies Act, CML, and IASs[a]
4	Additional balance sheet items required by the new regulations (20 items)	CML and IASs[b]
5	Additional income statement items required by the new regulations (5 items)	CML and IASs[b]
6	Additional general information, including accounting policies, required by the new regulations (105 items)	CML and IASs[b]
7	Board of directors' report items which are required by the established local regulations only (4 items)	Companies Act[c]
8	Statement of sources and application of funds required by the new local regulation only (16 items)	CML[d]
9	Cash flow statement required by the IASs only (15 items)	IASs[e]

[a]This section is familiar to practitioners because it is part of the established local regulation since 1981. It is available in Arabic (the native language) and required jointly by all three regulations.

[b]This section is not familiar to practitioners because it is require jointly by the new regulations (local/CML and international/IASs). It is available in Arabic.

[c]This section is familiar to practitioners because it was part of established local regulation (the CA) since 1981. It is available in Arabic.

[d]This section is not familiar to practitioners because it is part of the new local regulation (CML). It is available in Arabic. It is conflicting with IASs.

[e]This section is not familiar to practitioners because it is part of the newly mandated international regulation (IASs). It is not available in Arabic.

Egyptian users (Elsadik, 1990). During the era of central planning, the notes to the accounts were rarely disclosed (Mahrous, 1987; Tawfic, 1992). Additionally, research by Chang, Most, and Brain (1983) reveals inter-country variations in the importance of some parts of the annual report. The current research tests whether the regulatory change in Egypt was effective in increasing specific types of disclosure.

Scoring and Statistical Analysis

The content of each annual report is assessed by assigning each item on the disclosure checklist a "1" if disclosed and "0" if it is not disclosed (see e.g., Firth, 1980; Wallace, 1987; Cooke, 1989). To determine the applicability of each of the checklist items, the entire annual report was read prior to the scoring (see Cooke 1989; Hossain et al., 1994; Nicholls & Ahmed, 1995; Street & Bryant, 2000; Street & Gray, 2002). This prevented a company from being penalized for not disclosing items deemed irrelevant to its activities. The study used an unweighted scoring approach whereby the same importance was assigned to each disclosure item (Wallace, 1987; Cooke, 1989; Abayo et al., 1993; Belkaoui, 1994; Hossain et al., 1994; Street & Bryant, 2000). This minimizes subjectivity and also emphasizes the extent of overall disclosure, rather than emphasizing particular items (Belkaoui, 1994). The disclosure score for each company or item represents the ratio of the total actual score awarded to the maximum possible score relevant for that company or item.

Standard tests for normality reveal that the disclosures scores are not normally distributed. Consequently, non-parametric multivariate regression based on percentile ranks (Lang & Lundholm, 1993; Wallace & Naser, 1995) was utilized to test the hypotheses. The best fitting regression model was chosen based on the highest adjusted R^2 and the lowest standard error (Norusis, 1993; Bails & Pepper, 1993).[15]

Data

The two main year ends in Egypt are December 31st and June 30th. The annual reports covered in this research are for the financial year ended on either December 1991 or June 1992 (referred to as 1991–1992) and for the financial year ended on either December 1995 or June 1996 (referred to as 1995–1996). Levels of disclosure in the annual reports of 1991–1992 and 1995–1996 were measured in order to compare the outcome of the new CML to the situation immediately prior to its enactment. In August 1995, the 1992/1993 CML became mandatory in Egypt. Between 1991–1992 and 1995–1996 companies gradually adopted the requirements at varying rates. While 1995–1996 represents the first year of de jure implementation, full de facto implementation was not expected in 1995–1996 as the culture of secrecy and conservatism from the central planning era was expected to continue (Abd Elsalam, 2002). Additionally, as of 1995–1996, the CMA remained in a transition period and penalties for non-compliance were not yet fully applied.

Table 2. Characteristics of Sampled Companies.

Characteristic		Number		Number
Panel A: Characteristics of all companies tested for 1995–1996				
Share trading	Active	29	Not active	43
Legal form	Public	25	Private	47
Type of activity	Industrial	53	Non-industrial	19
Compliance note	IASs compliance note	14	Other compliance note	58
Audit firm	Big six	15	Others	57
Panel B: Characteristics of 20 companies available in both 1991–1992 and 1995–1996				
Share trading	Active	17	Not active	3
Legal form	Public	7	Private	13
Type of activity	Industrial	18	Non-industrial	2
Compliance note	IASs compliance note	4	Other compliance note	16
Audit firm	Big six	3	Others	17

The annual reports of listed companies are available from the CMA. However, in the first stage of the transition period, companies were not regular in filing their annual reports.[16] For the period of study, 89 companies from the initial sample of 100 were collected for 1995–1996. After excluding banks, financial companies, and incomplete reports, the final sample consists of 72 companies. Table 2 indicates the main characteristics of the final sample.

As indicated in Table 2, 1991–1992 annual reports were available for only 20 of the 72 companies.[17] Other 1991–1992 annual reports were not available due to the irregularity of filing during the era of central planning. During the central planning era, public sector (governmental) companies and private sector (mainly closed family) companies were not seeking external capital. If additional resources were needed, most companies preferred to seek bank loans.

RESULTS AND ANALYSIS

Hypothesis H1

Table 3 reports the analysis of the disclosure scores for 1991–1992 and 1995–1996. The results for the three total disclosure scores (CA, CML, and IASs) are provided in Panel A.

The first line of Panel A indicates that compliance with the established regulation (CA) was relatively high in 1991–1992 with a mean of 92% and

Table 3. Comparison of Disclosure Scores for 1991–1992 and 1995–1996 ($n = 20$).

	1991–1992			1995–1996		
	Mean	SD	Median	Mean	SD	Median
Panel A: Total disclosure scores						
CA score**	0.92	0.04	0.93	0.95	0.03	0.95
CML score**	0.73	0.06	0.72	0.84	0.09	0.86
IASs score**	0.76	0.05	0.76	0.84	0.07	0.83
Panel B: Disclosure sub-scores						
1. Balance sheet items						
CA + CML + IASs**	0.95	0.05	0.96	0.97	0.03	1.00
2. Income statement items						
CA + CML + IASs***	0.94	0.08	1.00	0.95	0.08	1.00
3. General information item						
CA + CML + IASs**	0.89	0.13	0.96	0.94	0.08	1.00
4. Balance sheet items						
CML + IASs*	0.75	0.32	0.92	0.82	0.27	1.00
6. Items in the notes						
CML + IASs**	0.55	0.21	0.57	0.76	0.15	0.74
7. Board of directors' report						
CA + CML***	0.69	0.19	0.67	0.67	0.18	0.67
8. Statement of sources and application of funds						
CML only**	0.15	0.37	0.00	0.50	0.51	0.50
9. Cash flow statement						
IASs only**	0.00	0.00	0.00	0.23	0.41	0.00

*Increase in scores is not significant at $p = 0.05$ but is significant at $p = 0.10$.
**Increase in scores is significant at $p = 0.05$ based on the Wilcoxon matched-pairs signed-ranks test and the paired samples t-test.
***Not significant.

increased further to 95% by 1995–1996. We suggest that compliance with the established regulation improved between 1991–1992 and 1995–1996 because companies responded to the new economic policy of privatization, the increase in stock exchange activity, and the expanded ownership base.

The second and third lines of Panel A indicate that some of the items required by the new regulations (CML and IASs) were voluntarily disclosed in 1991–1992 before the new accounting regulations were enacted (mean 73 and 76%, respectively). Both scores significantly increased in 1995–1996 (mean 84 and 84%, respectively). The improvement in 1995–1996 supports the argument that accounting regulation is essential for improvement in disclosure in a newly emerging capital market (Jaggi, 1975; Shaffer, 1995).

However, compliance in 1995–1996 was not as high as expected in a system where law and regulation are respected. Analysis of the sub-scores, as reported in Panel B, helps explain this observation.

Our results for disclosure sub-scores 1, 2, and 3 relate to aspects of the balance sheet, income statement, and general notes where the requirements of the CML and IASs repeated well-established rules of the CA of 1981. Compliance scores that were already high (mean 95, 94, and 89%, respectively) increased further (mean 97, 95, and 94%, respectively). Our interpretation is that the increased interest in transparency and external disclosure reflects a reaction to the increased activities of the Egyptian Stock Exchange in the early 1990s, the new economic policy of privatization, and the increase in the ownership base after privatization. Consequently, balance sheet disclosures and accompanying notes were improved to correct previous omissions during the central planning period. In 1991–1992, companies were already focusing more on the balance sheet and income statement than on the notes because the amount of net profit and dividends were the primary target of attention of Egyptian users (individual investors and government) (Elsadik, 1990). Accordingly, in 1995–1996 less scope existed for significant further increase in the disclosure of balance sheet and income statement items.

The results for disclosure sub-scores 4 and 6 (additional balance sheet items and note items, including accounting policies, required by the new regulations; the CML and IASs) show that some voluntary disclosure existed in 1991–1992 (means of 75 and 55%, respectively). This may be associated with the attempted development of non-mandatory Egyptian accounting standards based on IASs. By 1995–1996, the average level of disclosure for these scores was 82 and 76%, respectively. One cause for this limited improvement in disclosure was the continuing reluctance to disclose the market value of investments (less than 10% of the companies disclosed this item). That might be associated with the long-established culture of conservatism and disclosing only historical costs or it might reflect a lack of the experience and technical support needed for determining market value. While these findings may be disappointing in the context of a mandatory regulation, our interpretation is that companies were having difficulty in understanding some aspects of the regulation, especially where the CML referred the reader to an IAS for which an official translation was not available in the native language (Arabic).

The results for disclosure sub-score 7 (the information required in the report of the board of directors, duplicated in the CML and the CA) show no improvement for the majority of companies, between 1991–1992 (mean 69%)

and 1995–1996 (mean 67%). These requirements had existed since 1981 and therefore the results indicate that a plateau of disclosure had been reached. This has to be interpreted in the context that one of the disclosure items, the market value of land, was rarely disclosed (less than 10%). We interpret this as showing persistence of the long-established policy of conservatism.

The results for disclosure sub-scores 8 and 9 (statement of sources and application of funds and cash flow statement) show that disclosure was relatively low in 1991–1992 (means of 15 and 0%, respectively) but increased significantly (means of 0.50 and 0.23%, respectively) in 1995–1996. The significant increase in these aspects of disclosure supports the effectiveness of mandating disclosure in emerging markets (Jaggi, 1975; Shaffer, 1995). However, familiarity with new regulations and the enforcement mechanism still required improvement to be achieved over time.

Item-by-item analysis revealed the reluctance of companies to disclose the market value of assets (which is prohibited by tax laws) despite a significant difference from book value. This suggests that companies preferred compliance with tax law to compliance with the new capital market regulations. In addition, many companies did not disclose related party information in spite of its importance in the context of family-owned companies (less than 10% of the companies disclosed this item).

In summary, our findings in regard to hypothesis H1 indicate that disclosure in our matched sample was significantly higher in 1995–1996 than in 1991–1992. This is explained partly by the new regulations mandated for the revitalization of the stock exchange. It is also explained by an improvement in compliance with established regulations that may be interpreted as enhanced awareness of detailed rules and more openness due to the privatization program and the need to raise equity capital.

Hypothesis H2

We applied cross-sectional analysis to the full sample of 72 companies for 1995–1996 (the first period immediately after the new regulations became mandatory) using a multivariate regression procedure. Our aim was to explore any association between disclosure practices and company characteristics immediately after the new regulations became effective. For each of the total disclosure indices and sub-indices, the resulting models with the highest R^2 are reported in Tables 4 and 5.

Table 4 shows that legal form of companies and activity in share trading in the stock exchange were strong determinants of the CA and CML

Table 4. Cross-Sectional Study Corporate Characteristics Associated with Each Disclosure Score ($n=72$).

Characteristic	Disclosure Score		
	CA	CML	IASs
Constant			
Coefficient	0.367	0.213	0.267
t-statistic	0.000***	0.020**	0.003***
Legal form			
Coefficient	0.576	0.438	0.530
t-statistic	0.000***	0.000***	0.000***
Audit firm[a]			
Coefficient	0.107	0.076	0.469
t-statistic	0.290	0.415	0.000***
Activity in share trading			
Coefficient	0.252	0.365	0.121
t-statistic	0.024**	0.001***	0.214
Type of business			
Coefficient	0.079	0.146	0.343
t-statistic	0.416	0.107	0.000***
Leverage			
Coefficient	−0.145	−0.001	−0.217
t-statistic	0.179	0.990	0.025**
Profitability			
Coefficient	0.043	0.099	0.128
t-statistic	0.690	0.315	0.179
Liquidity			
Coefficient	−0.101	−0.051	−0.194
t-statistic	0.311	0.578	0.030**
Adjusted R^2	0.41	0.50	0.54
SE	0.23	0.21	0.20
Model significance	0.000	0.000	0.000
F-value	7.932	11.117	12.654

Notes: CA = Established regulation. CML = New regulation in native language. IASs = New regulations (part translated to native language only). Size is excluded because of correlation with legal form. IAS compliance note is excluded because of correlation with audit firm.
[a]IASs compliance note was significant in model where audit firm was not tested. These variables mirror each other due to their strong correlation.
**$p<5\%$.
***$p<1\%$.

disclosure practices of Egyptian listed companies in 1995–1996. This is consistent with political costs and capital need theories. Public sector companies in the process of privatization were at the forefront of governmental attention. Additionally, lower disclosure by companies with

Table 5. Cross-Sectional Study Corporate Characteristics Associated with Each Disclosure Sub-Score ($n = 72$).

Characteristic	Disclosure Sub-Score						
	1	2	3	6	7	8	9
	Balance Sheet	Income Statement	General Information	Items in Notes	Directors' Report	Funds Flow Statement	Cash Flow Statement
Constant							
Coefficient	0.275	0.338	0.543	0.386	0.427	0.285	0.323
t-statistic	0.011**	0.001	0.000***	0.001**	0.000***	0.001**	0.001**
Legal form							
Coefficient	0.324	0.519	0.437	0.168	0.011	0.307	0.459
t-statistic	0.019**	0.000***	0.001**	0.217	0.943	0.014**	0.001**
Audit firm[a]							
Coefficient	0.165	0.235	−.202	0.313	0.302	−0.120	0.593
t-statistic	0.155	0.044**	0.066*	0.008**	0.055*	0.249	0.000***
Activity in share trading							
Coefficient	0.088	0.212	0.204	0.066	0.349	0.286	−0.099
t-statistic	0.477	0.090*	0.084*	0.597	0.027**	0.013**	0.402
Type of business							
Coefficient	0.191	0.055	−0.053	0.363	−0.162	−0.042	0.130
t-statistic	0.088*	0.618	0.614	0.002**	0.265	0.674	0.218
Leverage							
Coefficient	0.043	−0.053	−0.171	−0.284	−0.070	0.198	−0.038
t-statistic	0.726	0.663	0.141	0.022**	0.631	0.076*	0.746
Profitability							
Coefficient	0.183	−0.037	0.041	0.088	0.018	0.052	0.060
t-statistic	0.134	0.762	0.719	0.468	0.903	0.638	0.601
Liquidity							
Coefficient	−0.174	0.013	−0.128	−0.114	−0.221	0.058	−0.067
t-statistic	0.128	0.906	0.233	0.315	0.120	0.573	0.531
Adjusted R^2	0.23	0.24	0.32	0.24	0.15	0.37	0.31
SE	0.25	0.23	0.23	0.26	0.19	0.20	0.21
Model significance	0.001	0.001	0.000	0.001	0.039	0.000	0.000
F-value	4.096	4.147	5.732	4.116	2.345	7.007	5.497

[a]IASs compliance note was significant in the model where audit firm was not tested. These variables mirror each other due to their strong correlation.

*$p < 10\%$.

**$p < 5\%$.

***$p < 1\%$.

inactive share trading may be an indication of managerial behavior reflecting a corporate culture of secrecy, as a legacy of the previous era. IASs total disclosure scores were significantly associated with legal form, audit firm, type of business, leverage, and liquidity. Although this model reveals different significant explanatory variables compared to those for the CA and CML, the overlap of disclosure requirements across the regulations means that the incremental effect of introducing international standards is not identifiable from the analysis in Panel A.

For further insight, it is necessary to turn to Table 5 that analyses the various sub-sections of the total scores.[18]

Our results for sub-score 1 (balance sheet items jointly required by the three regulations) show that the best determinant of disclosure is legal form. Political costs for public sector companies arise because they are at the forefront of government attention in the privatization program. For sub-score 2 (income statement items required by the three regulations), we find that legal form and audit firm are determinants of the observed disclosure. We used legal form to represent the theory of political costs. Choice of audit firm may be a type of signaling where the quality of the company's disclosure is related to the quality of auditor. For sub-score 3 (general information items in the notes required by the three regulations), only legal form is a significant determinant. This again supports interpretation in terms of political costs.

For sub-scores 4 and 5 (additional balance sheet and income statement items required by the new regulations, CML and IASs, only) no independent variable was significant at 5%. For sub-index 6 (the items in notes required by the new regulations, CML and IASs, only), audit firm, type of business, and leverage were significant determinants of level of disclosure. We interpret the significance of audit firm as evidence of the effect of familiarity and a language barrier. Some of the IASs disclosure items required in this sub-index were not publicly available in Arabic translation. The type of business may indicate political costs because manufacturing companies were those moving from government ownership to privatization (McKee, Garner, & McKee, 1999). Sub-index 7 covers the items of the directors' report where regulation is duplicated by the established regulation (CA) and the new regulation (CML). Activity in share trading is a significant determinant of disclosure. We explain this as a reflection of capital need.

Sub-index 8 reports compliance with the CML requirement in preparing a statement of sources and application of funds. The complication for Egyptian practitioners was that the CML drew its statement of sources and application of funds from a previous version of IAS 7, superseded by the

current IAS 7 on cash flow statements.[19] Presentation of a statement of source and application of funds was associated significantly with activity in share trading and legal form. Our interpretation is that companies producing the statement of source and application of funds were motivated by capital need and political costs. Sub-index 9 measured compliance with the up-to-date version of IAS 7 on cash flow statements. There was confusion among Egyptian companies because the CML not only prescribed a statement of source and application of funds but also required compliance with the IAS prescribing a cash flow statement. The scores in sub-index 9 were associated with type of audit firm and legal form. Our interpretation is that international audit firms were more confident and more knowledgeable in presenting cash flow statements under IASs. The significance of legal form for sub-scores 8 and 9 is interpreted in terms of a unique reaction of public sector companies, which tried to overcome the contradiction in regulations by providing both a statement of source and application of fund and a cash flow statement.

In summary, capital need and political costs are recurring theoretical explanations. Companies audited by one of the major international audit firms were encouraged to disclose more information in the notes, including accounting policies and a cash flow statement.[20] This reflects the expertise of international firms in being more familiar with IASs provisions, which were not available in Arabic at this early stage of adoption by Egyptian companies.

CONCLUSION

Our research provides evidence that when new regulations are introduced in emerging markets, less than full compliance is likely to occur in the first year of mandatory application. By separating the elements of each regulation, we reveal that the primary problems lie in those aspects of the new regulated disclosures that are not familiar from previous practice. Our findings further provide evidence that the force of mandatory regulation yields an improvement in compliance with IASs, even in those instances where there was some voluntary compliance prior to the formal implementation of new laws requiring IASs. We report the extent of the problem in a developing country and show that the greatest problem lies in new regulations that require education and training. Achieving education and training success is likely to be more problematic in developing countries where there are limitations on financial and technical resources.

A detailed subdivision of disclosure items reveals that compliance with relatively unfamiliar aspects of IASs was less complete than compliance with aspects of IASs appearing in previous local regulation. The legacy of the previous era of central planning, secrecy, and conservatism is reflected in the reluctance of Egyptian companies to disclose the market of value of investments and the market value of land in spite of the significant difference (as documented by inflation indices) between the market and book value. This may reflect a continuation of the conservatism policy deeply rooted in the Egyptian culture. Non-compliance with related party disclosure also reflects continued secrecy. At this early stage of privatization and new regulations, non-compliance costs were lower than compliance cost due to the time needed by the CMA to adapt to the new regulations (new CML and IASs). Penalties for non-compliance were not fully applied in the first year. Our findings support Cooke and Wallace (1990) in their conclusion that the effectiveness of financial disclosure regulation in a country is a function of regulatory requirements and the degree of enforcement. Our findings, if replicated in studies on other countries, could have implications for understanding the rate of achieving de facto internationalization of accounting standards. In spite of formally adopting IASs in Egypt, there was variation in the level of practice between different companies. In particular, our study supports Rahman et al. (2002) in that varying strengths of different national regulatory regimes and other environment differences may give rise to different practices and affect the level of de facto harmony between countries.

Our study overcomes two of the limitations of prior research highlighted by Wallace et al. (1994). First the study focuses on the construction of the disclosure checklist and second it controls for the potential effect of the regression equation by comparing the results of several regression procedures (Cooke, 1998). The process of tailoring and analyzing the subsections of a disclosure list for mandatory requirements of listed companies in an emerging capital market makes a contribution to the literature on accounting disclosure by demonstrating that hypothesis testing and research design may be focused on the issues under investigation. Research design should not be excessively constrained by a desire only for replication and comparability with prior work, particularly when exploring issues specific to emerging markets. The complexity of change in the regulations of accounting disclosure and the accompanying complexity of change in the environment of those regulations and disclosures may be incorporated in the research design so that conclusions are robust in presenting detailed evidence and specific explanations of change.

Limitations of this study mainly reflect the practical problems of obtaining representative samples. In particular, we were constrained by the availability of annual reports for 1991–1992. Thus, the current results should be interpreted with caution. The scoring process may be limited by subjectivity that cannot be entirely eliminated. Finally, the results of this study are time-specific because of our focus on a unique event of major change in regulation. While it is recognized that research has its limitations, this exploratory study offers a contribution to the international accounting literature by providing a detailed analysis of accounting regulation in an emerging market during a period of complex change.

NOTES

1. Egypt is an important and influential country in the Middle East. ''Egypt has traditionally played a pivotal role in Middle Eastern politics'' (Merrill Lynch, 1996, June). Also, it has been a recognized leader of the Arab world (EIU, 1995). The EU is Egypt's most active trading partner for both imports and exports (Arab-British Trade, 1999). The United States is Egypt's second largest trading partner, after Europe. According to the U.S. Embassy in Cairo, approximately 230 U.S. companies are investing in Egypt. (ACCE, 2000). Egypt has been highlighted as the fifth cheapest market for investors worldwide (Flemings Global Emerging Markets Earnings Guide, 1999, June).

2. The CML No. 95 is issued by the Ministry of Finance and administered by the Capital Markets Authority (CMA).

3. This comparison takes into account the complexity that some or all of the new regulatory requirements may already be made available by some companies on a voluntary basis.

4. During the period covered by this research, employees of the supervisory body; the CMA, were only beginning to receiving training in the new regulations and the IASs from one of the major international accounting firms. For supervisory purposes, CMA was using a fairly basic disclosure checklist. Indeed the checklist was less detailed than the one used in this research. Accordingly, non-disclosure could easily escape the attention of the CMA staff. Mandating IAS in Egypt has required extensive training and updating for accountants, thereby resulting in relatively high costs of compliance compared with very low non-compliance costs.

5. Government ownership of public sector companies ranged from 51 to 100%. These companies were listed in the Stock Exchange as a pre-stage for issuing securities for public subscription as part of the privatization program.

6. Listed companies were offered a number of tax exemptions. An amount was allowed equal to interest on the paid up capital of a listed joint-stock company at the prevailing interest rate on time deposits at banks in Egypt for one year. Capital gains on sales or transfers of securities were not taxable. Corporate dividends from shares and interest from debentures and bonds listed on the Egyptian Stock Exchange were

not taxable on condition that the company acquired the shares of the other company on its foundation (Moore, 1995).

7. A World Bank (2002) report noted that the pool of closely held companies had risen to approximately 900, with only another 100 shares being actively traded.

8. The law on financial reporting is separate from the law on tax reporting. Listed companies should prepare the balance sheet and other financial statements according to the accounting criteria referred to in the executive regulations of the CML and IASs. Income from the audited financial statements of corporations is then adjusted for any differences between tax law and financial reporting regulations to arrive at income for tax returns (McKee et al., 1999). However, in practice many companies are influenced by tax regulations. As stated in a report issued by the World Bank (2002) "Tax accounting often takes precedence over sound general-purpose financial reporting. To ensure favorable tax outcomes, the tax partner, the audit partner, and the client work together to select accounting treatments and prepare appropriate disclosures for reporting in the financial statements".

9. During the twentieth century Egypt has had four different economic stages as follows:

a. Pre-1956 (large private ownership).
b. From 1956 to 1973 (nationalization and a socialist era).
c. From 1974 to 1991 ('open door policy' and encouraging foreign investment).
d. After 1991 up to the date of this research (privatization and revitalizing the capital market).

10. In developing countries, prevailing problems of culture, environment, and economy lead to an expectation that the reliability of financial disclosures will not be high unless legal disclosure regulations are set. If the disclosure of information in these countries is primarily left to individual companies supervised by the professional bodies, there appears to be a very small probability that this reliability can be improved. The intervention of governments through accounting and disclosure regulation may be essential to ensure higher reliability of financial disclosure, which is vital for the expansion of a developing country's capital market and industries (Jaggi, 1975).

11. Greater financial disclosure may be perceived by companies as reducing investor uncertainty and may allow that new capital be raised more cheaply (Choi, 1973; Firth, 1980; Cooke, 1993).

12. International Accounting firms can only operate in Egypt through an Egyptian partner (correspondent). In Egypt, the audit profession and auditor independence have been well regulated since the 1950s. At the time of this research, the IASs were newly mandated in Egypt. Previously there had been no great local interest in the IASs. It is expected, therefore, that major international audit firms would be more familiar with the IASs because of their international relations. In addition, only part of the IASs was translated into the native language at that time in Egypt.

13. In Egypt most manufacturing companies had a majority government ownership, as stated by McKee et al. (1999) "Egyptian industry is still largely controlled by the public sector".

14. Since sub-score 5 contained only five items that were infrequently relevant to the companies sampled, it is not reported in the empirical findings.

15. Space precludes publishing details of all regressions. They are available from the first-named author on request.

16. This improved later, after delisting a number of non-compliant companies in 1997 and opening a disclosure department where all annual reports can be collected after paying a nominal fee.

17. The 20 companies represented a good range of size, profitability, leverage, and liquidity. Seven of the companies were public sector, 18 were industrial companies and 17 were actively traded in the stock exchange.

18. The trade-off for greater insight is that the explanatory power in adjusted R^2 falls.

19. IAS 7 cash flow statement was issued in 1992, becoming effective in 1994. It replaced a previous standard IAS 7 statement of changes in financial position (issued 1977), which required a statement of source and application of funds. The move to a cash flow statement was a major change of direction but the CML retained the previous approach of source and application of funds. (http://www.iasplus.com/standard/ias07.htm). The text has been reworded and made clearer.

20. There were six international audit firms at the time of this study.

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(CA) Companies Act No. 159 of 1981.

(CML) Capital Market Law No. 95 of 1992; CML, its Executive Regulations 1993 and Investors Guidance. Capital Market Authority (CMA), 1993.

(IASs) International Accounting Standards, 1995. International Accounting Standards Committee.

CRITICALLY APPRECIATING SOCIAL ACCOUNTING AND REPORTING IN THE ARAB MIDDLE EAST: A POSTCOLONIAL PERSPECTIVE

Rania Kamla

ABSTRACT

There has been no comprehensive or detailed study in respect of social accounting and reporting practices in the Arab countries of the Middle East. Indeed, very little is known about accounting practices and accounting regulations in the Arab Middle East (AME hereafter), with most studies available in the English-speaking world being concerned mainly with the larger and more economically significant countries of the AME, such as Egypt and Saudi Arabia. This study attempts to fill this gap in the literature by exploring and bringing insights into social accounting and reporting practices in a selection of AME countries, namely: Saudi Arabia, Kuwait, Qatar, Bahrain, Oman, United Arab Emirates (UAE), Syria, Jordan and Egypt. The concern of this study is to explore the actuality and potentiality of social accounting manifestations in the AME from a critical and postcolonial perspective. Pursuing a critical and postcolonial perspective that is sensitive to the context of the AME, it is concluded that social accounting manifestations in the AME are largely

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orientated towards 'repressive/counter radical' positions of accounting. The study, in addition, considers the potentiality of more radical positions of social accounting in the AME inspired by a critical approach and the particular history and culture of the AME.

INTRODUCTION

Social accounting literature has criticised current social accounting manifestations in the Western context as failing to significantly play an emancipatory role in society. Critics argue that social accounting has been hijacked by business for its own problematic public relations purposes, has been mobilised to enhance business managerial control and has been largely captured by the dominant economic interests of business organisations.[1] Social accounting and reporting manifestations, they argue, have been 'mildly progressive', failing to challenge the economistic focus of accountings or to go beyond these accountings. Current manifestations of social accounting and reporting, consequently, have been orientated towards a 'repressive/counter radical' form of accounting rather than an 'emancipatory/radical' form of accounting (see, for instance, Gallhofer, Haslam, & Lehman, 1998; Gray, 1999, 2000a, 2000b; Richardson, Welker, & Hutchinson, 1999; Owen, Swift, Humphery, & Boweerman, 2000; Dey, 2001; Gray & Bebbington, 2001; Gallhofer & Haslam, 2003; O'Dwyer, 1999, 2003; Gallhofer & Haslam, 2003). This study aims at critically exploring the actualities and potentialities of social accounting and reporting manifestations with regard to their volume, quality and nature in 68 company annual reports in nine Arab Middle East (AME) countries.[2] With this emphasis, the study is a timely one in that all AME countries in this study are increasingly moving from a central economy system to a free market system. This move influences the role of accounting and disclosure in these countries (see Dorsa, Gallhofer, & Haslam, 1995). It would be interesting to examine the way these moves influence the practice of social disclosure in AME companies' annual reports and whether these social disclosures resemble Western ones in their orientation towards 'repressive/counter radical' positions or if they have any emancipatory potentials that go beyond the limitations of these Western practices. After all, as it will be argued in this study, accounting practices in the AME have long been influenced by the Western system and experience.

In this sense, the critical analysis will concentrate on how the socio-political and economic context of the AME, including the colonial experience, has

influenced the way accounting in general and social accounting in particular are regulated and practised in these countries. The analysis exposes the impact of the colonial and neo-colonial experience on accounting in general and social accounting practices in particular in the postcolonial Arab world, gives a voice to that part of the world by attaching due value and respect to their cultural beliefs and philosophy and envisions a way-forward for the betterment of social accounting and reporting practices in these countries enlightened by the thoughts of postcolonial theory, which argues in favour of hybridity and a transcultural/transactive discourse.

This study contributes to the social accounting literature by bringing insights from the AME, where little is known about its social accounting manifestations (see Naser & Abu-Baker, 1999; Abu-Baker & Naser, 2000; Attia, 2000; Jahamani, 2003; Al-khater & Naser, 2003). It also contributes to critical accounting research through intervening in a study of accounting from a critical and postcolonial perspective – a perspective which is not significantly employed in exploring and researching accounting in the AME. For example, studies such as Naser and Abu-Baker (1999), Abu-Baker and Naser (2000), Attia (2000), Jahamani (2003) and Al-Khater and Naser (2003) in the social accounting literature and Abdeen and Yavas (1985), Kayed (1990), Al-Rehaily (1992), Fakhra (1992), Helles (1992), Al-Rumaihi (1997), Suwaidan (1997), Abd-Elsalam (1999), Beard and Al-Rai (1999), Joshi and Ramadhan (2002), Abd-Elsalam and Weetman (2003), HassabElnaby, Epps, and Said (2003) and Islam (2003) in the international accounting literature lack, in most cases, significant engagement with critical theorisation and perspectives, including the postcolonial one.

SOCIAL ACCOUNTING AND REPORTING

Despite what may be reasonably identified as major advances in social accounting and reporting in the last decade, there is still a considerable level of controversy concerning its nature, content, focus and main purpose(s). This controversy makes it difficult to give social accounting a specific and agreed upon definition (Gray, 2000a, 2000b). Gallhofer and Haslam (2003) explain that questioning of the role and impact of business on society has resulted in calls for more openness and transparency that, in part, translated into calls for social accounting and reporting. Social accounting and reporting in this regard means extending the accountability of business organisations beyond the traditional role of providing a financial account to the owner of finance to include other users, including the public at large

(Gray, Owen, & Maunders, 1987; Gray, Owen, & Adams, 1996; Gray, Dey, Owen, Evans, & Zadek, 1997). The end purpose of social accounting and reporting would be about enabling accounting to participate in achieving the welfare of the whole society. Bebbington (1997), in this regard, elucidates that social and environmental accounting is concerned with: "... exploring and developing new forms of accounting which are more socially and environmentally benign and which have the potential to create a fairer more just society". For accounting to play a role in creating a fairer and just society it needs to be enabling and emancipatory. In other words, it is accounting that poses a challenge to existing practices and goes beyond their conventions. Bebbington (1997) notes that "... there is a case to be made that SEA [Social and Environmental Accounting] is an enabling, empowering and emancipatory form of accounting in that it provides both a critique of existing practice and develops alternative accounting practice". The association of social accounting with the concept of emancipation has been explicitly put forward in accounting literature (see Tinker, 1984a, 1984b, 1985; Gray, 1992; Owen, Gray, & Bebbington, 1997; Bebbington, 2001; Bebbington, Gray, & Owen, 1999). Gallhofer and Haslam (2003, p. 106) have also discussed social accounting in relation to its emancipatory potential. They explained that "social accounting has been mobilised as an accounting challenging conventional accounting and, on the face of it, as an accounting reflecting a concern to go beyond a narrow instrumentalism ... thus, the mobilisation of social accounting is suggestive of accounting being aligned with the idea of emancipation".

Social accounting and reporting manifestations, however, have largely failed to deliver on this enabling and emancipatory potential. The social accounting literature has criticised social accounting and reporting practices and initiatives on the grounds that they have been predominantly voluntary (not prescribed by law), where business organisations play the role of a social agent – a situation which, Gallhofer and Haslam (2003) explain, allowed business to hijack social accounting for their own problematic public relations purposes. Social accounting and reporting, therefore, have been perceived as a 'public relation opportunity' promoted to business as routine, simple and a straightforward process that resembles financial accounting and reporting (see Gray, 1999; Owen et al., 2000; Gallhofer & Haslam, 2003). Social accounting and reporting practices, consequently, concentrated, in most cases, on the telling of the good news and countering the bad news. In addition, social reports have rarely been independently attested or verified, failing, as a result, to provide the appropriate assurance to report users (see Gallhofer & Haslam, 1993; Gray, Kouhy, & Lavers,

1995a; Zadek, Pruzan, & Evans, 1997; Gray, 2000a, 2000b; Ball, Owen, & Gray, 2000; Owen & O'Dwyer, 2004).

While these concerns are expressed in relation to social accounting and reporting manifestations in the Western context and literature, little is known about these manifestations in the AME. This study is concerned with putting forward debates, insights and manifestations in respect of social accounting and reporting in a number of Arab companies in the Middle East.

CRITICAL INSIGHTS INTO SOCIAL ACCOUNTING IN THE AME FROM A POSTCOLONIAL PERSPECTIVE

The critical accounting school has argued that any empowering and emancipatory form of accounting should first challenge the status quo where there is a social conflict between structurally advantaged and disadvantaged groups in society.[3] Accounting, according to the critical school, functions as a political tool, which, to a large degree, is mobilised repressively in society to embrace and protect interests of capital and shareholders (Tinker, Lehman, & Neimark, 1991; Gallhofer & Haslam, 2003). The critical approach in accounting literature, in most cases, however, has fallen short of extending the conflict-based argument to encompass the impact of the colonial and imperial experience on accounting and the role of accounting in societies of the postcolonial world.[4] Postcolonial theories and studies, in this regard, by taking a significant position against imperialism and Eurocentrism (Bahri, 2001), provide a good basis for the extension of the critical school debates to accommodate insights from a non-Western perspective.

Postcolonial studies and theory are mainly concerned with the process of 'revisiting, remembering and, crucially, interrogating the colonial past', in order to disclose a relationship between 'reciprocal antagonism and desire between coloniser and colonised'. Unfolding this troubled and troubling relationship should start to discern the ambivalent prehistory of the colonial condition (Gandhi, 1998, p. 5). Gandhi (1998) explains that colonialism could take two forms. The first form is the 'physical conquest' of territories. The second form is committed to the conquest and occupation of minds, selves and cultures. While the 'physical conquest' form is more violent, it is transparent in its self-interest, greed and rapacity. The second form, however, is more confusing as it is pioneered by rationalists and liberals who argued

that imperialism was really the 'messianic harbinger of civilisation' to the uncivilised world (Gandhi, 1998, p. 18). Colonialism/imperialism, consequently, is viewed beyond the 'physical conquest' of territories and these territories' resources to mean "the historical process whereby the "West" attempts systematically to cancel or negate the cultural differences and value of the 'non-West'" (Gandhi, 1998, p. 16). Said's (1978) influential book '*Orientalism*' emphasises the way in which European culture, colonial power, especially that of Britain, France and the US, have been able to dominate, structure and have authority over the Orient.[5] Said (1978, p. 7) explains that Orientalism is never far from the 'idea of Europe', the strong notion of identifying 'us' Europeans as against all 'those' non-Europeans. Said argues that a major component in European culture perceives European identity as a superior one in comparison to all the non-European peoples and cultures, which makes the culture hegemonic both in and outside Europe. Thus, a "very large mass of writers, among whom are poets, novelists, philosophers, political theorists, economists, and imperial administrators" have accepted the basic distinction between East and West as the starting point for elaborating accounts and "making statements concerning the Orient, its people, customs, mind, destiny and so on" (Said, 1978, pp. 1, 3, 5). The West consequently saw itself as a dynamic, innovative, expanding culture. It saw (sees) itself as "the spectator, the judge and jury of every side of Oriental behaviour". This became part of its imperial pride. In 1910, the French advocate of colonialism Jules Harmond illustrated this argument when he stated:

> It is necessary, then, to accept as a principle and point of departure the fact that there is a hierarchy of races and civilisations, and that we belong to the superior race and civilisation, still recognising that, while superiority confers rights, it imposes strict obligations in return. The basic legitimation of conquest over native people is the conviction of our superiority, not merely or mechanical, economic, and military superiority, but our moral superiority. Our dignity rests on that quality, and it underlies our right to direct the rest of humanity. Material power is nothing but a means to do that. (Said, 1993, p. 17)

Even after independence, imperialism and Orientalism have continued to shape and define the relationship between East and West. Victorious nations after the end of World War II drew up agreements that would guarantee control and management of the world economy through effective international institutions and principles under the acknowledged leadership of the US (Hoogvelt, 1997).[6] The provision of aid and development programmes provided by these international institutions to the developing world depended in many cases on the readiness of these countries to undertake social, cultural and political changes (Hoogvelt, 1997; Held & McGrew, 2002). Economists

hired by the US as practical advisers and people responsible for aid missions told us how cultural diffusion and the introduction of technology from the outside were frustrated by the negative role that traditional culture played in 'blocking' development. Traditional institutions or values on many occasions were considered 'dysfunctional' to the process of development and regarded as 'problems' that comprehensive socio-economic planning could be designed to correct. "Progress became a matter of ordered social reform" (Hoogvelt, 1997, p. 36). Modernisation and progress in practice came to be the convergence of less-developed societies to the Western model (Hoogvelt, 1997).[7] Accordingly, Westerners may have physically left their old colonies in Africa and Asia, but they retained them not only as markets but also as 'locales on the ideological map' over which they continued to rule morally and intellectually (Said, 1993, p. 27). As a result, most former colonies, in today's global context, are far from free of colonial influence or dominance. In other words, the celebration of independence marks the march of neo-colonialism in the guise of modernisation and development in an age of increasing globalisation and transnationalism (Bahri, 2001). The 'visible presence rule', accordingly, is replaced with the 'invisible government' of corporations, banks and international organisations (the IMF and the World Bank, for example) (Held & McGrew, 2002, p. 13). Imperialism, in a sense, has continued to linger in a new mode of Western imperialism. As Petras and Veltmeyer (2001) note, globalisation is "not a particularly useful term … it can be counterpoised with a term that has considerably greater descriptive value and explanatory power: imperialism" (p. 12; Held & McGrew, 2002, p. 84). It is not surprising then that when the West talks about universalism in any field (whether classics, historiography, anthropology and sociology and even international accounting) this universality is Eurocentric on the extreme, as if other literature, culture and societies had either an inferior or transcended value (Said, 1993).

POSTCOLONIALISM: A WAY-FORWARD

Postcolonial theorists attempt to remind us that the experience of imperialism/colonialism made the East an integral part of European material civilisation and culture, and in the same time, Western imperialism imported many of its cultural components to the East. Therefore, partly because of empire, all cultures are involved in one another; none is single and pure, all hybrid, heterogeneous, extraordinarily differentiated and unmonolithic (Said, 1993, p. xxix). In postcolonial discourse, therefore, hybridity is

celebrated and privileged as a kind of superior cultural intelligence owing to the advantage of 'in-betweenness', the straddling of two cultures and the consequent ability to 'negotiate the difference' (Hoogvelt, 1997, p. 159). Postcolonial contemporary thought, thus, argues for the abandonment of the clash of civilisations and confrontation old story, to be retold with an eye on the transactive/transcultural aspect of postcolonialism that involves a two-way process of interactive dialogue, negotiation and exchange and the equal participation of East and West in the transnational institutions of global governance (Gandhi, 1998). Global governance with its international institutions, as a result, would revolve towards 'mutual transculturalism' where the colonised culture is less repressed and ignored and the West does not remain the privileged meeting ground for all cross-cultural conversations, but where there is an acknowledgement that the colonised people should be heard from, and their ideas known (Said, 1993).

The above debates under postcolonial theory and studies could contribute significantly to accounting and social accounting discourse by exposing the way that Western imperialism has to a great extent shaped accounting systems and practices in the colonised world, including the AME. Furthermore, postcolonial studies' emancipatory potential lies, partly, in their ability to give a 'voice' to the subordinated group of the postcolonial world by attaching due value and respect to their cultural beliefs and philosophy and bringing an insight from these beliefs and values that could enrich the process of setting national or international standards and initiatives, and go beyond the dominant economistic dimension of Western accounting systems (see Hopwood, 1983; Gallhofer & Haslam, 1991; Lowe, Gallhofer, & Haslam, 1991; Gray & Bebbington, 2001). Postcolonial theory, in addition, allows us to realise how the colonial experience has affected the coloniser and the colonised, a realisation that helps in linking their experiences and potentially creating a common ground for developing a universal framework for global accounting/social accounting, where transactive and transcultural interactive dialogues form the basis for communication.

COLONIALISM AND ACCOUNTING IN THE AME

All of the Arab countries in this study have at one time been under Western powers control. At the end of the 19th century, as the Ottoman troops began laying down their weapons, the Allies were in full control of the disposal of Ottoman territory.[8] The long-standing Western colonial presence and influence in the area has, to a large extent, shaped accounting systems in

these countries. As is the case of many countries that were at one time part of the British or French Empire, these countries found that when they achieved their independence they had a professional accounting body and companies' legislation based on the British (or French) models (Briston, 1990). In Egypt, for example, as a result of the British colonial influence from 1882 to 1956, the training of accountants, the organisation of the accounting profession, the law regulating companies, disclosure standards and the financial reporting practices were based on those of the UK (Samuels & Oliga, 1982). The Egyptian accounting system, developed in this manner, was passed on to the Syrians through the United Arab Republic (UAR), and to Saudi Arabia and other Gulf States through Egyptian experts working there (Al-Rehaily, 1992).[9] After independence, at the end of WWII, the majority of AME countries in this study, like the Gulf States and Jordan, remained absolute monarchies, ruled by the same families appointed by the British during their rule in the area (Cleveland, 1994; Anderson, 2000). These countries maintained close relations, especially economic ones, with Britain and the West. They also undertook or adhered to development and economic programmes prescribed to them by Western experts, whether working in multinationals operating in these countries, including accounting firms, or in international organisations such as the World Bank and IMF. Even countries like Syria and Egypt, which after independence formed a Pan-Arab, socialist Republic, have in recent decades taken major steps in moving away from the central government policies and opening up to the free market ideology and foreign capital. Indeed all of the Arab states in this study have been moving steadily away from central economic planning to market economy and open door policies. Striving to participate in the global economy, Arab states are taking major steps in enhancing the private sector role in the economy, developing foreign business and economic liberalisation and, in many cases, privatisation programmes. A number of Arab countries have undertaken IMF and World Bank development programmes, such as Egypt and Jordan, for guidance on economic liberalisation. Egypt became the first Arab nation to experiment with economic liberalisation and privatisation, from the mid-1970s onwards (McKee, Garner, & McKee, 1999).[10] Similarly, in Saudi Arabia and other Gulf Council Countries (GCC), private sector investments are encouraged and recent development plans are giving priority to privatisation programmes, increasing the number of workforce in the private sector and bringing about greater private sector participation in infrastructure and offer development projects. Syria is the last of the Arab states to bring about economic liberalisation and reforms, with these reforms accelerating after

the death of late President Hafez Al-Assad and the succession of his son Bashar (McKee et al., 1999; Lopez-Claros & Schwab, 2005; Europa Regional Surveys of the World, 2005).

In this context, the influence of Western accounting systems on AME countries continued even after independence. Perhaps the most obvious evidence of this Western influence is the widespread adoption of international accounting standards in all countries in this study. In Egypt, as a response to the opening up policy and the increased importance of international trade and business, along with the effect of the IMF and World Bank programme, the accounting profession saw the advantages of adopting international standards (Abd-Elsalam & Weetman, 2003). Furthermore, after the introduction of the new stock exchange in Egypt, the profession increased its collaboration with international audit firms and multinational business hoping that an adoption of the same principles and practices of these international bodies would make things easier (Samuels & Oliga, 1982), and would encourage further foreign investment coming to Egypt. Similarly in Jordan, Naser and Abu-Baker (1999) argue that the implementation of the IMF privatisation programme encouraged the Jordanian professional accounting body (JACPA) to adopt IASs. In Bahrain, Oman and Kuwait, IASs have been adopted as national standards (IASB, 2005). Other countries in the study, while not having IASs as a mandatory requirement, are basing their accounting practices on either IASs or US/UK standards. Saudi Arabia, for instance, while not having legislation enacted that would set accounting standards, is using 'divergent methods' to prepare financial statements following US/UK or international standards (McKee et al., 1999). Furthermore, in Saudi Arabia, the appointment of auditors requires in the majority of cases membership in a professional organisation in the UK or in the US (Islam, 2003). Countries such as Qatar and United Arab Emirates (UAE), which do not have accounting principles or practice requirements stated in their legislation and have not constituted a body to set and enforce audit and accounting standards, generally follow international accounting standards (McKee et al., 1999). Another boost for the use of international accounting standards in the AME came from the encouragement of the Arab Society of Certified Accountants (ASCA) to use IASs.[11] The ASCA, whose importance is on the increase today as a result of increased regional business agreements among Arab countries (Hussain, Islam, Gunasekran, & Maskooki, 2002), has devoted huge efforts to the translation of international accounting and auditing standards into Arabic (Abd-Elsalam & Weetman, 2003).[12] The ASCA, rather than employing efforts for developing accounting standards that would be suitable for the AME context, has embraced and

encouraged AME countries to adopt IASs. Joshi and Ramadhan (2002) cite Choi et al.'s (1999) claim that IASs are adopted in different non-Western countries, including Arab ones, as a result of either international or political agreements, or encouragement from professional bodies to comply with IASs. They explain that the wider acceptance of IASs in the non-Western world is due to a number of factors. Joshi and Ramadhan (2002) explain that these factors include the notion that IASs are used as an international benchmark by the EU and other international bodies such as the IMF, as well as the fact that many stock exchanges such as London, Frankfurt, Rome, Hong Kong and Thailand, and regulators accept financial statements that are prepared in accordance with IASs.[13] Joshi and Ramadhan (2002) suggest that many non-Western nations, including the Arab ones, are trying to achieve harmonisation in reporting practices in conformity with that of Western countries. Such a significant Western influence and dominance on accounting practices, training and education in the AME could, as Briston (1990) cautions, be harmful to these countries. For a start, these countries have adopted accounting principles and systems of accountancy training that originally evolved to meet the needs of UK capitalism a century ago. Further, it must be borne in mind that a particular system evolved in a particular economic environment and that it may well need considerable adaptation to meet the needs of a particular country (Briston, 1990; Nobes, 1998). The Western accounting system mainly presupposes that the bulk of economic activity is carried out by companies financed by private shareholders and whose shares are listed in a local stock exchange. This, however, is not the case in most postcolonial, non-Western countries, where the bulk of investment is in public sector companies and, therefore, very different criteria for measurement and reporting need to be developed. For instance, many countries that were under the colonial influence of Western powers, after gaining their independence, moved to nationalism and a centrally planned economy, departing significantly from the Western economic and political systems. State-owned enterprises came to dominate large segments of many postcolonial economies (Maunders, Gray, & Owen, 1990). Despite moves towards market liberalisation, the state role in the business environment in these countries is the most significant (Lopez-Claros & Schwab, 2005). Samuels and Oliga (1982) argue that accountants cannot, therefore, ignore the requirements for economic decision making in respect of the different postcolonial environments with its information requirements that differ from those of shareholders and bankers in a Western context dominated by the private sector. There is also the likelihood in this respect that the political and economic systems would be very different from those of

the US and the UK, so that the objective of economic management might well be different. In addition, Samuels and Oliga (1982) explain that particularly in the case of the AME, religion may have a significant influence on financial and economic reporting, which is largely ignored in Western accountings, including IASs.

It is clear, therefore, that accounting in the UK and the US does not significantly satisfy the role that accounting should play in these non-Western societies, as it almost entirely concentrates on the private enterprise sector, and even there, the emphasis has been on financial accounting to the virtual exclusion of social accounting. Briston (1990) explains that an analysis of the predominant UK and US accounting and auditing standards demonstrates that they are concerned only with the problems of corporate financial reporting and the auditing of annual financial statements, while the information needs of "managers, of the government administration sector, and of government planners" are not regarded as the concern of accounting standards. Similarly, in the case of IASs, Rahman (1988, p. 365) explains that while the IASB claims itself to be the 'only' world-wide body setting accounting standards, it seems never to have thought of considering non-financial reporting as a 'possible candidate for its pronouncements'. He elucidates that reason behind this resistance is that according to the established value judgements of those Western capitalistic societies, any extension of corporate social responsibility and development of non-financial reporting is considered to be a radical 'left-wing' idea and constitutes a political threat to the powerful vested interest groups. For Wallace (1990), financial statements that are predicated on the standards of the IASB can be perceived as deficient for determining the extent of the contribution made by a reporting company to the social and economic development process in a country. Accordingly, Wallace (1990) stresses that the interests of government and society, especially in the case of non-Western postcolonial countries, should be given greater attention than at present in international accounting standards.

The Western and capitalistic nature of IASs raises doubts over their 'international' character. Furthermore, the insistence of MNCs and international governance organisations, such as the World Bank, on promoting and demanding the use of IASs by non-Western, postcolonial countries also raises questions about the IASs' imperial role in the enhancement of the problematic neo-global order in the non-Western world. For instance, Annisette (2004, p. 310) explains that the World Bank and the IMF institutional structures "compel them to support a pro-capitalist development ideology" (see also Monbiot, 2003). In this context, the role of

the IMF and World Bank in promoting 'international accounting standards', Annisette (2004) argues, requires an "urgent critical enquiry into the role of these "international" standards in a development context".

Consequently, the way that accounting is regulated and developed in the nine Arab countries included in this study and the main factors influencing their development indicate the lack of any regulatory requirements for social disclosures in any of the nine Arab countries. None of the nine countries have introduced regulations demanding disclosure that goes beyond the economic and financial activators and objectives of the organisation that are required in Western accounting systems (with the exception of Zakat disclosure required in Saudi Arabia). The dominance and influence of Western, especially UK and US accounting systems, on accounting practices in the AME has resulted in these systems taking a very narrow view of the role of accounting as primarily an obligation to report financial information of mainly the private sector directed to providers of finance. These systems ignore, in the meantime, the information needs of other users, such as the government, workers or society at large (Briston, 1990).

ISLAMIC INFLUENCE ON ACCOUNTING IN THE AME

The dominance of Western Anglo-American (secular) accounting systems has not gone unopposed. The dominance of such systems provoked the opposition of Muslims, who believe sincerely that a separation of religious and temporal affairs should not exist.[14] Islam is by far the most practised religion in the area. Within only a few years after Mohammed's death, Islam emerged from being an obscure religion held by a small group of people in Arabia, the Islamic Ummah, and expanded to embrace a universal world empire. Islam spread into Palestine, Syria, Egypt, Iraq and Iran. Arabic replaced Greek, Persian and Aramaic. Islam replaced, though it did not eliminate, Judaism, Christianity and Zoroastrianism. In essence, Islam was established alongside the Byzantine and Iranian Empires which at the time divided the Middle East (Hourani, 1991; Cleveland, 1994; Anderson, 2000). Islam until this very day has a major impact on life and culture of people in the Middle East. Many features of social and political life in the modern Middle East derive from religious matters (Anderson, 2000). In this context, many Muslims have called for a stricter return to the fundamental teachings of Islam, as specified by Sharia, in all aspects of life, political, economic and

social (Gambling & Karim, 1991). This has resulted in Islamic groups (not Western-supported governments) putting their efforts together for the development of Islamic accounting (McKee et al., 1999).

The spread of Islamic banking during the past 20 years, motivated by the generally successful performance of these banks, has been a great, although largely unknown, success story (Pomeranz, 1997).[15] The efforts have also resulted in the introduction of the Accounting and Auditing Organisation of Islamic Financial Institutions (AAOIFI), which has so far drawn up 16 accounting standards, and more are in the pipeline (Chand, 2001).[16] Furthermore, governments in a number of Islamic countries are facing pressure to facilitate the development of Islamic finance and accounting standards (McKee et al., 1999). Therefore, while the central political and business influence in the Middle East came from the US and the UK, the main social and cultural influence continued to be Islam (Samuels & Oliga, 1982). Islamic banks exist in all GCC countries except Oman (Hussain et al., 2002). In Saudi Arabia, despite the clear Western influence on accounting regulations, Islamic influence on Saudi business and accounting can best be seen through the imposition of Zakat and the prohibition of Riba (Al-Rehaily, 1992).[17] The other evidence of the Islamic influence on accounting in Saudi Arabia is the education system there that maintains some Islamic principles. Some key universities in Saudi Arabia include courses such as 'Zakat accounting' and 'accounting systems in Islam' (Al-Rehaily, 1992). Furthermore, since the expansion of Islamic banking systems within the Islamic world, many Saudi businesses conduct their business accounting to the Sharia where charging interest is prohibited. Islamic banks and business arrange financing with profit and loss sharing rather than interest paying contracts (McKee et al., 1999).[18] Another example is Bahrain, where AAOIFI standards became mandatory for Islamic financial institutions (Chand, 2001).[19] Bahrain also is leading the competition as it anticipates its emergence as a new Islamic financial centre since it is now boasting 18 Islamic financial institutions (Pomeranz, 1997; McKee et al., 1999). Egypt, a country that is moving steadily towards a liberal economy, was the first Arab country to develop the first Islamic Bank. Furthermore, a number of Egyptian commercial banks can provide bank services that are consistent with Islamic Law (McKee et al., 1999).

Despite this Islamic influence on accounting in many Arab states, none of their governments have developed any regulations or reporting requirements that would regulate the disclosures of Islamic influence on their activities. The Western influence on accounting and reporting practices, therefore,

remains the most dominant, and recent developments in the area regarding market liberalisation and privatisation policies are enhancing the dominance of these Western models.

RESEARCH METHODS AND SAMPLE

Content analysis is used in this study to enable a critical examination of the volume, quality and nature of social reporting practices in the annual reports of 68 companies from nine AME countries, Saudi Arabia, Qatar, Bahrain, Oman, Kuwait, Syria, Jordan and Egypt (see Appendix A). The examination aims at exploring the potential of these practices to act as 'emancipatory/radical' or 'repressive/counter' radical forces in the societies of the nine Arab countries and explaining possible factors and reasons behind the quality and nature of these disclosures in line with the contextual and theoretical analysis carried out in previous sections. Content analysis also aims at bringing insights from social reporting practices in an Arab, non-Western context and giving a voice and value to the particular culture and needs of this context.

As Gray et al. (1995a) suggest, content analysis, as a research method, has been widely used in the social accounting and corporate social reporting (CSR) literature (see, for instance, Ernst & Ernst, 1976; Guthrie & Mathews, 1985; Cowen, Ferrari, & Parker, 1987; Tinker & Neimark, 1987; Harte & Owen, 1991; Guthrie & Parker, 1990; Roberts, 1991; Adams, Coutts, & Harte, 1995; Adams, Hill, & Roberts, 1998; Adams & Laing, 2000; Gray et al., 1995a; Gray, Kouhy, & Lavers, 1995b; Buhr, 1998; Unerman, 1999, 2000; O'Dwyer, 1999; Campbell, 2000; Lodhia, 2000; Wilmshurst & Frost, 2000). Content analysis places narrative text, or other types of communication, into categories to facilitate analysis in order to derive conclusions about 'thematic content' (Budd, Thorp-Robert, & Donohue, 1967, cited in Buhr, 1998; Krippendorff, 1980 cited in Unerman, 1999). Content analysis, as a result, has been deemed to be an appropriate research method for studying corporate annual reports (CARs) in general and for CSR analysis in particular (Unerman, 1999). The method helps in 'structuring essentially unstructured documents' in order to highlight matters that many stakeholders will not have necessarily been so consciously aware of (Hines, 1988 cited in Unerman, 1999) and can deal with large volumes of data (Unerman, 1999).

Most CSR studies focused on one corporate document, namely the CAR as the sampling unit (Unerman, 1999). The focus on the CAR in CSR research could be due to a number of important characteristics of this

corporate document. First, the CAR is a 'systematically produced' statutory and, at least partially, standardised document that is known in advance should exist for each year studied – the latter point, allowing in turn, for year on year comparison (Gray et al., 1995a; Unerman, 1999; Bebbington, n.d.). Further, the document is the most widely distributed of all public documents and, therefore, the most accessible to researchers (Unerman, 1999; Campbell, 2000). Second, the CAR is viewed by researchers as an important document that is used by the organisation to construct its own social imagery (Gray et al., 1995a). Macintosh (1990) explained this idea further when stating that the annual report represents ''… a permanent expression of those social issues which top management regard as important and wish to communicate to shareholders and the public, and so are a record of the entity's historical social consciousness'' (Macintosh, 1990, p. 168, cited in Buhr, 1998, p. 169). Tinker and Neimark (1987) go further to suggest that the social role of the CAR is not limited to reflecting the organisation's 'historical social consciousness', but also playing a part in forming the worldview or social ideology that fashions and legitimises particular social conditions and dimensions such as a woman's place in society. The above characteristics combined have made the CAR a very interesting document for CSR researchers to study. There is a concern in the literature, however, regarding this nearly sole focus on CARs as the sampling unit. As such, the focus may result in representing an incomplete picture of disclosure practices by corporations, since companies do use a number of other reporting mediums (Roberts, 1991; Wilmshurst & Frost, 2000). Furthermore, this emphasis in the CSR literature on formal accounts prepared by organisations is privileging these corporations, which prioritises/emphasises shareholders as agents of social change and somewhat ignores the role of the state and wider public sphere (Lehman, 1999). This current study, while recognising the limitations of solely using CAR as the sampling unit, found that attempts to obtain other types of documents from the nine countries, including governmental documents or press releases, are very difficult. This difficulty could be due to the context whereby Arab countries, after gaining their independence, moved to nationalisation and a centrally planned economy where the bulk of investment is in public sector companies. This sector is accountable to the government and reporting, therefore, manifested in detailed reports made available to governmental bodies at least ostensibly representative of the public interest. These reports are not available for direct public use.

The CSR content analysis literature does not provide a clear reference to recording units (categories of analysis) (Unerman, 1999), with most studies

basing their categories of analysis on the framework of either Ernst and Ernst (1976) or Guthrie and Mathews (1985) (Adams et al., 1998 cited in O'Dwyer, 1999) or Gray et al.'s (1995a) study. Gray et al.'s (1995a) framework identified five major themes for categorising CSR in the mainstream social accounting literature. These themes concern the way that the 'natural environment', 'employees', 'community', 'customers' and 'others' are reported on. The structuring of the research instrument in this study with its definitions and categories of analysis is based on this social accounting literature (for instance, Ernst & Ernst, 1976; Guthrie & Mathews, 1985; Cowen et al., 1987; Tinker & Neimark, 1987; Harte & Owen, 1991; Guthrie & Parker, 1990; Roberts, 1991; Adams et al., 1995, 1998, 2000; Gray et al., 1995a, 1995b; Buhr, 1998; Unerman, 1999, 2000; O'Dwyer, 1999; Campbell, 2000; Lodhia, 2000; Wilmshurst & Frost, 2000; Kuasirikun & Sherer, 2004) as well as the appreciation of the context analysis of the nine AME countries. In this manner, given that social accounting literature in general and in relation to countries in the AME in particular are not very well developed, both deductive and inductive approaches have been employed in order to construct a research instrument within which social disclosure in the nine countries can be categorised. The result of this process is the research instrument shown in Appendix B. The researcher conducted a pilot study on the initial instrument to ensure that the categories felt 'right' and were 'workable' and that categories included in the instrument capture the volume, quality and nature of social reporting by Arab companies. The initial instrument, however, did not prove sufficient for analysing social reporting in the nine Arab countries, as there was information that clearly had to do with social disclosure that did not fall into the initial research instrument's categories. Furthermore, this initial instrument failed to capture the trends and particular nature of social reporting by Arab companies. As a result, the categories were further refined based again on the relevant literature, in addition to a number of inductive categories that were added after the review of the 68 annual reports. Indeed, the fourth dimension in the research instrument, as well as other Islamic and national/governmental considerations in the economic dimension, was added as the result of these pilot studies. The final categories produced, therefore, reflect the researcher's reading of the annual reports, her appreciation of the AME context and the relevant social accounting literature. The research instrument used for this study contains four major disclosure dimensions aimed at facilitating the analysis of the volume, nature and quality of social reporting by the 68 companies. These dimensions are 'economic', 'environmental', 'general social' and 'other

cultural characteristics of the reports'. A set of 22 categories of analysis is classified under these four disclosure dimensions. The research instruments and categories for each of these dimensions are contained in Appendices B–E, respectively.

The study, while reporting on the volume of disclosure under different social reporting categories, is mainly concerned to highlight the nature and quality of these disclosures in order to explore the extent of accountability and transparency inherent in these disclosures. Therefore, capturing the data using content analysis is done by analysing sentences (not counting them). In a similar vein, Gallhofer, Haslam, and Ten (1996) paper's concern was to explore in greater detail, through an interpretive content analysis, the character of environmental reporting (p. 73). Their analysis concentrated on analysing the content and quality of the environmental disclosure, rather than counting words or sentences. They provided quotations from 38 UK companies' annual reports for the year 1993 and analysed these quotations in relation to their quality and nature. In doing so, they commented on characteristics such as whether disclosure by the 38 UK companies was narrative, monetary or non-monetary and whether these disclosures were verified by a third party or not. This current study analyses sentences in relation to the understanding of social accounting given earlier, and allocates these disclosures to the suitable categories. In addition, similar to Gallhofer et al. (1996), the study aims at analysing the meanings of these disclosures and relating these meanings to the context analysis and 'basic context data'. This 'basic context data' in the mainstream CSR literature is mainly related to company size, profitability, ownership and industry sector (Gray et al., 1995b). This study, however, goes beyond such limited factors to consider the main social, economic, political and environmental factors in Arab countries that may reasonably be taken to have an effect on corporate choice and the levels of social data disclosed (or not disclosed) in annual reports. The quality of disclosures was assessed when any of the categories and subcategories manifested in disclosure. Additional information was then collected including whether reporting was only concentrating on ostensibly neutral or positive information, or included some critical/negative information as well. In addition, it was recorded whether financial and qualitative information was provided and the level and sophistication of the information was commented upon. For example, it was noted whether financial information concerned only conventional financial data such as investments and provisions, contingent liabilities, fines and financial savings or included more socially inclined reporting such as value added statements, environmental balance sheets, full cost analysis or advanced sustainability

reporting like Life Cycle Analysis (LCA). Other measures to determine the quality of social disclosures included a search for evidence of independent verification or stakeholders' engagement and feedback mechanisms. Furthermore, illustrations and citations taken from the annual reports are presented and analysed in order to better critically evaluate the level, nature and quality of disclosure by the 68 Arab companies. The assessment has also concentrated on what social-related issues are made visible and what are not. All social disclosures considered in this study, with the exception of Zakat obligation disclosures required by Saudi companies, are non-mandatory 'voluntary' disclosures. Therefore, the final research instrument contained no significant mandatory disclosure requirements for the period under exploration in any of the nine countries involved in the study.

A list of the FT's top 100 companies in the Middle East was obtained in May 2001. The researcher attempted to contact each of these companies that fell in the nine countries in the study, in order to request the most recent annual report. The response level was low. Consequently, the researcher tried to download and print the annual reports of the rest of the companies from the Internet. The researcher, however, was not always able to find a website in respect of the companies in the top 100 list. Furthermore, not all the companies having a website included their reports on their website. In addition, the top 100 list did not include any companies from Egypt or Syria. The researcher, therefore, tried to obtain as many reports as she could from the nine countries in the sample, whether these were included in the FT top 100 list or not. These efforts included visiting companies in Syria and requesting their annual reports and asking friends to collect annual reports. These reports should in principle be publicly available, but in practice it is difficult for non-residents to obtain them.[20] The researcher's efforts yielded 68 annual reports from the nine Arab countries (see Appendix A).[21] Difficulties in obtaining annual reports from Arab countries have, on some occasions, been documented in the social accounting literature. For instance, Hanafi and Gray (2005) share the difficulties which faced them in obtaining CARs from listed Egyptian companies. In this current study, all companies contacted were requested to provide both their most recent annual reports and any most recent separately published social report (if any). Only one company in the sample published a social report (Bahraini Telecommunications Company). This report was analysed as part of the annual report. Arab companies in general accommodate social disclosure in their average of 35–45 pages annual reports. The reports, especially the ones produced by GCCs and Jordanian companies, look significantly similar to those produced by Western companies. The reports usually contain Arabic

Table 1. Sample Companies by Country and Sector.

Country	Sector							
	Industrial	Utilities	Financial	Food and Beverages	Oil	Telecoms	Services	Total
Bahrain			11			1		12
Egypt	6			1		1	1	9
Jordan	1		4					5
Kuwait	1		8		2	1	1	13
Oman			2					2
Qatar			2			1	2	5
Saudi Arabia	1	2	7		1		1	12
Syria				1			1	2
UAE			7			1		8
Total	9	2	41	2	3	5	6	68

and English sections. The two sections were checked and proved to be the same. Only in Syria and Egypt were the reports obtained produced in the Arabic language only. The time period in which companies were contacted was between May and December 2001. All the reports received or printed from the Internet were mostly related to year 2000 annual reports. A few reports related to 1999. The majority of companies (85% of the sample) are public companies listed on the stock exchange. Only four companies are characterised by a joint ownership between the government of the country and the private sector and five companies are commercial state-owned companies.[22] The sample includes companies from different sectors (see Table 1), with majority of these companies being from the financial sector. This is due to the fact that a significant number of Arab companies registered on the stock exchange belong to the financial sector.[23]

SOCIAL REPORTING PRACTICES IN 68 ANNUAL REPORTS FROM THE NINE AME COUNTRIES

Illustrations and Descriptions of Main Social Reporting Categories

This section is concerned with demonstrating and analysing the findings of the content analysis study. Illustrations and descriptions of the main social

Table 2. Level of Disclosure for Four Dimensions.

Dimension	Companies	
	Number	%
Economic	47	69
Environmental	10	15
General social	62	91
Other social characteristics of reports	35	53

reporting categories are presented, followed by a critical analysis of disclosures under these categories and theoretical reflections on disclosures. Table 2 shows a summary of the level of disclosure recorded under each of the four disclosure dimensions. The findings of the content analysis demonstrated how most companies in the sample have made some form of social reporting, with only one company not providing any form of what is regarded as social disclosure in this study.[24] The coverage of social information provided by companies ranged from one paragraph to the providing of a stand-alone social report. Out of the four main disclosure dimensions considered in this study, disclosure in respect of the 'general social' dimension was the most commonly experienced, with 62 companies (91% in the sample) satisfying at least one category and/or sub-category under this dimension. The majority of reporting under the 'general social' dimension was in relation to the 'employee issues' category, with 75% of the companies in the sample providing some form of employee information as understood here. The second highest level of social disclosure was provided under the 'economic' dimension, with 47 companies or 69% of the sample reporting under this dimension. The most popular area of disclosure under the 'economic' dimension was the 'customer relations' category, with 30 companies disclosing some form of customer-related information. The 'other social characteristics of reports' dimension level of disclosure came third, with 35 companies or 53% of the sample satisfying one or more of this dimension's categories or sub-categories. The poorest level of disclosure was recorded under the 'environmental' dimension, with only 10 companies in the sample providing some form of environmental information.

In general terms, the majority of social disclosures provided by the 68 companies in their annual reports were of a qualitative nature with quantitative information provided concentrating mainly on employment training, charities and donations, and less often on amounts relating to governmental and Islamic concerns. Financial disclosures concentrated

mainly on using conventional types of financial disclosures, especially expenses related to employees' benefits and amounts of donations provided to charitable bodies in society. Islamic-related financial disclosures were provided by 10 companies in the sample, with the majority of these being in respect to liabilities for Zakat. Disclosures were also mainly positive in orientation, with hardly any reference to any negative or 'bad' news information in any of the reports. In all dimensions, disclosure themes relating to social and other cultural particularities in Arab societies were in evidence. For instance, Islamic and nationalistic/governmental considerations were emphasised in a number of reports in the sample. All social information provided was done so voluntarily, with the exception of the disclosing of Zakat liabilities by Saudi companies, which is required by law in Saudi Arabia.

The Economic Dimension

Mostly, the focus of social accounting and reporting concentrated on issues of natural environment, employees and local and international communities. A number of studies, however, have insisted on the importance of including the 'economic dimension' in social accounting if we want to see more radical social accountings emerge (see Bebbington, n.d.; GRI, 2002; Boyce, 1998; Gallhofer & Haslam, 2003). Bebbington (n.d., p. 9) argues that if by social accounting we are aiming towards sustainability development, then key concepts such as integration and interconnectedness should be applied to social accounting. Integration means bringing together information relevant to all company's stakeholders, be they financial (e.g. investors, lenders), those affected by its environmental impact or those whose well-being is affected by the company (e.g. employees, local communities). The second key concept is interconnectedness: "showing how a company's activities relate to the environment, sustainable economic development, and quality of life" (Bebbington, n.d., p. 9). In line with this understanding of a radical form of social accounting, the study incorporates some aspects of the 'economic dimension' to social disclosure.[25]

Social accounting and CSR literature have concentrated mainly on supplier and customer relation issues when dealing with the economic dimension of social disclosures.[26] This current research, inspired by the pilot study and AME context, added two other categories that the researcher thought to be relevant and would enrich the 'economic dimension' as well as reflect some aspects of particular social and cultural elements in Arab

Table 3. Disclosure under 'Economic' Dimension.

Categories	Companies	
	Number	%
Supplier relations	4	5.5
Customer relations	30	44
Islamic considerations in company business decisions and company activities	18	26
Linking corporate business activities and decision making to governmental and national considerations	25	37

societies; these are 'Islamic considerations in company business decisions and activities' and 'linking business activities and decision making to governmental and national considerations'. Appendix B provides a description of categories under the 'economic' dimension. A total of 47 companies (out of the 68 companies in the sample) disclosed some form of 'economic' information as defined for the purpose of this analysis (see Table 2).

There was little evidence of 'supplier relation' disclosures, with only four companies providing some form of information under this category (see Table 3). The highest level of disclosure in respect of the 'economic dimension' came under the 'customer relations' category, with 30 companies in the sample providing information related to customer relations and customer satisfaction. The vast majority of disclosures undertaken by companies in the sample concentrated on improving customer care and broadening the range of products and services provided to customers.

In its 2000 Annual Report, for example, Taib Bank states:

> We'll use our expertise and insight to create new products and services, including new investment opportunities that will allow our clients to tap into high growth sectors in unique markets. Plans also include expanding our online brokerage services to provide clients with direct access to a wider range of markets. (Taib Bank Annual Report, 2000, p. 5)

A Bahraini Telecommunications company went further to demonstrate its commitment to enhanced customer services by implementing a 'Customer Service Charter':

> As part of its commitment to enhanced customer service, Batelco implemented a Customer Service Charter. Applicable to residential customers, the charter constitutes a contract between the company and its customers, defining standards for acceptable levels of service and the time limits within which services should be provided. (Batelco Annual Report, 2001, p. 8)

The company's annual report and social report (Batelco is the only company in the sample to have a stand-alone social report) provided brief description of what the charter contains. That included opening up of new channels of communication and service with the establishment of additional customer sales and service centres across the Kingdom of Bahrain, where a full range of services for residential and small business customers is available. The Chief Executive Report (p. 20) explained that such charter aims at "offering accountability and transparency to the customer". The statement included in Batelco's Annual Report contains radical and emancipatory potentials. These potentials stem from the ability of an external user to hold the company responsible for the shortcomings in its performance by reference to this charter (see Gray & Bebbington, 2001 for discussions on importance of environmental and social charters). The charter, in other words, could be used as a benchmark for good practice to hold the company responsible and for evaluation of the company's future performance.

Other types of disclosures under this category concentrated on the organisation's relationship with its customers by providing statements that demonstrated the good reputation of the organisation among customers. The annual report of Jordanian bank highlighted its successful relationship with customers as follows:

> Our outstanding relation with the customer, as well as our endeavour to stand by them and help them in achieving their goals represents an important strength element in Arab Bank's clearly articulated strategy. (Arab Bank Group Annual Report, 2000, p. 8)

While companies were keen to include positive statements about company–customer relationships and customer satisfaction, very few companies provided disclosure regarding the means of communicating with customers or information related to customer's needs and satisfaction surveys. The handful of companies that disclosed such information did so in very general terms. An annual report of a Saudi Bank explained its policy regarding communicating with customers:

> At ANB, we are driven to exceed customer expectations through a process of listening, evaluating, delivering and communicating with our customers. (Arab National Bank Annual Report, 2000, Directors' report)

A telecommunication company also states in their annual report that:

> The feedback from our customers has indicated that they are in fact satisfied with our service and personal attention. (National Mobile Telecommunications Company Annual Report, 1999, Chairman's Message, p. 4)

The above two companies, however, fail to give further details on the means of communications with their customers or on feedback mechanisms. Other less evident disclosures under this category varied from providing a list of customers dealing with the company to some unique disclosures, such as this one by a Syrian joint venture Services and Tourism Company:

> Despite the fact that the customer failed to comply with the contract conditions and regulations, the company continues dealing with (the customer) until the customer finds another supplier, as the company wishes to co-operate with (the customer) to avoid a situation where employees (of the customer) stay without food or services. (The Syrian Services and Tourism Company Annual Report, 2000, p. 27) (translated from Arabic to English)

The Syrian company's quotation suggests that considerations, other than maximising shareholder value, may, in this case at least, be of some significance. The reason could be that the Syrian Services and Tourism Company is a joint venture where the government owns 25% of the shares, making it the largest shareholder in the company. The Syrian Services and Tourism Company' customer is also a joint venture company where the government owns 51% of the shares. This suggest that in a country like Syria, where the government plays a significant role and has a significant share of economic activities, decision making, in some cases, is not always based on a profitability criterion, but also on broader conceptions of public and national interest.

All in all, disclosures under 'supplier' and 'customer' relations categories tended to be general, qualitative and concentrating mainly on good or neutral news, lacking, in most cases, any critical or negative news. Radical forms of disclosures under these two categories made a very modest appearance. Very few companies, for instance, disclosed any form of engagement and communications with or feedback from their customers or suppliers – such as that of Batelco's 'Customer Services Charter' that constitutes a contract between the company and its customers. Exclusion of the voices of customers and suppliers from the process of governing and shaping company's future policies, indicated by the lack of disclosure on such involvement, deprives the entity of the opportunity to construct an accountable and transparent account of its relationship with its customers and suppliers. On another note, it is not clear why there is a significant difference in disclosure levels between 'customer' and 'supplier' relations disclosures, where customer relations disclosures manifested in the 68 annual reports are considerably higher than disclosures relating to 'supplier' issues. From the analysis, this is most likely because the majority of companies in the sample are public holding

companies, driven in many cases by expanding their customer base and, therefore, maximising their shareholders' value. Disclosures on customers tend to reflect such a consideration.

Disclosures indicating Islamic influence on business decisions and activities amounted to 26% of the sample (18 companies). Disclosure in this category primarily included details regarding the provision and introduction of Islamic products and services. The annual report of a Kuwaiti Islamic financial institution stated:

> Kuwait Finance House has achieved a remarkable success toward providing overall banking services based on the principles of the Sharia … In the field of financing Islamic companies and car agencies, KFH provided KD 51 million in finance through its 'murabaha'[27] product, and provided KD 10 million for financing the building of the University City at Sharjah, through the 'istisnaa'[28] product. (Kuwait Finance House Annual Report, 2000, p. 16)

Providing Islamic products and services is not exclusive to Islamic banks and institutions. Other banks are also providing Islamic types of products and services. The majority of those transactions fall within traditional banking transactions, such as dealing with interest. A Jordanian bank describes services offered under Islamic Sharia and the expansion of the Islamic division in the bank as follows:

> The Islamic Banking Division offers Islamic-based financing to the health, education and manufacturing sectors … The bank provides banking services which are in compliance with the Sharia … The total number of employees in the Islamic banking Division at the end of 2000 reached 209 compared with 161 by the end of 1999. (Arab Bank Group Annual Report, 2000, p. 34)

Some disclosures under this category provided statements confirming the strict adherence to the principles of Islamic Sharia in the organisation's activities. Islamic institutions were, again, prominent in this area. The annual report of a Bahraini Islamic bank described how the bank's functions were all in line with the 'Sharia Islamieha' that is taken from the Holy Quran and the sayings and practices of the Prophet Muhammad:

> The Holy Quran outlines for Muslims a complete code of life for dealing individually or collectively. This is further amplified by the sayings and practice of the Holy Prophet (May Peace be Upon Him). In this context all functions of the Bank are performed in strict adherence to the principles of Islamic Sharia. In order to ensure such conformity to Sharia the Group's operations are checked and monitored by its Religious Supervisory Board (RSB) to which the management reports periodically. In case of new operations and activities prior approval of the RSB is invariably obtained by the Bank's management … The RSB of the bank itself comprises eminent scholars of Islamic Sharia from Bahrain, Egypt, Saudi Arabia, Turkey and Pakistan possessing in depth knowledge of the

conditions in which the Group operates. The RSB is also composed of many international renowned Islamic Scholars, provides advice from time to time on issues that pertain to Group level implementation. (Faysal Islamic Bank Annual Report, 1999, p. 6)

While Islamic banks and institutions state their full adherence to Sharia principles, other institutions in different sectors have also disclosed information regarding the influence of Islamic considerations on their business activities. A Bahraini telecommunications company explained its business policy of making the usage of facilities easier for pilgrims on Haj:

This year Batelco will be doing even more to ensure that pilgrims on Haj have every opportunity to stay in contact with family and friends in Bahrain throughout their journey. A special package has been designed for Haj Agents which will include mobile handsets and SIM cards for use on Haj, allowing pilgrims to communicate easily and cost effectively while they are away. (*Batelco Social Magazine*, p. 7)

Quantitative disclosures were more evident under this category than the previous 'supplier' and 'customer' categories. Ten companies (15% of the sample) provided some forms of financial disclosure in respect of their Islamic activities. The majority of disclosures concentrated on Zakat payment and Zakat obligations. Other financial disclosure in respect of Islamic considerations included information regarding the dealing with earnings prohibited by Islamic Sharia. The following is an example:

Earnings prohibited by Sharia amounting to US$337,019 for the year ended 31 December 1999 (1998: US$15,000) are not included in the income statement and are set aside for charitable purposes'. (Faysal Islamic Bank Annual Report, 1999, p. 27)

Financial disclosure regarding Islamic investments was also evident as in this example from an Islamic company:

A Murabaha investment amounting to KD 2,748,000 has been pledged against a letter of guarantee. (The International Investor Annual Report, 2000, p. 26)

Islam has a major impact on life and culture in the modern Middle East. Muslims consider Sharia to be the source of all law. To be a true Muslim, all aspects of life should be conducted in line with the rules of Islam (McKee et al., 1999). It is not surprising then to find some companies in the AME, including those that do not necessary name themselves as Islamic, voluntarily providing information regarding their adherence with Islamic rules and teachings, and/or disclosing information that illustrates the impact of Islamic considerations on their business activities. It could be that these types of information are a company's way of portraying themselves as 'good citizens' in the Arab community, where religion and the teachings of Islam have a big influence on people's everyday lives.

Most of the companies disclosing under this category are financial institutions describing themselves as Islamic. They are part of an increased trend in the AME of moving towards Islamic financing and investments. Their voluntary disclosures regarding their adherence to Islamic concepts and Sharia in different aspects of their business/economic activities represent a potential for a radical and emancipatory form of accounting where social justice (the main objective of Islamic Sharia) is enmeshed within economic objectives. For instance, disclosures under this category have demonstrated a consideration for making economic decisions on a basis other than the financial ones, of maximising shareholders' value: 'all functions of the bank are performed in strict adherence with the principles of Islamic Sharia'. Another emancipatory and radical potential stems from the necessity under Islamic consideration to provide details of activities undertaken by the institution to ensure adherence to Islamic Sharia: "[The bank] offers Islamic-based financing to the health, education and manufacturing sectors". Institutions have also provided details in respect of their charitable contributions of income resulting from activities prohibited by Islam, such as dealing with interest. Further emancipatory potential is evident in disclosures on financial activities in line with Sharia such as Zakat,[29] Mudaraba[30] and Musharka,[31] which have social justice aspects to them. Disclosures under this category have also demonstrated a verification mechanism to Islamic objectives, where a 'Religious Supervisory Board' verifies and reports on the adherence of organisation's activities to Sharia. While the Board is an internal one within the organisation, its role can have emancipatory potentials in that it verifies the adherence to Sharia concepts and not to profitability ones. Disclosure under the Islamic considerations category demonstrates a radical form of disclosure in that it interconnects social and economic objectives and activities of business organisations – an important aspect of sustainability development.

More than one-third (37%) of the companies in the sample have engaged in disclosures linking their activities to governmental and/or national considerations (see Table 3). The vast majority of disclosures under this category are concerned with demonstrating the contribution of organisations in the development and growth of the domestic or regional economy and the implementation of governmental objectives and policies. Typical disclosures under this category are outlined below.

The annual report of the Oman Arab Bank states the following:

> The bank has made significant contributions to the development of the Sultanate's economy by financing a number of infrastructure construction and development projects

> such as highways, airports, harbours, power stations, water desalination plants and hospitals. (Oman Arab Bank Annual Report, 2000, p. 2)

Qatar National Bank also states in its 2000 Annual Report that:

> The bank has traditionally played a leading role in the development of the State of Qatar economy and its infrastructure with the financing of a number of major projects, the Bank continued to arrange and participate in major local, regional and international syndications. (Qatar National Bank Annual Report, 2000, Management Report)

A number of companies emphasised the nationalistic issue of allowing national contractors, or contractors that mostly employ national staff, the opportunity to contribute effectively to the growth of the national economy. The following statement is taken from Kuwaiti Oil Company's 1999 Annual Report:

> By the end of the year, 37 of these contracts (with suppliers) were amended, providing 166 jobs for Kuwaiti nationals. The actual number of Kuwaiti employees employed under these contracts reached 157. (The Annual Report of Kuwait Oil Company, 2000, p. 19)

Among all the companies, a Syrian Services and Tourism Joint Venture Company was the one to disclose most under this category. One example of this disclosure is the following citation, where the company states that the purpose of its existence in the first place is to meet governmental and national plans:

> The establishment of our company was in line with the state's plans to encourage the private sector to play a constructive role in the national economy. Therefore, the Company, as a joint venture between the private sector and the state, plays an important role in developing and encouraging tourism in Syria as the Syrian development plan is based on the co-operation between the private and the public sector. (Syrian Services and Tourism Company Annual Report, 2000, p. 4) (translated from Arabic to English)

By the time Western colonial powers left the AME at the end of World War II, most of these countries were either left with absolute monarchies, such as the Gulf States and Jordan, or with socialist governments, such as Syria and Egypt. In both cases, the government has a large stake in and control over the national economy and contributes to the development of the private sector (Briston, 1990; McKee et al., 1999). It is not surprising then to find that Arab companies are willing to voluntarily provide information regarding their support of governmental policies and plans, and to explain to their stakeholders, of which the government constitutes an important part, the impact of national considerations on their business activities and decision making. Again, the types of disclosure under this category constitute a potential for an 'emancipatory/radical' form of disclosures. They represent a

departure, albeit marginally, from the dominant economic/financial disclosures in capitalistic frameworks, which largely address the interests of shareholders in regard to maximising their wealth. A number of disclosures manifested under this category included a concern for the company to meet some aspects of national and social interests and welfare.

In general terms, the disclosures in respect to the 'economic' dimension with its four categories (see Table 3) were positive or neutral in nature, with no signs of any negative or bad news in any of the reports. The impact of Arab societies' particular characteristics was evident throughout the reports, with religious and national interests emphasised as drivers for economic decision making.

The Environmental Dimension

Only 10 companies, 15% of the sample, disclosed some form of environmental information, making the level of disclosure in relation to the 'environmental' dimension the lowest (see Table 2). The narrative/qualitative form of disclosure was the most common under this dimension. Again, as in the case of the 'economic' dimension, there was no evidence of any 'negative' or 'bad' news related to the environmental impact of companies in any of the annual reports, with the majority of disclosures being of a 'positive', self-complementary nature. Apart from a few service and financial companies reporting on some general themes in relation to the environment, companies providing information in relation to their environmental performance were mainly from the oil and industrial sectors, having a clear environmental impact. Disclosing companies, mainly, emphasised their environmental management and control (see Table 4), with 6 out of the 10 reporting companies making some form of policy statements regarding their environmental performance. The majority of these statements are being general and of a 'positive' or 'neutral' nature.

Disclosures under energy, water, waste and pollution control categories were very low ranging only from two to five companies. Disclosures under the 'other environmental' category, which contains different environmental topics, amounted to nine companies disclosing on issues such as studies and research in respect of the environment, discussing general themes related to the environment and educating the community on environmental issues. Only two companies in the sample provided evidence of environmental audit or management systems and four reported on compliance with national and international regulations. Only one company in the sample disclosed information relating to the rate of environmental incidents. Disclosures

Table 4. Disclosure under 'Environmental' Dimension.

Categories	Companies	
	Number	%
Energy	3	4
Water	4	6
Waste	2	3
Pollution control	5	7
Sustainability	1	1.5
Material usage (other than fuel and water)	0	0
Transport	0	0
Habitat protection	1	1.5
Land use/biodiversity	2	3
Environment management and control	6	9
Other environmental disclosure	9	13

were of a 'positive' or 'neutral' nature, failing to give any specific details or significant quantitative and financial data. Only three companies reported under the energy category, with disclosure concentrating on energy savings and conservation, but failing to provide any information regarding types and quantities of energy used by the company. The following is an example from a Saudi petroleum company annual report, which referred to the company's 'energy conservation programme':

> As part of its ongoing environmental efforts, Saudi Aramco implemented specifically tailored energy conservation programmes at its many oil and gas plants. A wide range of energy efficiency improvement and emission reduction measures have been identified, ranging from short-payback operations and maintenance items to large investments in process optimisation, heat integration and cogeneration. The programmes seek to reduce the company's fuel gas and electric power consumption, setting an example for other industries in the Kingdom. (Saudi Aramco Annual Report, 2000, p. 36)

Despite the critical importance of the water issue for countries of the Middle East, only four companies disclosed information on water conservation. One Saudi oil company annual report highlighted the importance of water to Saudi Arabia and its efforts to protect water supplies in the Kingdom as follows:

> Beneath the surface of Saudi Arabia exists a supply of water that for centuries has provided the essence of life. The protection of this vital resource is an important responsibility and one of Saudi Aramco's highest priorities. In order to maintain high standards of purity, Saudi Aramco assesses water quality from source through distribution

> to ensure that it is free from harmful biological and chemical contamination and is safe for use. Water wells, seawater intakes, treatment plants and distribution systems are routinely inspected to ensure compliance with company standards. Likewise, water samples are continually collected from groundwater monitoring wells in order to detect contamination at waste storage and disposal sites, industrial plants, oil fields, and surface water disposal facilities. (Saudi Aramco, Environment Section, Annual Report, 2000, p. 37)

Waste-related and land use disclosures amounted only to two companies (Table 4), while none of the companies in the sample provided information under the 'material usage' and 'transport' categories. Only one company in the sample made a mention of sustainability development in its annual report.

Arab countries of the Middle East face major environmental concerns, most importantly, population growth that results in increasing pressure on natural resources, especially water. The 68 companies in the sample, however, failed to significantly address and elaborate on environmental issues that are of particular concern to Arab societies. Disclosures, when made, concentrated on enhancing a positive image of the company, providing only positive and self-complimentary information and avoiding any discussion or information on the extent of the impact of the company's operations on the environment. In addition, the level of disclosure in respect to employment of environmental management and control systems, an evidence of efforts to reduce negative environmental impact, was very low, amounting to only 3% of the sample. Independent verification of environmental disclosures, furthermore, was completely absent. One may speculate about the reasons behind this low level and quality of environmental disclosure. It could be due to the lack of mandatory requirements for such disclosures in the nine countries in this study and the lack of good news that companies would be willing to voluntarily disclose. The low level of disclosure could also be due to the choice of sample in this study, as 80% of the companies in this sample come from financial and service sectors that may not perceive themselves as engaged in environmental sensitive activities.

General Social Dimension

The proportion of companies reporting under the 'general social' dimension amounted to 91% or 62 companies of the sample. The most popular disclosures under this dimension were the 'employee-related issues' category with 75% of companies disclosing information (see Table 5). As was the case with the previous two disclosure dimensions – 'economic' and 'environmental' – disclosure under the 'general social' dimension tended

Table 5. Disclosure under 'General Social' Dimension.

Categories	Companies	
	Number	%
Community developments	21	31
Employee issues	51	75
Health and safety issues	6	9
Management information	48	71
Commitment statements and management control of social responsibility	35	51.5
Other social/ethical disclosures	4	6

Table 6. Disclosure under 'Employee-Related Issues' Category.

Sub-Categories	Companies	
	Number	%
Training and education	36	53
Employee surveys and staff consultations	4	6
Employees benefits	14	21
Thanks to employees	32	47
Nationalisation of employees	27	40
Details of workforce of company	11	16
Other employee issues	5	7

mostly to be 'positive' with an absence of any 'negative' news. The predominant form of disclosure undertaken was, mainly, narrative/qualitative orientated. A number of companies provided some financial and quantitative information, especially in relation to donations and employee training.

The 'employee-related issues' category was hit most often in the analysis in terms of the number of companies reporting. There were 62 companies providing some form of information under this category. Disclosures mainly declared 'good' and 'positive' news, with little evidence of dialogue or consultations with employees. Disclosing companies tended to emphasise mainly employee training and education, thanking employees and providing details of the 'nationalisation' efforts of the workforce undertaken by the company. Table 6 illustrates the main sub-categories under the 'employee-related issues' category.

The highest number of companies disclosing under the employee category was in the sub-category 'training and education of employees',

with 36 companies (53%) of the sample disclosing some form of information under this category. Out of these, 21 provided some sort of quantitative information regarding numbers of employees involved in these training and education courses and the types and nature of courses or sponsorships that were awarded to employees. Typical examples of disclosures are elaborated below.

Saudi British Bank, for example, states the following in their 2000 Annual Report:

> [The] 'Training Department' has continued during the year with developing and presenting training programmes which enhance the quality and efficiency of SABB staff, thus ensuring the highest levels of customer service and enhanced profitability for the Bank. Over the year, in excess of 2000 employees have attended the Bank's training courses. Many of these courses have addressed the basic skills required by staff including credit assessment, trade services, treasury, banking system, PC proficiency and English Language, for which the Bank is proud to announce the appointment of its first Saudi English language trainer. (The Saudi British Bank Annual Report, 2000, p. 17)

Kuwait Oil Company states the following about employee training:

> The company devotes special attention to training and career development programmes designed to improve the capabilities of indigenous manpower and to increase the overall efficiency of employees … Furthermore, the company continued its co-operation and co-ordination with various consultants … sending 848 employees to local training programmes. A further 508 employees attended developmental training courses overseas designed to introduce them to the latest methods and technologies a total of 1222 employees participates in versatile administrative and technical development training courses conducted by KPC. (Kuwait Oil Company Annual Report, 2000, p. 25 [sic])

This high level of disclosure under the 'training and education of employees' category could again be explained in terms of the significant importance of the nationalisation of the workforce issue, especially in the six Gulf States. The GCC states constitute a very young population. Up to 70% of the Saudi population, for example, is under 25 (Europa Regional Surveys of the World, 2004). Another related issue occurs in countries like the UAE, Qatar and the rest of the Gulf States, where expatriates outnumber the indigenous population (Anderson, 2000). In Bahrain and Kuwait, for instance, some 45% of the population is non-national. In the UAE only 20% of the population are UAE citizens (Anderson, 2000). This has made the issue of education and nationalisation of the workforce a high priority to Gulf States' governments (McKee et al., 1999). Therefore, companies are eager to demonstrate their efforts in training and preparing young, indigenous people to join the company and take over from foreign experts.

Nationalisation of the workforce disclosure reached 40%, with 32 companies disclosing in respect of this issue. All companies that mentioned their success in nationalising the workforce came from the six Gulf States (UAE, Saudi Arabia, Qatar, Oman, Bahrain, Kuwait). Disclosure under this sub-category basically included statements celebrating the success of the company in increasing the number of the national, indigenous staff within the company's workforce. Disclosures under this category may reasonably be taken to be the most specific and provided the most quantitative information including tables showing the number of local/national workers in the company in comparison to expatriates. The following statements were typical examples of this type of disclosure:

> Emiratisation remained on top of our agenda and various initiatives were launched to attract, train and retain the high calibre UAE nationals. Over 70 UAE nationals joined the bank during the year and all new joinees underwent a structured induction and development process. Workplace opportunities were provided to students trainees in every town and Emirate. As part of community service, the Bank launched a training programme that is designed to equip young UAE nationals to take up jobs in the private sector. Trainees are given the option to join the bank on completion of training. (Mashreq Bank Annual Report, 2000, p. 18)

Information regarding Board of Directors' names and job titles was disclosed by 48 companies, 71% of the sample. Out of these, 10 provided a C.V. and background information in respect of their Board of Directors members. Only one company highlighted the names of Board members in charge of managing the company's social responsibility matters.

Disclosure under 'commitment statements and managerial control of social responsibility' category amounted to 35 companies, 51.5% of the sample. A number of companies included social commitment statements in their general policy or mission statements. On other occasions, social commitments were in evidence throughout the report. As in the case of 'environmental commitment statements', social statements tended to be vague, lacking any specific illustrations of corporate objectives, as well as lacking substantial quantitative data or indicators that the company could be held accountable for in the future. Commitment statements varied in length and issues covered. The vast majority of these statements highlighted the social responsibility of the company towards the community in general. Commitment statements towards employees and human resources were also popular. Other topics disclosed included commitments towards suppliers, the government and governmental or national social objectives. A statement provided by a Bahraini/Kuwaiti finance company in its annual report

explained how the company values its social role in the community more than its 'pure business success':

> For over 25 years, Bahrain Kuwait Insurance Company's symbol has generated the feeling of confidence for the community and represented to take care of society in many innovative ways … [T]oday, our balance sheet illustrates this philosophy in action. Our performance demonstrates the attitude of confidence instilled in ourselves as much as we seek to build confidence in society. More than pure business success, what the Company most values today is its wealth of goodwill, the core strength that empowers us to continue enabling the community to strive for more. (Bahrain Kuwait Insurance Annual Report, 2000, pp. 2–3)

The Bahrain Kuwait Insurance Annual Report, however, fails to provide any detailed information on the company's involvement in society or any information on the mentioned innovative ways in which the company empowers the society and puts its needs first.

Statements expressing commitment to Islamic Sharia and teachings statements were evident in all Islamic institutions included in the study. Below is an example:

> Kuwait Finance House, with its strong Islamic values, is a financial institution whose aim is to develop and promote Islamic banking worldwide. Kuwait Finance House offers unique yet competitive products and services directed to target markets for both depositors and shareholders. In accordance with the Islamic principles, Kuwait Finance House ensures that while working with the public professionally, the company guarantees an honourable relationship with its client base in particular and the Islamic community as a whole. (Kuwait Finance House Annual Report, 2000, p. 7)

None of the companies provided an independent verification of their social data. The only verification that could be somewhat considered as a form of social verification is the one undertaken by the 'Sharia (or Religious) Supervisory Board' in Islamic institutions. The Board is part of the organisation's internal regulatory system. It is, however, independent from the management of the company (Suleiman, 2003). The Board's main role is to provide assurance that institution transactions are in line with Islamic law (Sharia) and to provide opinion about the adherence of new products and projects with Islamic Sharia rules and principles. The assurance provided by the 'Sharia Supervisory Board' is very vital as if the Board concludes that the management has violated the Sharia, the management would quickly lose the confidence of investors and customers (Suleiman, 2003).

Despite the higher level of disclosure under 'social commitment statement' category compared with the 'environmental commitment statements and control' category, the similarly low quality of disclosures indicates a corresponding – in that disclosures are mostly positive, not verified by third

parties and qualitative – lack of serious commitment by Arab companies to address and act upon serious social issues in Arab societies. Such a tendency deprives these social disclosures of the opportunity to become more radical or emancipatory.

As noted in Table 5, a total of 21 companies (31% of the sample) disclosed a form of 'community development' information. The most common forms of disclosure under this category included: donations and sponsorship of schools, art, sports, health, education and details of charitable donations. Some disclosures also included development of local/regional communities in general. In some cases, companies included details regarding the amounts of donations and the parties that these donations were made to. Donations for schools and general education purposes were, no doubt, the most prominent focus of this type of disclosure. The quotation below provides an example of a company's disclosure regarding their donations and support of educational causes:

> Education continues to be a central focus of our community activities and a significant allocation is made to support a number of educational institutions. For the sixth consecutive year, Batelco contributed to the British Chevening Scholarship Fund for Post Graduate Study in the United Kingdom … the scheme sponsors Bahraini students wishing to pursue their studies abroad. This donation brings Batelco's total contribution to BD 27,000 over a six-year period. In co-operation with other organisations, such as the Bahrain Society for Training and Development, Batelco promotes Training and Education fundamental to the progress of Bahrain. Our annual summer training programme attracted 84 students from the University of Bahrain. (Batelco Annual Report, 2001, p. 24)

Although disclosures under the 'general social' dimension tended to be mostly vague and general, they, in many cases, have provided an insight into some social and ethical issues that are of particular significance to the AME societies and context. The researched companies, by disclosing (or not disclosing) on certain issues, have allowed us this kind of insight. For example, the above mentioned emphasis on donations, specifically in the field of education, may be due to the fact that many countries in the sample (if not all) have relatively high illiteracy rates (Anderson, 2000; Lopez-Claros & Schwab, 2005). This factor, in addition to the high population growth in the region and the high proportion of young people in the population (70% of Saudis are under the age of 30), means that educating young people and providing them work opportunities is a very important goal for Arab societies. Other less frequent but equally insightful disclosures are those made by companies on social and historical issues that do not relate directly to company's social activities – such as those in respect of Islamic coinage and the Arab horse. These disclosures emphasise Islamic and Arab pride.

They could be companies' way of relating themselves to that pride and, therefore, enhancing their image in Arab societies. Furthermore, disclosures emphasising religious and nationalistic themes that were evident throughout disclosure categories are an indication of the relative importance of religion and nationalism in the Arab world.

Non-disclosure could also give an indication of the importance or unimportance of particular social issues in the AME societies. Child labour, forced labour, human rights, freedom of association and rights to collective bargaining disclosures and equal opportunity disclosures (all very important issues in Western social disclosures) were completely absent or very rare in the 68 Arab companies' annual reports. This could be due to the notion that these issues are not of a significant importance to Arab societies. On the other hand, non-disclosure could also be interpreted to be companies' way of avoiding discussions of highly sensitive issues in AME societies such as human rights, freedom of association and equal opportunity (especially for women), which are controversial issues in the context of the AME societies that companies may choose not to voluntarily mention.

Other Cultural Characteristics of the Reports Dimension

The 'other cultural characteristics' dimension is concerned to highlight other social characteristics of the 68 Arab companies' annual reports that were not fully captured in the previous dimensions considered. These disclosures or characteristics recurred in 53% of the sample. They also often re-emphasised what previous sections have indicated to be of apparent importance in the disclosures: religious issues and national objectives. Categories under this dimension included: starting reports with mentioning the name of God; Islamic and religious influence on the style of writing throughout the report; including verses from the Holy Quran; and including a thanking statement to the rulers and the government of the country.

Twelve companies (18% of the sample) started the report or the Chairman/ Directors' statement with 'In the Name of Allah'. Some companies included this phrase in Arabic (Bism Alah Al Rahman Al Raheem), even in the English version of the report (Saudi American Bank Annual Report, 2000; The Saudi British Bank Annual Report, 2000; The Saudi Investment Bank Annual Report, 2000; The National Shipping Company of Saudi Arabia Annual Report, 2000; Faysal Islamic Bank Annual Report, 1999; Egyptian Company: Matahen Shareq Delta Annual Report, 1999; Egyptian Company Naser City for Buildings, 2000). Other companies used the English translation

of the term 'In the Name of Allah, The Most Gracious; the Most Merciful' (Sceco-West Annual Report, 2000; Kuwait Finance House Annual Report, 2000; Kuwait Real Estate Bank Annual Report, 2000; Qatar National Navigation & Transport Company Annual Report, 2000; Kuwait Oil Company Annual Report, 2000).

In 25% of the sample (17 companies), Islamic spirit seemed to influence the style of writing. For instance, a number of companies started the Chairman/Directors' statement with the Islamic greeting 'Al Salam Alikum wa Rahmut Allah wa Barakatuh' (Peace be upon you and His mercy and grace). Even in instances discussing the performance of the company, Islamic influence on writing style was evident. For example:

> The Company has achieved, and *by the grace of God*, during 1999 a big step in the fields of production and purchases as a result of the increase in productivity after the receipt of the second production line ... The Company promises its shareholders to stay, *by God's Will*, a pioneer and a leader in its field ... *and God is the one that guarantees success*. (Translated from original Arabic to English) (Suez Cement Company Annual Report, 1999, Chairman Statement, p. 3)

The Chairman's Statement of a Kuwaiti company concluded with the following paragraph:

> We pray to Allah the Almighty to bless our honourable martyrs and grant the release of our prisoners of war and detained brothers and sisters. We also ask Allah the Almighty to inspire us with the proper guidance to serve our beloved country under the leadership of His Highness the Amir Sheikh Jaber Al-Ahmad Al-Sabah and His Highness the Crown Prince, Sheikh Saad Al-Abdullah Al-Sabah. (Kuwait Middle East Finance and Investment Company Annual Report, 2000, Chairman and General Manager's Statement, p. 7)

The Chairman's Statement for one company began with the following paragraph:

> Al Salam Alaykoum Wa Rahmat Allah Wa Barakatouh: In the name of Allah, The Beneficent;. The Merciful; Prayers and peace be upon Mohammed, His Last Prophet. May Allah guide us to the right path for prosperity and well being in this world and the world thereafter. I have great pleasure in presenting the 1999 Annual Report of the Bank covering its global operations for the year 1999. (Faysal Bank Annual Report, 1999, Chairman's Report, p. 5)

A Chairman Statement of an Islamic Bank starts with the following:

> Thanks be to Allah the Lord of all creatures, and prayer and peace be upon the most prominent of all messengers, our Prophet Mohammed, the faithful, and upon all members of his family and his companions and those who tread the same path of righteousness until the day of Judgement. (Kuwait Finance House Annual Report, 2000, Chairman Statement, p. 14)

The Statement concludes with the following:

> Finally, we thank Allah for His blessing and for our success, and pray to the Almighty to give us further success in the future in realising the goals and objectives of Kuwait Finance House, in the best interest of our beloved country, under the wise leadership and guidance of His Highness the Amir, Sheik Jaber Al-Ahmad Al-Jaber Al-Sabah and His Highness the Crown prince and Prime Minister, Sheik Saad Al-Abdullah Al-Sabah, and the Arab and Islamic world. (Kuwait Finance House Annual Report, 2000, Chairman Statement, p. 14)

Four companies in the sample included verses from the Holy Quran in their annual reports. An investment corporation started its annual report with the following verse from the Holy Quran (Talak Sura, verses 2, 3):

> And for those who fear God (ever), He prepares a way out. And he provides for him from sources he never could imagine. And if anyone puts his trust in God, sufficient is (God) for him, for God will surely accomplish his purpose verily, for all things has God appointed a due proportion. (The International Investor Annual Report, 2000)

Another Islamic company started its annual report with the following verse:

> In the Name of Allah, the Most Gracious, the Most Merciful: Ye who believe! Fear Allah and give up what remains of your demand for usury, if ye are indeed believers. If ye do it not, take notice of war from Allah and his Apostle, but if ye turn back, ye shall have your capital sums deal not unjustly and ye shall not be dealt unjustly (the Quran Al Baqara (278–279). (Kuwait Finance House Annual Report, 2000)

A Saudi electricity company concluded their report with the following *Sura* from the Holy Quran:

> In the Name of Allah; The Most gracious; The most Merciful: Our Lord! Perfect our light for us, And grant us forgiveness, For Thou hast power Over all things. (Sceco-West Annual Report, 2000)

Many annual reports, especially in the Chairman or the Management Directors' Reports (or both), included a statement of thanks to the rulers of the country or the people of the country at the end of the statement or report. In this study, 35 companies out of the 68 (53% of the sample) have made this type of statement in their annual reports.

SABIC, for example, states the following:

> As SABIC prepares to celebrate the 25th anniversary of its formation in 2001, we gratefully remember the full support that the Custodian of the Two Holy Mosques King Fahd Ibn Abdulaziz extended to this company's establishment and growth. That vital Royal support continues even today. (SABIC Annual Report, 2000, Chairman and Managing Director Statement, p. 11)

A UAE company goes further with its appreciation of their ruler:

> At the outset, we are extremely exhilarated on the safe return of H.H. Sheikh Zayed bin Sultan Al Nahyan to the homeland following a full recovery to health and well being. We pray to Almighty for his long life and continued sound health. Finally, the Board of Directors, on their own behalf and on behalf of all the shareholders and staff of the Company, would like to express their loyalty and gratitude to His Highness Sheikh Zayed bin Sultan Al Nahyan, President of the United Arab Emirates and Ruler of Abu Dhabi and to His Highness Crown Prince Sheikh Khalifa bin Zayed Al Nahyan for their continued support and encouragement to the national institutions. (Abu Dhabi National Insurance Company Annual Report, 2000, Chairman Statement, pp. 5–6)

Faysal Islamic Bank states the following:

> I would like to extend my thanks to the Government of Bahrain, the Bahrain Monetary Agency and the Ministry of Commerce for enforcing policies conducive to the operations of Islamic banking which will obviously give strength to the operations of these institutions and provide confidence to interested parties. (Faysal Islamic Bank Annual Report, 1999, Chairman's Report, p. 5)

A Syrian company recorded its acknowledgement and gratitude to the encouragement of both the late and present Presidents of the country:

> The care and encouragement of the late President Hafez Al-Assad (may heaven be his last home) to our company since its inception, in addition to the encouragement of our President Dr Bashar Al-Assad to continue in respecting the law and regulations applicable, had pushed us towards success. This success would have not been achieved if it was not for both (President)'s encouragement and caring, especially towards the tourism industry in Syria. We, in Syria, are looking forward to more prosperity, which was made possible by the safe environment in Syria. This safe environment is a result of the policies employed by the late President Hafez Assad, (may heaven be his last home), and continue to exist in the era of Dr Bashar Al Assad, when more growth and developing projects are employed for the benefit of our beloved country. (Syria Tourism Company Annual Report, 2000, p. 6) (translated)

Such examples of disclosures re-emphasises the previously discussed notions of the importance of Islam and national considerations for Arab people's societies. Arab companies' annual reports, as part of Arab societies, have on many occasions illustrated the impact of these two factors. For instance, starting the report with the name of God or incorporating the mentioning of God throughout the report may be a cultural characteristic of Arabs' way of speaking and writing. It does also indicate a desire to portray a religious or Islamic consciousness to the overall activities of the company. It is worth indicating that this sort of style of disclosure was not limited to Islamic institutions, but manifested in other types of companies' annual reports. Statements thanking the government or the rulers of the country

indicate a desire by Arab companies to portray their activities to be in line with the governmental or national objectives and targets. They also indicate the significance of the State in the business environment in the Arab world.

DISCUSSION AND CONCLUSION

On the face of it, the results of the content analysis carried out in this study have some similarities and are comparable with most CSR content analysis studies carried out on UK companies.[32] For instance, Gray et al.'s (1995b) study, probably the most comprehensive content analysis study of corporate social and environmental reporting in the UK (for the period between 1979 and 1991) and this study, found that employee-related disclosures were the most common theme on which to report on in the period studied. Community disclosure was also widely practised. Customer-related disclosures, however, seemed to be less emphasised in Gray et al.'s (1995b) sample than in this current study. Gray et al. (1995b) observed that customer-related disclosure remains 'very low' in the UK sample. The higher level of disclosure in annual reports of Arab companies relating to customer relations could be due to the policy of making new efforts towards market liberalisation and in respect of the encouragement of private capital in the Arab world. This is driving companies to attempt to demonstrate their customer-orientated policies in order to encourage investments. Environmental disclosures by companies in this current study appear to be at a much lower level than reported in the UK study. Gray et al.'s (1995b) study noted that environmental disclosure rose significantly throughout the period (1979–1991) and was no longer a 'marginal activity' after the mid-1980s. This is not the case, however, in this current study where environmental disclosure appeared to be a marginal activity, carried out by a small number of companies in the sample in the oil and industrial sectors. The low level of environmental disclosure by Arab companies may well be due to most of the companies in the sample falling under the finance and other service sectors or light industries (see Table 1), where issues such as environmental protection and energy savings are not viewed with the same weight of concern as oil and industrial companies. It could also be that companies in the Arab world are not facing enough pressure to undertake environmental disclosure.

While apparently the findings of this study are consistent with Gray et al.'s (1995b) study, a deeper analysis of the content analysis findings under these studies demonstrates the important influence of focal contextual factors on the nature and level of disclosure. For example, while both studies report

that employee-related disclosures are clearly the most popular disclosure by UK and Arab companies, themes discussed under the 'employee issues' category are different in both studies. According to Gray et al.'s (1995b) study, 'employee-related disclosure' was dominated by 'employment data' plus 'employee other' disclosures, including 'thanks to staff' and 'discussion of redundancies'. On the other hand, the most popular disclosure themes under the 'employee-related issues' in this current study were disclosures relating to the 'training and education of staff', especially national and indigenous ones. This was followed by 'thanks to employees' and the 'nationalisation of the workforce of the company'. The difference in themes emphasised under 'employee-related issues' disclosures between the two studies could give an indication to the critical social issues in the societies of the UK and the Arab world. Arab companies seemed to be emphasising their positive contribution to the education and employment of young native people in their societies, where population growth and employment is an issue of great importance in Arab societies.

As far as the quality of social reporting is concerned, Arab companies' social reporting practices discussed in this study seem to be similar to the practices in the UK as elaborated in the majority of UK studies. UK studies into social and environmental disclosures have, as well, concluded that the narrative form of disclosures was the most common with very little quantitative information (Gallhofer et al., 1996; Gray et al., 1995b). Furthermore, UK studies have reported that the majority of disclosures were of a 'positive' or 'neutral' nature, with hardly any reference to 'bad' news. For instance, in the case of social/environmental 'commitment statements' in CARs by UK companies, a number of UK studies concluded that social/environmental statements in the UK annual reports tended to be general, lacking any specific information. Gallhofer et al. (1996), in their analysis of environmental disclosure by the top 50 UK companies in the year 1993, suggested:

> … statement of intent made in the annual reports are quite vague, not being elaborated in terms of specific targets that the company aim to achieve and be held accountable for. (p. 77)

Similarly, Harte and Owen (1991) in their analysis of UK environmental reporting in 30 UK companies at the end of June 1990 observed that while they believed that there had been a general increase in the level of environmental disclosure over the years, there was still little detailed environmental information provided in the annual report. They explained that they have seen more reporting of 'general philosophy' than 'detailed

reporting of environmental impact'. Likewise, comparative social disclosures, compliance with legal requirements and externally audited social and environmental disclosures made very modest appearances in UK annual reports (Gallhofer et al., 1996; Harte & Owen, 1991, p. 55).

Harte and Owen (1991) maintain that this poor quality of environmental/social reporting is due to much of the disclosure in the UK appearing to be linked to the development of an image. UK companies' disclosures, according to Harte and Owen (1991), attempt to imply that it is good for both customers and shareholders that the company is environmentally aware, rather than representing a commitment to the concept of public accountability. As a result, Harte and Owen suggested that social information provided within UK annual reports tends not to be directly related to the quality of actual performance and can indeed be positively misleading. Other studies agreed with the above argument; Gallhofer et al. (1996) have also explained that annual reports are more of a 'public relations' exercise (in the negative sense), rather than integral to a genuine and serious attempt to tackle green issues. In the same vein, Gray et al. (1995a) suggest that the limited amounts of references to the companies' policies indicated that the annual report is used as some form of 'promotional device', and suggest that providing a serious account of the company's social performance to external stakeholders is not a priority (cited in Tilt, 2001, p. 205). Adams et al. (1998), in a study of CSR in six countries in Europe, also suggested that CSR is being used to improve image or reputation of companies and as a justification for not introducing more social legislation or regulations. This, they explain, may be a result of annual reports being aimed at individual shareholders in the UK, with private individuals being a significant source of capital, bearing in mind the fact that there is little regulatory demand for CSR. Adams et al. (1998) concluded that voluntary disclosure in the UK has little to do with social responsibility and accountability but may be seen as a useful way of reinforcing the government's free market ideology and anti-legislative stance.

UK studies, similar to this current study, have also noted the lack of third party independent verification of social reporting as defined in this study. Gallhofer and Haslam (1993) note that only 18% of companies in their sample had their environmental disclosures audited. Owen and O'Dwyer (2004), in a more recent study, critically analysed assurance statements appearing in leading edge environmental, social and sustainability reports as presented by those short-listed for the 2002 ACCA UK and European Sustainability Reporting Awards Scheme. They noted that there seems to be some improvement in terms of the rigour of work undertaken and

independence of the assurance exercise. The study, however, exposed a large degree of management control over the assurance process, as evidenced by a reluctance to address statements to specific stakeholder constituencies and a general absence of stakeholder participation in assurance processes. As far as Arab companies' annual reports are concerned, they did not include any independent verification (or assurance for that matter) statements regarding their social disclosures as defined in this study. The complete absence of third party independent verification statements in Arab companies' annual reports does little to improve the trust in and the credibility of social information presented in these reports.

It is reasonable to conclude that in many cases similarities in the level, nature and quality of social reporting between Arab and UK companies are due to corresponding factors. For instance, as in the case of UK social disclosures, social disclosures in Arab company annual reports are substantially voluntarily. There are little legal or mandatory requirements for social disclosure, as emphasised in this study, in the nine Arab countries in the sample. Furthermore, the majority of companies in this study are public companies owned by private shareholders. This arguably explains why, relative to companies with a significant state share, their annual reports are aimed mainly at shareholders rather than the broader groups of stakeholders in society. These factors combined explain the narrative, vague and positively slanted nature of social reporting among Arab companies where, like UK companies, reporting appears to be largely undertaken for reputation and image building rather than in support of any serious attempt at transparency or the demonstration of public accountability. The Western style, business-led voluntarist approach to social reporting by Arab companies has allowed these companies to largely displace important disclosures such as environmental and health and safety disclosures from the public domain. The lack of a regulatory framework that requires reporting on substantive social issues or compliance with radical initiatives that would improve the quality of social reporting contributed to the maintenance and support of the status quo, rather than challenging it. Therefore, as in the case of social accounting practices in the Western context, such as that of the UK context, social reporting is mobilised to service companies' business interests. The concentration of social reporting by the Arab companies in the sample on the telling of the good news plus the absence of substantial verification of this news has countered more progressive forms of social accounting – forms where social accounting and reporting is supposed to play an emancipatory role in society through functioning as a 'system of informing' (Gallhofer & Haslam, 2003) that allows for transparency and the provision of information

to enlighten and empower societies and move them towards a better and fairer state of social affairs.

Social themes discussed in Arab companies' annual reports re-emphasise the importance of some key social issues in the Arab world. On many occasions, social disclosures tended to emphasise nationalistic and religious considerations that would not usually be evident in UK or Western annual reports. For instance, as seen in explaining the 'economic' dimension, a number of Arab companies were willing to build business decisions on Islamic and/or governmental planning and objectives. These Islamic and nationalistic considerations were also evident in closely exploring the other three disclosure dimensions. Emphasis on Islamic and national considerations is due to a number of contextual factors. For instance, Arab countries that were under the colonial influence of Western powers, after gaining their independence, moved to nationalism and a centrally based economy, with state-owned enterprises coming to dominate large segments of many of these countries' economies. Even with the current movement towards privatisation and the open market economy, the state in these countries still has a significant influence on corporate activities. The findings of this study have demonstrated this importance of governmental role and objectives with many companies in the sample providing information regarding their support of governmental policies and objectives, and including statements thanking the government and rulers of the country. Islam has an even more significant and long-standing role in Arab countries' societies. From the sixth century onwards, Islam has been a significant factor in shaping the political, social, cultural and economic lives of people in the Middle East. Muslims believe that all their activities, including business ones, should be conducted in accordance with Sharia teachings. It is not surprising then to find that a number of Arab companies, in respect of all four disclosure dimensions in this study, were apparently enthusiastic about disclosing their commitment to Islamic considerations or Islamic Sharia in different aspects of their activities. It is equally not surprising for them to stress this commitment by using styles of writing or including verses from the Holy Quran that reflect Islamic considerations.

One may not unreasonably argue that these disclosures are made to enhance companies' image in Arab societies where religion and national considerations are central to their major stakeholders, including the shareholders. After all, the majority of disclosures recorded in this study are positive in nature, and lack substantial disclosures in the way of negative or critical commentary. Disclosures demonstrating sensitivity to Islamic and national considerations could, however, constitute a more emancipatory

potential for social accounting and reporting in the Arab world context and beyond. Incorporating national and Islamic considerations into companies' reports may be challenging to the conventional view of the role of accounting information and provide a promising potential to go beyond its conventional alignment to the goals of serving the maximisation of shareholders' value. For instance, currently central to Arab governmental economic policies and planning are issues such as creating employment opportunities for members of society, achieving lower illiteracy rates and providing more training opportunities for young people as well as improving the overall welfare of the society as a whole. Incorporating these objectives in corporate business activities would consequently challenge the view that the role of business in society is mainly to generate profit and maximise shareholders' value. In a similar fashion, incorporating Islamic teachings and Sharia into companies' policies and reporting practices entails the involvement of rich Islamic values and principles, central objectives in relation to which include establishing justice and promoting social welfare through obedience to God's commandments (Ibrahim, 2000). Islamic Sharia, for example, requires adherence to certain values when conducting business activities such as justice, kindness and honesty. Sharia also requires the avoidance of negative values such as tyranny, greed and extravagance or harm to self and society. Accounting and accounting information, therefore, in an Islamic context, are expected to participate in the achievement of Sharia objectives, which go beyond the maximisation of wealth to specific groups in society.

Despite the emancipatory potential of Islamic and national consideration disclosures to challenge the conventional repressive role of accounting in society, the voluntary and ad hoc nature of these disclosures currently counters any serious challenge to conventional accounting. As discussed earlier, none of the nine Arab countries in the study have introduced any disclosure requirements that would regulate or bring consistency to Islamic or national-related disclosures. Despite the increased interest in Islamic accounting, Western accounting models are still dominant in the nine Arab countries in this study. While Arab countries gained their independence, the colonial experience has already shaped their political and economic development including their accounting systems. These systems are an extension of Western systems that are predominantly developed to suit the Western context (Samuels & Oliga, 1982). Arab countries, therefore, have had little opportunity to develop accounting systems that suit their own development plans or social, cultural and religious needs. Even in the case of what is called international initiatives such as IASs, the Eurocentric nature of IASs and the blindness of these standards to information needs other

than those of shareholders have resulted in the situation whereby accounting regulations and practices in the Arab world, which are significantly influenced by accounting, do not require the inclusion of any social, whether national or religious, considerations in reporting. This situation results in Arab companies' disclosure practices not complying with a number of social and religious principles key to the Arab culture. For instance, displacing substantive social issues from disclosure contradicts the Islamic concept of accountability, where business organisations have the obligation to report to the Umma on the impact of business activities on the welfare of the Umma, and advise the Umma on the consistency of its operations with Sharia and how it was achieved (Maali, Casson, & Napier, 2003; Haniffa, 2001). The voluntary approach does not require companies to disclose on the contribution of their activities to social or national development and welfare. Social reporting manifestations in Arab annual reports in this study, consequently, fail to provide a significant 'radical critique' to the current socio-political order in the Arab world, where there is an increasingly steady move towards open market and capitalistic policies, that would make Arab societies prone to capital interests and manipulation.

The process of setting accounting standards in the Arab world could be designed in a way that would better encompass the social dimensions of business activities. An inspiration in this sense can be gained from Islamic Sharia whose main objective is the creation of a just and fair society (Gambling & Karim, 1991). Therefore, Muslim activities, including business ones, in accordance with Sharia, should overall contribute to the achievement of that objective. Social responsibility according to Sharia becomes a primary condition to business activity, rather than, as conceived in conventional Western economics' view, to be 'not of concern for business people' (Friedman, 1970 cited in Carroll, 1993, p. 37), or as perceived in mainstream social responsibility debates: a nice addition and 'fix' to the already dominant economic dimension (O'Dwyer, 1999). Such insights open up possibilities of indigenous 'paths' or 'routes' to emancipatory/radical accounting/social accounting (Sadiki, 2003). Accounting and accountants' role in Islam and in an Islamic society should in principle be mobilised to enhance justice and fairness in society through providing a fair basis of sharing profit and wealth, primarily through the calculation of Zakat, and providing a basis for the redistribution of power within society through providing a transparent and accountable information to society on business activity and its impact on Umma's well-being, even if this information would harm the company (Maali et al., 2003). Accounting under Islamic teaching could, consequently, be considered to represent a form of an

emancipatory and radical social accounting that goes beyond the narrow economic focus of conventional accounting and demonstrates higher transparency and accountability. Incorporating Islamic teachings into the setting and developing of accounting standards can provide basis for more radical accounting practices.

A fundamental consideration for Arab policy-makers, regulators and educators could encompass an employment of a critical examination of European, Western standards, practices, curriculum and teaching programmes promoted to them as universals and best practices. They could consider adapting them to Arab–Islamic society's needs and particularities. This does not mean that there should not be a room for exposure to and learning from the culture of the 'other', Western. This exposure, however, might be adapted to cultural specificity (Held & McGrew, 2002; Sadiki, 2003). The ASCA can play a significant role here. The Arab accounting association enjoys a significant success in the Arab world and increased range of membership throughout the Arab world. This popularity and willingness to become a member of the ASCA demonstrate a notion of Pan-Arab feeling of common history and common destiny. The historical bond enhances the ability of an Arab institution to bring about harmonised and enforceable standards. The Arab Association can mobilise such popularity to bring about efforts and experiences throughout the Arab world to develop accounting standards that are compatible with Arab–Islamic societies. At the same time, these standards can serve and enhance the ability of these societies to engage and trade with each other in light of increased initiatives for Arab markets and trade agreements. The Association can also mobilise this power to represent and defend Arab/Islamic societies' interests on the global level. The Arab Association thus far has limited its over reaching influence to the translation and promotion of IASs and Western practices, without the critical adaptation of these practices. Unless the Association chooses to mobilise its role to reflect its societies' needs and welfare, its role will be limited to the uncritical promotion of Western cultural insensitive practices and interests. The Arab Association can, for instance, give support and incorporate Islamic organisations' efforts to develop Islamic accounting. It can also begin to develop a form of social accounting along Islamic and national consideration lines to protect and better Arab societies, especially in their current steady moves towards more open and free markets economies. The Association's involvement in developing Islamic accounting and social accounting can bring them to the forefront of Arab practices, rather than being considered as practices particular to a few Islamic institutions.

On the international level, the setting of international or universal accounting standards can profit from gaining insights into the history of the Arab/Islamic world, which can provide inspiration for real universal global governance. The way that the Islamic civilisation incorporated accumulated practices that preceded it and abandoned Arab exclusiveness (see Kennedy, 1981; Hourani, 1991; Cleveland, 1994; Tinker, 2004) provides a good example and a lesson on how an enlightened universalism is possible if interaction and hybridity among different cultures and traditions are borne. International governance organisations today, including accounting ones, therefore, to be truly universal can begin to look for the non-West for inspiration and cooperation. They can begin to gain insights from them for better and more just global order, through transactive/transcultural communication and dialogue – rather than merely acting as principal agents for capital and powerful states' interests.

NOTES

1. Corporate social responsibility and social accounting has increasingly been seen as a business-led and voluntary exercise. For instance, the EU appears to have accepted the argument that corporate social responsibility is voluntary, business-led practice. The European Commission has defined corporate social responsibility as a "concept whereby companies integrate social and environmental concerns in their operations and in their interaction with stakeholders on a voluntary basis" (Murray, 2003, p. 9). This, however, has not always been the case. Nineteenth century research into social accounting, as well as the social audit movement of the 1970s, demonstrates that social accounting and reporting was carried out by parties external to the business organisation in order to act as a watchdog to business social performance and behaviour for society's social benefits (see Gray et al., 1996; Gallhofer & Haslam, 2003).

2. The term 'Middle East' first gained currency in the British India office during the 1850s. The Middle East was the area lying between the Indian subcontinent, where the British Empire had great interest and influence, and the Near East or Levant. The focus of the Middle East was the Persian-Arabian Gulf where it was seen as 'middle' in an east–west sense but also possibly in a north–south sense, essentially between the Russians to the north and the British to the south (Anderson, 2000). In recent times, the Middle East is taken to include the region from Egypt in the west to Iran in the east and from Turkey in the north to the Arabia Peninsula in the south (Cleveland, 1994). The Arab Middle East includes the Arab states in the Middle East, which means that it excludes countries like Turkey, Iran and Israel.

3. 'Critical accounting' is an umbrella term. It refers to an array of a variety of different theoretical perspectives in social science including Marxism and the Critical German School (in accounting research see Puxty, Willmott, Cooper, & Lowe, 1987;

Hopper, Cooper, Lowe, Capps, & Mouritsen, 1986; Tinker & Neimark, 1987), postmodernism (see Miller & O'Leary, 1987), postcolonialisim and feminism.

4. As far as social accounting research is concerned, it could be argued that the critical perspectives are dominated by Marxist-orientated perspectives, especially Marx's classical political economy theory (O'Dwyer, 1999). These socialist and Marxist approaches, as is the case with pluralism and liberal economy, have been considered to be the substantive positions for analysing and reconstructing the Western world (Gray, Owen, & Maunders, 1991). They are positions that are not necessarily suitable for analysing and addressing issues related to a non-Western context and ideology, such as one related to the postcolonial world of the Arab Middle East. Postcolonial critics argue that Marxism has ''failed to accommodate the specific political needs and experiences of the colonised world'' (Gandhi, 1998). This is because, as Said (1978 cited in Gandhi, 1998) would argue, the Marxist Theory is blinded (like Marx himself) to the world outside Europe.

5. Edward Said's book, '*Orientalism*', represents the first phase of postcolonial theory (Gandhi, 1998). The work of Said (1978) in '*Orientalism*' concentrates on what is considered one aspect of postcolonialism, 'colonial discourse analysis'. However, few postcolonial critics dispute the enabling effect of 'colonial discourse analysis' upon subsequent theoretical improvisations (Gandhi, 1998). Examining Orientalism as a discourse is essential to ''understand the systematic discipline that enabled European culture to manage and even produce the Orient politically, sociologically, militarily, ideologically, scientifically, and imaginatively during the postenlightenment period'' (Said, 1978, p. 3). Orientalism, according to Said (1978, p. 7), can be discussed and analysed as ''the corporate institution for dealing with the Orient, dealing with it by making statements about it, authorising views of it, by teaching it, settling it, ruling over it: in short, Orientalism as a Western style for dominating, restructuring and having authority over the orient'' (Said, 1978, p. 3). Said's (1978) '*Orientalism*' emphasises Britain, France and the US as colonial powers. The Orient, however, is a vast region, one that spreads across a myriad of cultures and countries. It includes most of Asia as well as the Middle East. Said, mainly, focuses in '*Orientalism*' on how English, French and US scholars have approached the Arab societies of North Africa and Middle East. He covers the period between the 18th century and the present (i.e. 1978).

6. For example, the Bretton Woods institutions of the International Monetary Fund (IMF) and the World Bank, 1944, and the General Agreement on Tariffs and Trade (GATT), 1947. Barely a couple of years later, tight political and military alliances were woven around the 'free world' economy (NATO) (Hoogvelt, 1997).

7. For example, modernisation studies would examine the processes of secularisation consequent upon the introduction of cash crops into traditional peasant communities, or the effect of industrialisation on the nuclearisation of family systems, or need for multi-party democracy to support the division of labour (Hoogvelt, 1997).

8. San Remo Conference divided the Arab provenience from Ottoman rule and allocated them between Britain and France. The Arab provinces were divided into entities called mandates. Britain received the mandates for Iraq and Palestine and retained control of Egypt, France the mandate for Syria. The other Arab state over which Britain exercised direct influence, Transjordan, was formed by the British and did not exist at the time of the Treaty (Cleveland, 1994).

9. Syria and Egypt formed a united state in 1958 under the leadership of President Jamal Abdel Naser, the President of Egypt. The UAR lasted for three years.

10. This task was not very easy as it must be remembered that during the Naser regime large segments of the nation's economy were socialised (McKee et al., 1999).

11. ASCA was established in London in 1984 as an Arab professional institution with an international character (www.ascasociety.org/english/society.htm, 2004). The ASCA includes members from the entire Arab world.

12. The Arabic translation by ASCA is the only acceptable version by IASB (www.ascasociety.org/english/society.htm, 2004).

13. Research also shows that more than 56 out of 67 countries surveyed by the IASB in 1996 either used IASs as their national standards or based their national standards on IASs. Furthermore, the International Organisation for Securities Commission (IOSCO), the IASB, the World Bank and International Federation of Stock Exchanges believe that the adoption of IASs is appropriate for, to what they term, developing countries. They argue that introducing IASs is often an "improvement over the existing systems as they provide low set up and production costs for accounting information, add to international comparability, and attract internal investment" (Joshi & Ramadhan, 2002).

14. A factor that has a less challenging influence on accounting in countries like Syria and Egypt is nationalism. After independence, in the late 1950s, Egypt and Syria began a process of nationalisation in various economic sectors that led to a socialist era (Abd-Elsalam & Weetman, 2003). This era resulted in the issuance of a Unified Accounting System (UAS) in Egypt, and later Syria, which regulates accounting in the public sector in line with government planning. The UAS does not, however, give any guidance regarding the private sector and has hardly been reformed since its issuance.

15. As explained in Pomeranz (1997) paper, assets of Islamic banks are estimated to range from US$50 to 100 billion. The annual growth rate is between 10% and 15% of the asset base (Pomeranz, 1997). The success of Islamic banks is driven by three considerations: (a) an Islamic investor should avoid association with industries prohibited to Muslims such as alcohol, gambling, pornography, meat packing (pork), weapons production and liquor; (b) an Islamic enterprise is to avoid interest (riba), along with gambling, and accordingly, restrictions exist on trading in debt securities and in futures and options; (c) many Muslim investors tend to be attracted to enterprise observing Islamic ethical moral standards (O'Sullivan, 1996a cited in Pomeranz, 1997). More up-to-date surveys put the growth of Islamic banks at an average annual rate of 15% in the world (Yuce, 2003).

16. AAOIFI, based on the island state of Bahrain in the Persian Gulf, was founded in 1993. It has to date issued 16 accounting standards covering areas such as the presentation of financial statements of Islamic banks and financial institutions, the treatment of provisions and reserves, and the treatment of the contracts such as 'Mudarabah', 'murabaha', 'istisna' and 'ijara' (Drummond, 2001). AAOIFI has also issued statements on capital adequacy for Islamic banks and has just completed a series of exposure drafts on foreign currency transactions and foreign operations, the provisions and reserves of Islamic insurance companies and the auditing of Islamic financial institutions (Drummond, 2001).

17. However, all enterprises must pay income tax or Zakat to the Directorate General of Zakat and Income tax. Saudi and GCC companies and individuals engaged in trade in Saudi Arabia should pay Zakat of 2.5% on taxable capital (www.us-saudi-business.org).

18. However, Saudi Arabia was cautious towards the expansion of Islamic banks and refused to let Islamic banks mention their intentions to comply with Islamic laws in their charters. This is based on the assumption that including the word 'Islamic' might imply that all other banks are 'non-Islamic' promoting demands to dissolve them (McKee et al., 1999). However, McKee et al. (1999) explain that Saudi Arabia hosts several of the world's most significant institutions for research on Islamic banking. The Kingdom is also considering ways in which it can use Islamic techniques to attract private investors for 'development projects, reducing foreign borrowing and deficit financing'. Islamic scholars are also searching for solutions for the fundamental economic problems. In this endeavour, the 'Ulama' (Islamic jurists) have been 'joined by other experts such as bankers, economists, lawyers, and financiers' (McKee et al., 1999).

19. Bahrain is the only country in the sample that made AAOIFI standards mandatory for Islamic financial institutions (www.islamiqdaily.com).

20. Lack of availability of annual reports to non-shareholders could be due to the fact that in many Arab states the concept of a stock market and private investors is new and net yet very established. Syria, for instance, does not have a stock market up until now. Even in a country like Egypt, which had one of the oldest stock markets in the world going back to the late 1800s, the socialist policies that were followed in Egypt after independence have resulted in the closure of the stock market, which only reopened in the 1980s. This could explain the lack of availability of information to the use of the general public (see Lopez-Claros & Schwab, 2005).

21. Appendix A demonstrates that the number of CARs obtained from the GCCs and Jordan exceeds that obtained from Egypt and Syria (despite the fact that more direct efforts were made to obtain reports from these specific two countries). This could be explained to be due to the small number of large public holding companies in a country like Syria, for instance. Many small and medium size private Syrian companies, while publishing their balance sheet in official newspapers in Syria, do not produce annual reports for the use of external parties. Similarly, in Egypt, while a stock exchange does exist, not a large number of companies trade on that stock exchange, thereby not many Egyptian companies have their CARs available to the public (see Hanafi & Gray, 2005).

22. Including state-owned companies in the sample provides an insight into the possible impact of ownership and the role of the government on the nature and type of social disclosure provided by companies.

23. While financial accounting standards can differ between the financial and non-financial sectors, this does not provide a great limitation to a study of social disclosure in AME as nearly all of social disclosures are voluntary in nature for all types of industries. Other international social reporting studies have also included the financial sector (see Kuasirikun & Sherer, 2004).

24. Any company that satisfied at least one disclosure category or sub-category was regarded as a 'reporting company'.

25. The study recognises that the aspects of the 'economic dimension' included in this study are only partial to the 'economic dimension' included in more critical writings in social accounting. Gallhofer and Haslam (2003, p. 184) explain that the category 'economic' is concerned with, for instance, productive efficiency, the ethics of the very practice of profit making, the extent of monopolistic or oligopolistic power exercised and the distribution of wealth, and the reproduction of material poverty should be at the heart of social accounting and reporting content and scope. They argue that "not to challenge conventional accounting in this context renders social accounting more susceptible to its influence and this enhances the grip of problematic hegemonic forces upon it" (Gallhofer & Haslam, 2003, p. 148).

26. Few studies in the CSR literature have incorporated the economic dimension in their research. Studies that incorporated the economic dimension have mainly concentrated on customer- and supplier-related disclosures (see Gray et al., 1995a; Kolk, Tulder, & Welters, 1999; GRI, 2002). The dropping of the economic dimension in CSR literature could be due to the notion that the economic dimension of sustainability or social reporting remains the least developed of the sustainability or social reporting frameworks (GRI, 2002).

27. Murabaha is a "combination of trading and debt technique. The sale of goods at cost plus an agreed profit mark *u*: Here the seller should inform the purchaser of the price at which the product was purchased and the stipulated amount of profit in addition to this" (Faysal Islamic Bank Annual Report, 1999, p. 11).

28. A contract "whereby the purchaser asks the seller to manufacture a specifically defined product using the seller's raw material at a given price" (Faysal Islamic Bank Annual Report, 1999, p. 11).

29. Islamic Zakat, while it has some similarities to the conventional tax system, differs from it. Under a conventional tax system, the government may have a range of usages of the tax. They typically have a range of priorities expenditure and are concerned with the promotion of the economy and certain industries (resulting in different fiscal policies and the enforcement of rules, e.g. capital allowances, expense exemptions, double tax relief). Such a wide-range set of purposes does not apply in the case of Zakat. Furthermore, the Zakat rate is predetermined and cannot be changed by the government (Ibrahim, 2000). On the social dimension, the Quran (9:60) has specified those who are eligible to receive Zakat payments from the Zakat fund. These include "the poor, the deprived, those who are unable to pay their debts, destitute travellers, and those on the path of Allah". Some religious scholars have justified the spending of Zakat on health and education as well as on some other services; however, this does not include the salaries and wages of those working in these sectors (Taheri, 2000).

30. Mudaraba is "an investment based technique, which is a partnership in profit between capital and labour. Profit is shared as agreed by the two parties and the losses being borne by the provider of funds". Mudaraba "differs from what is known as speculation, which includes an element of gambling in buying and selling transactions".

31. An investment-based technique whereby each party contributes to the capital of a partnership in equal or varying degrees to establish a new project or share an existing one. Each of the parties becomes an owner of the capital on a permanent or declining basis and shall have their due share of profit. Losses, however, are shared in proportion to the contributed capital. It is not permissible to stipulate otherwise.

32. Anything like comprehensive content analysis studies regarding social reporting in companies of the Arab Middle East is scarce. Furthermore, content analysis studies in respect of social reporting practices in other non-Western countries are also very few, which makes it difficult to compare the results of this study with non-Western studies.

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APPENDIX A. SAMPLE COMPANIES

Company	Country	Sector	Ownership
Sabic	Saudi Arabia	Industrial	Public holding company
Saudi American Bank	Saudi Arabia	Financial	Public holding company
Etisalat	UAE	Telecoms	Public holding company
Riyad Bank	Saudi Arabia	Financial	Public holding company
Saudi British Bank	Saudi Arabia	Financial	Public holding company
Sceco-Western	Saudi Arabia	Electricity	Public holding company
Arab Bank	Jordan	Financial	Public holding company
Qatar Telecom Co.	Qatar	Telecoms	Public holding company
Batelco	Bahrain	Telecoms	Public holding company
Kuwait Finance House	Kuwait	Financial	Public holding company
Mashreq Bank	UAE	Financial	Public holding company
Emirates Bank International	UAE	Financial	Public holding company
National Bank of Abu Dhabi	UAE	Financial	Public holding company
Saudi Investment Bank	Saudi Arabia	Financial	Public holding company
NSCSA	Saudi Arabia	Services	Public holding company
Investcorp	Bahrain	Financial	Public holding company
National Mobile Telecom	Kuwait	Telecoms	Public holding company

APPENDIX A. (*Continued*)

Company	Country	Sector	Ownership
Abu Dhabi National Insurance	UAE	Financial	Public holding company
National Bank of Bahrain	Bahrain	Financial	Public holding company
Ahli United Bank	Kuwait	Financial	Public holding company
Kuwait Real Estate Bank	Kuwait	Financial	Public holding company
Bank Al Jazira	Saudi Arabia	Financial	Public holding company
Bank of Bahrain and Kuwait	Bahrain	Financial	Public holding company
Qatar National Transport	Qatar	Services	Public holding company
Bank Muscat	Oman	Financial	Public holding company
Qatar Shipping Co.	Qatar	Services	Public holding company
National Bank of Fujira	UAE	Financial	Public holding company
Doha Bank	Qatar	Financial	Public holding company
Qatar National Bank	Qatar	Financial	Public holding company
Abu Dhabi Commercial	UAE	Financial	Public holding company
Sceco-Eastern	Saudi Arabia	Electricity	Public holding company
Public Warehousing Co.	Kuwait	Services	Public holding company
Arab National Bank	Saudi Arabia	Financial	Public holding company
National Industries	Kuwait	Industrial	Public holding company
Arab Banking Corp.	Bahrain	Financial	Public holding company
First Islamic Bank	Bahrain	Financial	Public holding company

APPENDIX A. (*Continued*)

Company	Country	Sector	Ownership
Union National Bank	UAE	Financial	Public holding company
Arab Insurance Group	Bahrain	Financial	Public holding company
The Arab Potash Co.	Jordan	Industrial	Public holding company
Syria-Saudi Co.	Syria	Food and beverages	State-owned company
The International Investor	Kuwait	Financial	Public holding company
Bahrain International Bank	Bahrain	Financial	Public holding company
Arab Jordan Investment Bank	Jordan	Financial	Public holding company
Export and Finance Bank	Jordan	Financial	Public holding company
Gulf International Bank	Bahrain	Financial	Joint venture between state and private sector
Bahrain Kuwait Insurance	Bahrain/ Kuwait	Financial	Public holding company
Kuwait Projects Co.	Kuwait	Financial	Public holding company
Faysal Islamic Bank	Bahrain	Financial	Public holding company
Kuwait National Petroleum	Kuwait	Oil	State-owned company
Taib Bank	Bahrain	Financial	Public holding company
Kuwait and Middle East Finance Investment Co.	Kuwait	Financial	Public holding company
Oman Arab Bank	Oman	Financial	Public holding company
Jordan Kuwait Bank	Jordan	Financial	Public holding company
Saudi Aramco	Saudi Arabia	Oil	State-owned company

APPENDIX A. (*Continued*)

Company	Country	Sector	Ownership
Kuwait Oil Company	Kuwait	Oil	State-owned company
Saudi Holandi Bank	Saudi Arabia	Financial	Public holding company
The United Bank of Kuwait	Kuwait	Financial	Public holding company
Central Bank of Kuwait	Kuwait	Financial	State-owned company
Syrian Company of Hotels	Syria	Services	Joint venture company: (government owns 25% of shares, the largest shareholder in the company)
Pachin Paints and Chemical Industries	Egypt	Industrial	Public holding company
Egyptian Company for Pharmaceutical Industries	Egypt	Industrial	Public holding company
Egyptian Company for Mobile Services	Egypt	Telecoms	Public holding company
Suez Cement Co.	Egypt	Industrial	Public holding company
Delta Company	Egypt	Industrial	Public holding company
Delta Industrial Co.	Egypt	Industrial	Public holding company
Maser Beni Suef Cement Co.	Egypt	Chemical	Joint venture between government and private sector
Naser City Housing and Building Co.	Egypt	Services	Joint venture: 75% private shareholding 25% governmental stake
Al Ahram Beverages Company	Egypt	Food and beverages	Public holding company

APPENDIX B. RESEARCH INSTRUMENT OF THE CONTENT ANALYSIS STUDY 'ECONOMIC' DIMENSION

Categories (GRI, 2002)	Description of Categories and Sub-Categories
Supplier relations	Disclosure in this category primarily includes details regarding nature and location of outsourced operations, performance of organisation in honouring contracts with suppliers, including meeting payment schedules, surveys carried out by organisation for measuring supplier's satisfaction and information related to drivers behind the choice of suppliers
Customer relations	Disclosure in this category mainly includes consumer complaints and consumer's satisfaction surveys and consultation, and other disclosures relating to consumer interests (consumer needs, consumer concerns, marketing practices)
Islamic considerations in company business decisions and company activities	Disclosure under this category could include reporting on investment decisions taken by the organisation in compliance with Islamic rules and teaching, how contracts, transitions and dealings are performed in adherence to the principles of Islamic Sharia, and disclosure(s) relating to Zakat obligations and payments
Linking company business activities and decision making with governmental and national considerations	Disclosure under this category mainly includes description of how the organisation's policy and decision making are in line with governmental plans and committed to the growth of the national economy. May also include disclosure regarding the relationship between the organisation and the government

APPENDIX C. RESEARCH INSTRUMENT OF THE CONTENT ANALYSIS STUDY 'ENVIRONMENTAL' DIMENSION

Categories (GRI, 2002)	Description of Categories and Sub-Categories
Energy	Disclosure relating to energy could touch upon the type and total energy usage in the company and energy conservation and efforts to reduce energy consumption, and use/development/exploration of new resources, efficiency, installation, etc. (Gray et al., 1995a) Sub-categories are: • energy conservation and savings; • other energy-related information
Water	Disclosure could include: total usage of water, water conservation and efforts to reduce water consumption
Waste	Information about recycling, reuse, remanufacturing, clean up and spillage
Pollution control	Pollution control includes talking about, for example, emissions, effluent and cutting noise pollution
Sustainability	Disclosures relating to sustainability or the mentioning of sustainability
Material usage (other than fuel and water)	Disclosure under this dimension primarily includes material types used by corporations, total material usage (other than fuel and water) and efforts to reduce material consumption
Transport	
Habitat protection	
Land use/biodiversity	

APPENDIX C. (*Continued*)

Categories (GRI, 2002)	Description of Categories and Sub-Categories
Environment management and control	This could include information related to environmental policy, whether a formal one or in the form of company 'will' company 'does' structure throughout the report. It also includes disclosure of an existence of environmental audit and management system, as well as disclosures regarding compliance with national and international regulations incident rates
Other environmental disclosure	This category includes: studies and research regarding environmental issues, discussing of general environmental issues that do not directly relate to the organisation's activities or disclosures regarding educating the community on environmental issues

APPENDIX D. RESEARCH INSTRUMENT OF THE CONTENT ANALYSIS STUDY 'GENERAL SOCIAL' DIMENSION

Categories (GRI, 2002)	Description of Categories and Sub-Categories
Community developments	Disclosure primarily includes local, national and international community development, including donations, whether to schools, art, sport, health, research or education. Charity disclosure, whether amounts of charities or destination of charity. It could also include any other reference to community outside the labour force and charities.
Employee-related issues	This could refer to one or more of the following sub-categories: • Training and education of employees; this could include details of the nature of these courses and number of employees who attended such training courses • Employee satisfaction surveys and consultations. • Employee benefits and wages. • Details of the work force in the company like number of employees and their qualifications. • Statement(s) showing gratitude and thanking employees. • Employee retention rates. • Disclosures that are specially related to employee disclosure in the context of Arab countries are disclosures related to the nationalisation of employees and work force in these countries.

APPENDIX D. (*Continued*)

Categories (GRI, 2002)	Description of Categories and Sub-Categories
Health and safety issues	Disclosure under this category could include: • health and safety at work; • toxic hazard (e.g.) to employees and the public; • any reference to health and safety law; • information to employees, training; • accidents (Gray et al., 1995).
Management information	This could include information related to names of the Board of Directors and the management team. An organisation could go further to provide and disclose the C.V.s of the management team or/and even disclose the management team or Board member(s) responsible for social issues.
Commitment statements to social responsibility and other types of social commitment indications	This category relates to any disclosure of: • Policy statement(s) or any general reference to the organisation's commitment to social issues (other than environmental issues). Policy statement could be of formal type headed with social policy or form part of the general formal policy of the company. Other policy statements could be things like company 'will' company 'does' form, or any reference to setting of social standards or targets, performance against benchmarks or reference to vision and strategy of the company. • Other: which could include acknowledgement of success or failure in achieving targets, reporting on

APPENDIX D. (*Continued*)

Categories (GRI, 2002)	Description of Categories and Sub-Categories
	accidents (other than environmental-related ones), undertaking social audit, staff training relating to social issues, compliance with regulations and the law (other than environmental ones), information related to prosecutions and complaints, charter subscription, sponsoring research devoted to social issues and an indication to any independent verification of the social disclosure within the report.
Other general social disclosures	Under this category a large number of issues could be included; however, the study limits these issues to matters such as: child labour issues, forced labour issues, human rights issues, indigenous rights issues, freedom of association and right to collective bargaining, and equal opportunities issues such as equal opportunities for women, the disabled and minorities, or even equality issues mentioned in general, and finally, discussing general social issues (other than environmental ones) that are not related to the organisation's direct activities.

APPENDIX E. RESEARCH INSTRUMENT OF THE CONTENT ANALYSIS STUDY 'OTHER CULTURAL CHARACTERISTICS OF ANNUAL REPORTS' DIMENSION

Categories (GRI, 2002)	Description of Categories and Sub-Categories
Other indications of Islamic and nationalistic influence on reporting	After conducting a pilot study on the 68 Arab companies' annual reports, the following sub-categories seemed to appear in a reasonable number of reports: • Starting reports with mentioning the name of God. • Islamic and religious influence on the style of writing throughout the report. • Including verses from the Holy Quran. • Including a thanking statement to the rulers and the government of the country.

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"BIG BANG" ACCOUNTING REFORMS IN JAPAN: FINANCIAL ANALYST EARNINGS FORECAST ACCURACY DECLINES AS THE JAPANESE GOVERNMENT MANDATES JAPANESE CORPORATIONS TO ADOPT INTERNATIONAL ACCOUNTING STANDARDS

Orapin Duangploy and Dahli Gray

ABSTRACT

The mandated adoption of International Accounting Standards (IAS) for Japanese corporations did not result in improved earnings that forecast predictability. These findings contradict the research findings of Ashbaugh and Pincus (2001). Herrmann, Inoue, and Thomas' (2003) research findings support the need for mandating the adoption of IAS. They found that Japanese managers were "manipulating" reported earnings by managing the sale of fixed assets and marketable securities. Adoption of

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IAS decreases the availability of this practice and it was and is expected to increase disclosure and transparency. Increased disclosure and transparency are expected to decrease financial analyst forecast errors, which did not decrease for 139 firms examined in this study for the timeframe of 1999–2002. This research finding does not support the idea that adoption of IAS improves financial information used in decision making relative to forecasting earnings. Assuming that increased predictability indicates higher quality reported earnings and enhanced usefulness of financial information, the mandated adoption of IAS did not result in these. Assuming that adoption of IAS in Japan increased the level of transparency and disclosure by Japanese firms, which made it harder for Japanese firms to manage their earnings in order to meet the managerial earnings forecasts that these firms must make. Thus, after the adoption of IAS in Japan, forecast errors for managerial forecasts of earnings increased. This evidence is new to the literature.

INTRODUCTION

In Japan, corporate management must issue forecasts of operating income, current profit, and net income. Between 1999 and 2002 there were a number of significant changes to corporate financial reporting in Japan. These changes essentially involved the adoption of a number of important International Accounting Standards (IAS), which are listed in appendix. This paper reports research findings which reveal that the mandated adoption of a set of IAS in Japan in the period 1999–2002 was not associated with an improvement in the accuracy of financial analysts' forecasts of Japanese companies' earnings. Ashbaugh and Pincus (2001) looked at a similar question, but examined a set of firms that voluntarily adopted IAS in the early 1990s. Their research findings revealed an increase in forecast accuracy. This study's research findings contradict the Ashbaugh and Pincus (2001) findings and thereby add an important new evidence to the existing literature.

The Japanese government requires managers in Japan to disclose annual and semiannual forecasts of operating income (OI), current profit (CP), and bottom-line net income (NI). Financial analysts at Toyo Keizai (http://www.toyokeizai.co.jp/english/) revise quarterly forecasts based on these disclosures. The revised forecasts made in the winter quarterly update for the years 1999–2002 are used in this paper as the expectations against which

actual earnings (and earnings components of operating income and current profit) are compared to determine forecast errors.

Prior to the adoption of IAS, Japanese accounting standards were similar to German code law. The bank-based financial system in Japan was heavily protected by its government, which viewed earnings management as both legal and prudent. The adoption of IAS reflects the transformation of the Japanese financial system from a bank-centered system to a market-centered system. Usefulness of reported earnings emerges as a significant quality. Hence, this study also investigates the usefulness of the accounting reforms from the predictability of earnings perspective.

The Japanese "Big Bang" in November 1996 reformed the corporate financial reporting system by embracing IAS. The International Accounting Standards Committee (IASC) developed IAS to generate more comparable financial information across national boundaries by requiring more transparency and disclosure. The reduction in the variation in measurement and greater disclosure practices will result in more predictable financial information (Ashbaugh & Pincus, 2001, p. 418). After the "big bang" reform, the Japanese financial reporting system is expected to provide a higher level of disclosure that is more in line with IAS. A number of changes in accounting standards became effective during 1999 and 2002 (see appendix). Among the new accounting standards that became effective beginning on April 1, 1999 is the treatment of consolidated financial statements as the primary financial statements and income tax allocation (Japan Institute of Certified Public Accountants (JICPA) 1999, pp. 45, 32). The requirement of issuing semiannual consolidated financial statements became effective on April 1, 1999 (JICPA, 1999, pp. 45, 50). Another major group of accounting changes took place beginning April 1, 2000. These changes require fair value reporting of financial instruments and include the following: accounting for marketable securities and investment in securities, accounting for retirement obligations, and accounting for foreign currency transactions (JICPA, 1999, pp. 16, 28, 52, 40). Adopting new accounting rules for the treatment of the impairment of long-lived assets was proposed on April 1, 2002 and voluntary application was encouraged prior to the full application in the fiscal year 2005 (www.jetro.go.jp/usa, July 2002). Hence, with the exception of the impairment loss of assets, the majority of the impact of the accounting reforms will be reflected in the March 31, 2003 financial statements.

Ashbaugh and Pincus (2001) studied a sample of 80 non-US firms that switched from domestic generally accepted accounting principles (GAAP) to IAS and found that "prior to adopting IAS, the extent of differences in countries disclosure and measurement policies relative to IAS is positively

associated with analysts' earnings forecast errors'' (p. 431). They also ''document a decrease in the absolute value of analyst forecast errors after firms adopt IAS'' (Ashbaugh & Pincus, 2001). Consistent results were found even after they controlled for ''the concurrent growth in news reports'' Ashbaugh and Pincus (2001).

It is therefore expected that the accounting reform in Japan, though not in full compliance with the IAS, will increase the predictability of earnings (i.e., accuracy of forecasts).

REVIEW OF JAPANESE ANALYSTS' EARNINGS FORECASTS AND EARNINGS MANAGEMENT

Analysts' Earnings Forecasts

The Japanese Securities and Exchange Laws require Japanese-listed firms to disclose annual management forecasts of earnings at three earnings levels: operating income, current income (i.e., before extraordinary items), and net income (Herrmann et al., 2003, p. 90). These forecasts are published in the firms' annual and semiannual press releases. They provide a direct measure of management's expected future performance (Frost, 1997, p. 2). Financial analysts incorporate the managerial forecasts in making their forecasts.

Conroy, Harris, and Park (1993) investigated the difference between the United States (US) and Japan forecasts by comparing Japanese forecasts of parent company earnings published by Toyo Keizai to analysts' forecasts of US companies' earnings per share summarized in the IBES database for 1985 through 1988. They found that the Japanese financial analysts' forecast errors were significantly lower than the US financial analysts' forecast errors each year. In addition, the Japanese forecast errors had lower standard deviations than their counterparts. They attributed the result to the ''ability of Toyo Keizai in avoiding very large errors rather than to an across-the-board improvement in forecast accuracy'' (Conroy et al., 1993, pp. 130–131).

Darrough and Harris (1991) examined whether investors receive incremental information when the Japanese manage forecasts of parent company and consolidated earnings. From their analysis of the Nikkei forecasts as published in Nihon Keizai Shimbun, the Nikkei forecasts were more accurate than those produced by a random walk model. In addition, their research indicates that parent company earnings releases have stronger correlations between announcements of forecasts and market returns than

consolidated earnings. They cite several reasons for the poor results from consolidated earnings. These include the more timely information provided by parent company-only information and the familiarity of Japanese investors with it. Despite the availability of most companies' consolidated earnings, Japanese investors did not use them.

Conroy and Harris (1995) compared Japanese parent-only earnings published by Toyo Keizai with earnings forecasts produced by sell-side analysts (and compiled by IBES). The Toyo Keizai financial analysts' forecasts incorporate and/or are based on the managerial forecasts. They find that the IBES forecasts exhibit "greater optimistic bias and inaccuracy than do forecasts published by Toyo Keizai" (Conroy & Harris, 1995).

These previous studies imply that Japanese financial analysts' forecasts prior to the adoption of IAS appear to be more accurate than the US financial analysts' forecasts that are based on accounting standards similar to IAS. Given the complex pattern of decentralized cross-holdings in Japanese corporate groups in Japan, the former parent company-only information is easier to prepare and forecast in comparison to consolidated financial statements. Also, Japanese investors are more familiar with the former than the latter. Since Japanese corporate managers have historically managed reported earnings that reduce reported forecasting errors, the next section will briefly summarize earnings management in Japan.

Earnings Management

Darrough, Pourjalali, and Saudagaran's (1998) study investigates choices of accounting accruals used by Japanese management. Similar to their US counterparts, managers of Japanese companies chose income-increasing accounting accruals to increase their bonus and increase the amount of outside funding. Those companies that have higher degrees of ownership by trust companies and stockbrokers "have incentives to choose income-increasing accruals to provide a more positive picture of the firm" (Darrough, Pourjalali, & Saudagaran, 1998, p. 313).

Nagy and Neal (2001) findings imply that neither Japanese nor US managers use discretionary accruals to smooth income. However, the results suggest that both use research and development (R&D) investments to smooth income. Japanese managers smooth income to a greater degree than their US counterparts (Nagy & Neal, 2001).

Herrmann et al. (2003) cited various incentives for management to reduce forecast errors (p. 89). In Japan, the various incentives include mitigation of

negative stock price reactions, "saving face" by avoiding letting the company down, avoidance of lower compensation, loss of employment, and potential insider trading investigation. The latter is attributed to the regulation enacted by the Japanese Securities and Exchange Law which stipulates that any difference between management's forecast of net income and published net income that is greater than 30% and trading of the company's stock by related parties is considered insider trading (Herrmann et al., 2003). Management was found trying to maintain the reported earnings within 30% of the forecast (Herrmann et al., 2003, p. 92).

Inoue and Thomas (1996) identify fixed assets and marketable securities as providing management ample opportunity for earnings management in Japan. As fixed assets impairments are not recognized in Japan, the unrealized gain between fixed assets book value and market value remains unrealized until the fixed assets are sold. Fifty percent of all Japanese firms record marketable securities at cost. They have the option of recording such securities at the lower of market or cost. Any change in the market values of these assets is not recognized. Holding gains or losses are created, but not recorded. Management can thus select the time when to sell specific assets in order to manipulate net income.

In summary, Japanese management uses earnings management to reduce forecast errors. Among the methods cited is the application of R&D investments to smooth income. Cherry picking and timing of sale of fixed assets and marketable securities are other means to manage earnings. However, the timing of income recognition on marketable securities is no longer allowed under IAS.

RESEARCH HYPOTHESES

The adoption of IAS in Japan affected various levels of income. A summary of the accounting changes and their effects on the different levels of income is presented in Table 1. As shown in Table 1, having consolidated financial statements as the primary financial statements, consistent with IAS 27 (see appendix for IAS list), will increase itemized assets, liabilities, revenues, and expenses. This change will increase aggregated assets and liabilities on the balance sheet. Total revenues and total expenses will increase. The major change is the introduction and use of fair market values being used to replace or supplement historical cost. This furthers the goal of providing useful information. A few examples are presented next to illustrate the changes that IAS have when moving from traditional Japanese GAAP.

Table 1. Summary of Accounting Standards and Effects on the Level of Income.

Effective Date	Accounting Standard	Effect on Level of Income
April 1, 1999	Consolidated financial statements as primary financial statements	Operating income, current profit
April 1, 1999	Income tax allocation	Net income
April 1, 2000	Mark to market:	Current profit
	Trading securities	Operating income
	Pension assets	Current profit
	Derivatives	
	Accrual basis:	
	Pension costs and liability	Operating income
	Current exchange rate on Long-term receivables and payables	Current profit
	Cumulative translation gains/ losses from current rate method	No impact on income
April 1, 2001	Mark to market: Available-for-sale securities	No impact on income

Consistent with IAS 12, Japanese accounting standards now require the adoption of asset liability in inter-period tax allocation. This change may facilitate the forecast of income tax expense.

Adoption of IAS 39 requires reporting financial instruments at fair value. This is a change from the lower of cost or market method for marketable securities and cost method for other investments. The change in fair value under the trading securities classification is reported as unrealized gains or losses in the income statement. The unrealized gain or loss of the available-for-sale securities is shown as a separate component of stockholders' equity, net of taxes. This change is expected to give rise to higher forecasting error on current profit because of the volatile securities markets.

Adoption of IAS 19 requires the application of the accrual basis of accounting in recording pension costs and liabilities. The pension benefits are based on future salary levels discounted to the present based on actuarial calculations and estimates. Plan assets are required to be reported at fair value. Despite the requirement of the actuarial estimations of several factors of pension cost computation and fair value adjustments, an income smoothing method is applied to amortize the significant prior service cost. Hence, the forecast errors under this accrual method are expected to be relatively lower than the cash basis.

Adoption of IAS 21 requires long-term receivables and payables denominated in foreign currencies to be translated at the current exchange rates at the balance sheet date. They were translated at the exchange rate prevailing at the transaction dates under the old standard. The impact is on the income statement under other income/expense. Given the existing volatile foreign exchange markets, forecasting errors on current profit would tend to be higher than those in the past.

A revision is required on the current rate method in which the currency of the overseas subsidiary is the local currency. Any translation exchange gain or loss resulting from the translation of the foreign currency into yen was formerly accounted for as a component of assets or liabilities in the previous years. It now must be recorded as a component of shareholders' equity and minority interest in the consolidated balance sheet. Such modification is consistent with IAS 21.

Consistent with IAS 39, companies are required to state the derivatives position at fair value. The changes in fair value of derivatives designated as hedging instruments is deferred until the loss or gain on the underlying hedging instrument item is recognized. Formerly, gains or losses on derivative positions were deferred without the assessment of hedge effectiveness. This change will impact the current-profit forecasting errors and stockholders' equity (for cash-flow hedge). The derivative markets are volatile. Perfect hedging is relatively expensive in practice.

The changes in accounting principles effective April 1, 2000 appear to complicate the forecasting of the current income. Changes in accounting principle on accounting for pensions will impact the operating income. The application of fair value accounting on marketable securities and derivatives will affect current profit. Revision of accounting for foreign currency translation will also impact current profit.

The increased disclosure and transparency income measurement is expected to decrease earnings forecast errors. The 2003 earnings forecast error should be less than that of 1999 in these three different levels of income: operating income, current income, and net income. The forecast error at the net income level should be the least, since management has a high incentive not to miss their net income forecasts by more than 30% to avoid the potential insider trading investigations. Hence, the first null hypothesis is

$H_0$1. There is no significant difference between analysts' forecast errors on operating income, current profit, and net profit before and after the adoption of IAS.

Alternative hypothesis one is as follows:

H_a1. Financial analysts' forecast errors increased on operating income, current profit, and net profit before and after the adoption of IAS.

Alternative hypothesis two is as follows:

H_a2. Financial analysts' forecast errors decreased on operating income, current profit, and net profit before and after the adoption of IAS.

Previous studies suggest that decomposition of earnings provides additional information. In particular, the market assigns higher multiples to earnings that are more persistent (Lipe, 1986; Ohlson & Penman, 1992; Strong & Walker, 1993). If the reform is successful, 2002 disaggregated income components would serve as accurate predictors of 2003 net income Three categories of income are computed prior to the computation of net income: operating income, other income and expense (a component in between current profit and operating income), and below current-profit income which comprises primarily extraordinary items and income tax. The study of Hermann et al. (2000) indicates that operating income or non-operating income is more persistent than extraordinary items.

The accounting reforms from cash to accrual basis may generate mixed results. Some accruals may not generate less variance of earnings relative to cash flow. Basu (1995) indicates that matching cost of goods sold or depreciation against revenue results in a less variable income stream. On the other hand, Pope (2003) suggests that forecast errors will be greater where the underlying economic environment is more volatile or uncertain. An example of this is the predictability of earnings reflecting the unanticipated changes in market values of securities.

The accounting changes that affect the operating income, other income and expense, and income tax expense are attributed to the adoption of accrual and fair value accounting. Despite the relatively more transparent accrual accounting applied in IAS, Japanese analysts may have difficulty in forecasting income using the new technique. The adoption of IAS may be useful to the global, external users in predicting net income. The reverse may be true for Japanese analysts who based their forecasts on the firms' announcements. The transparency of the financial information may hinder earnings management Japanese firms are accustomed to in meeting their forecasts.

Another means to assess the usefulness of embracing IAS is to study the predictability of earnings. The fair value valuation mandated in IAS affect the accounting for various balance sheet items. These in turn will impact the

different levels of income. The changes in fair value on trading securities and derivatives that are reflected in other income and expense are recognized currently. The changes in fair value on pension assets affect the computation of pension expense that is included in the determination of operating income. The application of inter-period income tax allocation will probably facilitate the prediction of income tax than the cash basis applied in the past. The predictability of income tax expense (which is a component of the below current-profit item) is probably more accurate than the cash basis in the past. Before the adoption of IAS, Japanese accounting was highly influenced by the German code law and the economy was creditor oriented. Under which, earnings management is "legal" and prudent. Since the primary objective is to inform creditors (supported by government), earnings had low volatility giving rise to less forecast errors. However, with the adoption of IAS, the users are changed from creditors and government to investors, from debt to equity financing, transparency, and disclosure become essential. In order to incorporate the more long-term impact of the transition to IAS and to delineate the impact of forecast from the three different components of net income, the second null hypothesis is stated as follows:

> **$H_0$2.** There is no significant difference in predictive power for subsequent-year net income among operating income, other income and expense, and below current-profit items.

SAMPLE SELECTION AND RESEARCH METHODOLOGY

Sample companies represent Japanese firms listed in the transport and electrical machinery industries in the Japan Handbook.[1] Consistent with the early study by Choi et al.(1983), these two industries are selected.[2] The forecast and actual earnings of three different levels (operating income, current income, and net income) of 152 companies were hand collected from 1999 to 2003. The Ministry of Finance in Japan allows Japanese firms that prepare their financial statements in accordance with US GAAP to be exempt from preparing another set of financial statements in compliance with the Japanese accounting standards. Thirteen large firms having their financial statements prepared under US GAAP are excluded from the sample companies. These excluded firms have average sales 4.86 times of the average of the total 152 firms. The sample firms contain 139 firms applying

exclusively Japanese accounting standards. The Brown, Foster, and Noreen's study (1985) suggests that analysts' forecast accuracy is improved with more recent forecasts. Baginski and Hassell (1997), on the other hand, indicate that management's forecasts of annual earnings are more precise for firms with greater analyst following and for smaller firms. Hence, the earnings forecasts of the Winter issue of *Japan Company Handbook* of 1999–2003, the issue prior to the actual earnings reported in the Spring issue, are used to represent the forecast earnings. They represent the most up-to-date forecasts after all the necessary revisions by the analysts.

Testing Hypothesis One

Forecast errors are defined as the absolute difference between the forecast and actual earnings. The *t*-test for Paired Two Sample for Means is applied to test the significance of forecast errors between the base fiscal year-end of 1999, which is prior to the adoption of IAS and each of the years subsequent to the IAS adoption. The latter includes the fiscal year-ends of 2000–2003.

Testing Hypothesis Two

Consistent with Chen and Wang's study (2004), the following 1-year ahead earning prediction model is applied to test whether the reformed earnings components have predictive powers. To test this hypothesis, the following regression is estimated:

$$\mathrm{NI}_{t+1} = \alpha + \beta_1 \mathrm{OI}_t + \beta_2 \mathrm{OTI}_t + \beta_3 \mathrm{BP}_t + e \tag{1}$$

where NI_{t+1} is 2003 net income, OI_t the 2002 operating income, OTI_t the 2002 other income and expense, and BP_t the 2002 below current-profit items (such as extraordinary items and income tax expense), e is the error term.

All variables are scaled by actual sales.

ANALYSIS OF RESULTS

Table 2 presents the descriptive statistics of all the years under study. Actual income of each level is compared to the respective forecasted income. The difference is the forecast error that is deflated by actual sales. As shown in Table 2, average sales improve progressively over the five years under study.

Table 2. Descriptive Statistics of Forecast Errors.

Level of Income	1999	2000	2001	2002	2003
Operating income					
Mean	3,668	4,497	5,671	6,854	4,842
Median	1,089	1,091	1,175	1,535	1,091
Minimum	1	21	4	22	24
Maximum	95,055	110,026	180,314	163,470	173,679
Standard deviation	9,174	11,561	19,863	21,838	20,463
Current profit					
Mean	4,371	4,117	6,374	6,172	5,775
Median	1,552	952	990	1,431	1,112
Minimum	12	1	3	19	17
Maximum	138,115	79,827	242,309	124,744	234,003
Standard deviation	12,562	9,431	26,248	18,027	25,586
Net profit					
Mean	4,334	11,465	8,220	6,408	6,950
Median	1,293	1,089	748	1,686	1,037
Minimum	17	1	39	7	11
Maximum	83,820	624,363	271,075	150,542	264,671
Standard deviation	10,814	61,939	33,894	16,120	28,005
Average sales	431,778	434,584	457,053	461,489	486,484

In anticipation of the mark to market requirement on available securities beginning in 2002, major banks sold cross-held shares (which are classified as available for sale securities) of a total value of more than 4 trillion yens through 1999 and the first half of 2000 (Poe, Shimizu, & Simpson, 2002, p. 78). This partially explains the increased fluctuation in net profit for the fiscal year ended on March 31, 2000 over the previous year.

The new accounting requirement in reporting financial instruments at fair value effective April 1, 2000 (in the globally volatile economy) gives rise to the high mean and standard deviation on current profit for the year ended on March 31, 2001. The adoption of the retirement benefits in April 2000 requires the pension plan assets to be reported at fair value. Additionally, the pension benefits using future salary level are discounted to the present value based on actuarial calculations and estimations. The impact of this change in accounting appears to impact the operating income for the year ended on March 31, 2002 (a year after the adoption) the highest. The impact is a year after the adoption of the new accounting standard, since the amortization of the actuarial gains or losses, which are the differences between the actual and expected returns, are not amortized until the next year. In addition, according to the Annual Report on Japan's Economy and

Public Finance for fiscal year ended on December 31, 2001, the economy during this period was relatively weak and deflationary. Corporations were saddled with excessive debts. Banks experienced a large amount of non-performing loans. The March 31, 2003 average operating income and current profit forecast errors decrease from those of the previous year. However, the decrease in forecast error on net income of 2003 does not show an improvement. This could be attributed to some extraordinary gains or losses realized during the year.

Table 3 presents the analysis of the forecast errors on three earnings figures: operating income, current profit, and net profit. Consistent with the Beckman's (1998) finding, forecast errors among the three different levels of income reflect progressively greater average forecast errors with operating-income forecast errors as the lowest. The forecast error on net income of 62% of actual net income in Beckman's (1998) study is similar to 61% of forecast net profit in 1999 in this study. A comparison between 1999 and 2000 indicates that the 2000 forecast errors on the operating income are smaller than those of 1999. Nevertheless, the high sell-out of cross-holding shares (resulting in extraordinary items) intensifies the forecast errors on net income in 2000.

Table 3 also illustrates that the average forecast errors on operating income and current profit in 2002 are the largest among the years prior to as well as subsequent to the current year with numerous accounting changes. The fiscal year-end of 2003, which experiences no new accounting standard implementation, reflects the least forecast errors.

Table 4 displays the comparative *t*-statistic among the five years under-study. Consistent with the previous analyses, in comparison to 1999 (the base year prior to the adoption of IAS), fiscal year-end of 2002 reflects significantly larger forecast errors in operating income and net income relative to those of

Table 3. Average Forecast Errors (%) on Three Different Levels of Income.

Level of Income	March 31, 1999	March 31, 2000	March 31, 2001	March 31, 2002	March 31, 2003
Operating income	31	26	26	35	20
Current profit	28	28	32	35	27
Net profit	61	265	104	75	54

Note: Scaled as percentage of each year's forecast income/profit.

Table 4. Comparative Forecast Errors between 1999 Forecast Errors and Subsequent Years.

Level of Income	1999 vs. 2000	1999 vs. 2001	1999 vs. 2002	1999 vs. 2003
Operating income	−0.7483	−1.3073	−2.1293**	−0.8809
Current profit	0.1901	−1.0862	−1.4506	−0.9270
Net profit	−1.4919	−1.7205*	−2.2900**	−1.4792

*t-statistic significant at .05.
**t-statistic significant at .01.

Table 5. Predictability of Various Income Components on Net Income.

$$\mathrm{NI}_{t+1} = \alpha + \beta_1 \mathrm{OI}_t + \beta_2 \mathrm{OTI}_t + \beta_3 \mathrm{BP}_t + e$$

Earnings	N	Coefficients	t-statistics	p-value
Operating income	139	0.16720	3.54187*	0.000546
Other income/expense	139	−1.38235	−2.57735*	0.011029
Below-current profit items	139	−0.12905	−0.92098	0.358703
Adjusted R^2: 0.076997				
F-test: 4.837307				

Note: NI_{t+1} is the 2003 net income; OTI_t the 2002 other income and expense; OI_t 2002 the operating income; BP_t the 2002 below-current profit items (such as extraordinary items and income tax expense), e is the error term.
*Significant at .01.

1999. Out of the four years, only 2001 and 2002 reflect significant difference from 1999 in net profit. The H_01 is rejected in favor of H_a2.

As shown in Table 5, the regression statistics indicate that the predictability of both the 2002 operating income and other income/expense have significant statistical influence on 2003 net income. This is indicated by the high t-statistics for the two earnings. Despite the more relatively accuracy of predicting the income tax income expense, items that are infrequent or unusual in the extraordinary income and expense hinder the predictability of future income. Hence, the below current-profit components do not support the predictability of future income. The null hypothesis two is therefore rejected.

IMPLICATIONS AND CONCLUSIONS

This research studies whether the adoption of IAS improve the predictability of earnings by investigating the improvement in analysts' forecast errors

between the base year (i.e., 1999) and each of the subsequent years until 2003. Based on 139 companies in the transport and electrical machinery industries, the result of this study demonstrates significant improvement is found in operating income and net income in 2002 and net income of 2001. This is reflected from the analysis of the average forecast errors that are the absolute differences between the forecast and actual earnings. Contrary to the study of Barron, Byard, and Kim (2001), the accounting reforms do not give rise to a difference in impact between large and small firms. On investigating whether the reformed earnings components have different predictive powers, operating income, and other income/expense have significant statistical influence on 2003 net income.

The convergence of Japanese accounting standards to IAS is still at the early stage. As shown in appendix, the Japanese standard setters, though attempting to narrow the gap between Japanese GAAP and the IAS, do not yet fully comply with the 39 standards promulgated by the IASC.[3] The change in accounting standards may have added the impetus to make economic decisions abruptly. This complicates the different levels of income forecasts, particularly in the year of implementation of changes. The findings of this study do not fully support the research results of Ashbaugh and Pincus (2001). In addition, their 80 sample firms (of which three are from Japan) comprised firms that voluntarily chose to adopt IAS (Ashbaugh & Pincus, 2001, p. 421). These firms might be motivated to select IAS because their earnings would be more predictable under those GAAP.

Nevertheless, the findings of this study appear to be consistent with previous studies that imply that the capital market does not perceive the reconciliation from various home GAAP to US GAAP as being useful. US GAAP is considered to be highly convergent with IAS, since the framework of the IASB is widely influenced by the conceptual framework of the Financial Accounting Standards Board (Baetge & Ross, 1995, p. 27). Usefulness is somewhat subjective. The research findings of this study are built on the research of Herrmann et al. (2003). They found that Japanese managers were manipulating reported earnings prior to the implementation of IAS. The research results reported in this paper reveal that decreasing the manipulation increased the frequency and magnitude of forecast errors (i.e., difference between actual and forecasted financial report numbers). This paper's finding contradicts the research findings of Ashbaugh and Pincus (2001). They found that implementing IAS decreased forecast errors. The research reported in this paper adds to the literature by providing a different result (i.e., implementing IAS increasing forecast errors).

Despite the consensus of the global capital market that accounting harmonization (e.g., implementation of IAS) is essential to generate comparable financial statements, the diverse environmental factors are hindrances to generating useful information for investors. Implementation of IAS resulted in greater forecast errors and thereby less useful information. As the business world becomes progressively global, the inherent business practices may become more convergent. There is need for further research as to whether additional Japanese accounting reforms will increase the predictive power (i.e., usefulness) for subsequent-year financial reports as more IAS are implemented and/or more fully implemented.

NOTES

1. The Toyo Keizai Corporate Profit Forecast (published in English as the *Japan Company Handbook*) published earnings forecast based on the figures announced by each company. The Toyo Keizai reporters revised the company forecasts very often according to their judgment made as the result of the contact with each company's director or competent person. The quarterly forecasts published in the *Japan Company Handbook* are revised every time the handbook is published four times a year. Hence, the most up-to-date forecast for the Japanese fiscal year-end of March 31 is the Winter issue (e-mail from Toshimasa Shibata, Toyo Keizai Corp., June 16, 2004).
2. These two industries were initially selected based on their prominent presence in the United States (US) consumer market. Choi et al.'s (1983) selection was based on the ease of matching with a US counterpart.
3. IASC is the predecessor of the International Accounting Standards Board (IASB). In addition to 41 IAS, seven International Financial Reporting Standards have been issued.

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APPENDIX

Compliance of Japanese Generally Accepted Accounting Principles (JGAAP) with International Accounting Standards (IAS).

IAS		Degree of Compliance	Deviations
IAS 1	Presentation of financial statements	Some deviations	JGAAP does not require a statement of changes in equity and disclosure for uncertainties relating to the ongoing concerns.
IAS 2	Inventories	Some deviations	It is optional, rather than required, under JGAAP to apply the lower of cost or market method.
IAS 7	Cash flow statements	Generally conforms	
IAS 8	Profit or loss for the period, fundamental errors, and changes in accounting policies	Not in compliance	JGAAP prohibits restatement of prior period financial statements. Prior period adjustments are included in current income statement.
IAS 10	Events after the balance sheet date	Generally conforms	
IAS 11	Construction contracts	Some deviations	JGAAP also accepts the completed contract method.
IAS 12	Income taxes	Generally conforms	

APPENDIX. (*Continued*)

	IAS	Degree of Compliance	Deviations
IAS 14	Segment reporting	Some deviations	JGAAP requires disclosure of segment information not only by industry segment, but also by geographical area and overseas sales.
IAS 15	Information reflecting the effects of changing prices	No rules exist	
IAS 16	Property, plant, and equipment (PPE)	Not in compliance	JGAAP prohibits the revaluation of property, plant, and equipment. Historical cost is the only acceptable valuation.
IAS 17	Leases	Some deviations	JGAAP encourages, rather than requires, capitalization of assets under finance lease. Treatment as operating lease with the disclosure of "as if capitalized information" is acceptable for finance leases that do not transfer ownership of the leased property to lessee.
IAS 18	Revenue	Some deviations	JGAAP permits the completion method

APPENDIX. (*Continued*)

	IAS	Degree of Compliance	Deviations
IAS 19	Employee benefits	Some deviations	Transitional liability is required under JGAAP to be amortized over 15 years, rather than 5 years. Corridor amortization is not required under JGAAP.
IAS 20	Accounting for government grants and disclosure of government assistance	Generally conforms	
IAS 21	Effects of changes in foreign exchange rates	Generally conforms	
IAS 22	Business combinations	Some deviations	Pooling of interests method is broadly used in Japan and amortization of goodwill is over 5 years for stand-alone financial statements and over 20 years for consolidated financial statements. Under IAS, purchase method is the prevalent method and amortization is over 20 years.
IAS 23	Borrowing costs	Generally conforms	
IAS 24	Related party disclosures	Generally conforms	

APPENDIX. (*Continued*)

	IAS	Degree of Compliance	Deviations
IAS 26	Accounting and reporting by retirement benefit plans	Generally conforms	
IAS 27	Consolidated financial statements and accounting for investments in subsidiaries	Generally conforms	
IAS 28	Accounting for investments in associates	Some deviations	Equity method is optional under JGAAP.
IAS 29	Financial reporting in hyperinflationary economies	No rules exist	
IAS 30	Disclosures in the financial statements of banks and similar financial institutions	Generally complies	
IAS 31	Financial reporting of interests in joint ventures	No specific rules for joint venture exist	
IAS 32	Financial instruments: disclosures and presentation	Generally conforms	
IAS 33	Earnings per share	Generally complies	
IAS 34	Interim financial reporting	Some deviations	JGAAP requires publication of semi-annual financial statements, whereas IAS does not mandate frequency or publication of interim reports.
IAS 35	Discontinuing operations	No rules exist	

APPENDIX. (*Continued*)

	IAS	Degree of Compliance	Deviations
IAS 36	Impairment of assets	Generally conforms	
IAS 37	Provisions, contingent liabilities, and measurement	Generally conforms	
IAS 38	Intangible assets	Generally conforms	
IAS 39	Financial instruments: recognition and measurement	Generally conforms	
IAS 40	Investment property	Not in compliance	
IAS 41	Agriculture	No rules exist	

CONVERGENCE WITH INTERNATIONAL FINANCIAL REPORTING STANDARDS: THE CASE OF INDONESIA

Hector Perera and Nabil Baydoun

ABSTRACT

Accounting professional bodies and governments in over 70 countries have supported the efforts made through the Indian Accounting Standards Board (IASB) in setting global accounting standards by adopting International Financial Reporting Standards (IFRSs) for local financial reporting purposes. However, this has not happened in over 30 other countries due to various reasons. The US standard setters, for example, have decided to eliminate the differences between IFRSs and US Generally Accepted Accounting Principles (US GAAP) first as part of their convergence project with the IASB. Also, some emerging nations have not supported IFRSs due to other reasons. In Indonesia, for example, IFRSs are not permitted for domestic listed companies. The purpose of this paper is to provide an understanding of the possible reasons for non-adoption of IFRSs in Indonesia by highlighting some of the important factors that are likely to influence the accounting environment in that country, taking an ecological perspective.

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INTRODUCTION

The Indian Accounting Standards Board (IASB) attempts to develop a set of high-quality standards for financial reporting purposes worldwide by adopting a principles-based approach recognizing the need for financial statements published by companies in different countries to provide comparable information. On the other hand, the existence of a worldwide diversity in accounting standards and practices has drawn the attention of researchers to the need to explain the reasons behind such diversity for several decades, as an understanding of those reasons is important especially for the purposes of comparative analysis (Weetman & Gray, 1991). It appears that such reasons are long run and deep seated and that the subject matter of accounting is much broader than is generally recognized. Mueller (1965, 1967, 1968) initiated the thesis that accounting is a product of the environment in which it operates. This leads the way to a wave of research studies aimed at identifying the various environmental factors, including those related to the cultural orientation of the preparers and users of accounting reports that are likely to influence accounting in a particular country. Radebaugh (1975) was one of the first to provide a detailed description of the environmental factors influencing the development of accounting objectives, standards, and practices in a developing country.[1] Lists of possible reasons for international differences are also offered in international accounting textbooks (e.g., Radebaugh & Gray, 2006; Choi Frost & Meek, 2002; Nobes & Parker, 2006; Doupnik & Perera, 2007; Roberts, Weetman, & Gordon, 2005). However, very few have attempted to develop a theoretical framework that reflects the association between accounting and the various environmental factors in a systematic way.

The purpose of this paper is to highlight the factors that are likely to influence the environment in which accounting operates through a case study of Indonesia, and provide an understanding of the prospects for the implementation of International Financial Reporting Standards (IFRSs) in that country. The study was motivated first by the need to understand the possible reasons as to why despite the efforts of the IASB to develop a set of high-quality global standards, Indonesia does not permit IFRSs for domestic listed companies. Second, the importance of transparency in financial reporting has been highlighted in recent years. For example, the economic turmoil experienced by many Asian countries in the late 1990s brought the link between accounting and economic development to the limelight. A lack of accountability in business and government has been

often mentioned as a major contributor to the crisis during which the need for a financial system that works with transparency and efficiency, and the importance of corporate governance became painfully clear (e.g., Choi, 1998). Third, Indonesia was selected for this study for several reasons. It was a star performer during the boom period prior to the crisis but it also suffered the worst reversal of fortunes as a result of the crisis (Business Monitor International, Q1, 2005, p. 8; Economist, 14 November, 1998). Indonesia is a resource-rich nation (it is the largest producer of natural gas) and it is South East Asia's largest economy. Indonesia is unique among the countries in the region. Unlike Singapore, Malaysia, Thailand, Hong Kong, and the Philippines, where their common laws and local systems all bear a similarity to the Westminster system, the Dutch colonial masters in Indonesia were only interested in exploiting the country with no consideration for its economic infrastructure (Faulkner, 1995, p. 134).

TOWARD A THEORETICAL PERSPECTIVE

Among the international accounting researchers who attempted to provide a theoretical grounding for their reasoning are Schweikart (1985), Adhikari and Tondkar (1992), Gray (1988), Doupnik and Salter (1995), and Nobes (1998). Schweikart (1985) suggests contingency theory as a basis to establish a theory of international accounting. Adhikari and Tondkar (1992) examine the relationship between environmental factors and the accounting disclosure requirements of 35 stock exchanges. Doupnik and Salter (1995) attempt to present a general model of international accounting development using Gray's (1988) thesis on the cultural influence on accounting, and other ideas as suggested in the literature. Nobes (1998) develops an alternative to the Doupnik and Salter model and proposes a two-way classification using two variables, i.e., the strengths of equity markets and the degree of cultural dominance. Nobes argues that all the reasons identified in the literature can be included in these two major independent variables.

The various frameworks presented often focus on classifying countries based on their accounting systems. Nobes (1998) makes an important point in arguing that classification should be focused on accounting systems rather than countries. He says, "as there can be more than one system in a country it would be more useful to specify accounting systems, and then to note that particular companies in particular countries at particular dates are using them" (p. 165). In order to understand how accounting operates in a

particular context, one needs both knowledge of and empathy with the entire local scene. However, in much of the prior literature, the very nature of the research is such that the purpose is to explain the accounting environment simply in terms of a few selected variables, without making any attempt at understanding the totality of the local context.

Gray (1985, 1988) in developing a classification model based on cultural factors suggests the importance of understanding accounting systems from an ecological perspective and argues that:

a. accounting is influenced by societal values, which in turn are affected by ecological influences through geographic, historical, technological, and urbanization factors;
b. these in turn are influenced by external factors, such as forces of nature, trade, investment, and conquest; and
c. both ecological factors and societal values influence a society's institutional arrangements for legal and political systems, corporate ownership, capital markets, professional associations, education, and religion, which affect accounting values and accounting practices.

On this perspective, accounting is likely to be influenced by a much broader range of factors than what is often assumed in the literature. Gernon and Wallace (1995) (hereafter, G&W) expand on the above perspective and provide a taxonomy of accounting ecology that is designed to reflect the association between accounting and its environment in a holistic manner. They explain the concept of accounting ecology as follows:

> A national accounting ecology is a multidimensional system in which no one factor occupies a predominant position and in which the perception held by actors on some unfolding accounting phenomena, as well as the accounting phenomena themselves, are the objects of study and analysis. Such a synthesis would emphasize the interrelationships of the environmental factors which influence and are influenced by accounting and would focus on the importance of perceptual as well as non-cultural factors such as population and land area (G&W, p. 59).

According to G&W, the concept of accounting ecology encompasses five separate but interacting slices of the environment, i.e., social, organizational, professional, individual, and accounting. The social environment refers to the structural (economic system, political system, and legal system), cultural and non-cultural (geographic and demographic features) elements within a society. The organizational environment refers to organizational size, technology, complexity and culture, and human and capital resources. The professional environment refers to such aspects of the profession as education, training, registration, discipline, and ethics. The individual

environment refers to the total setting in which reporting enterprises, professionals, and other non-professional members of society lobby standard setters and use accounting numbers to their respective advantage. The accounting environment refers to the disclosure and measurement requirements and practices, types and frequency of accounting reports, and accounting infrastructure.[2]

G&W explain the differences between their taxonomy and the previous ones as follows:

a. previous taxonomies rely on a causal theory that sees accounting as strictly dependent on the environment, whereas G&W's taxonomy incorporates both causes and effects of accounting.
b. the addition of the individual and accounting slices of the environment, in this taxonomy, recognizes the notion of the environment as a source of ideas and concepts and not only as an inanimate repository of causes and effects.
c. the narrow regulatory focus of recent international accounting research studies is subsumed under the organizational, professional, and accounting slices of this taxonomy which is broader than just government information, thereby encompassing all mandated constraints such as regulations, accreditation, legal development, professional code of conduct and so on (G&W, p. 60).

This paper adopts the taxonomy proposed by G&W in examining the accounting environment of Indonesia in identifying some of the factors that might explain the lack of support for IFRSs in that country.

BACKGROUND

The spectacular rates of economic growth averaging 8% per annum achieved by many countries in the South East Asian region for over a decade prior to 1997 has caused them to be identified as 'emerging economies'. The currency turmoil that hit the region in mid-1997 triggered the most serious regional economic crisis of the post-war era. For example, in July 1998, the Indonesian rupiah was trading at 13,000–15,000 to the US dollar, down from 2,500 a year ago (Economist, 10 October, 1998, pp. 21–23). Similar losses were experienced by other currencies in the region. One of the most damaging factors was the quick reversal of capital inflow into the region. For example, about $20 billion in private capital left Indonesia in

1997 (Time, 2 June, 1998, p. 36).[3] These events showed how the global currency and capital markets are prone to panic and capable of causing economic destruction. According to the Bank of International Settlements, Asia's crisis was unique, in that the core problem was not government debt or bad policies, but a relationship turned sour between banks and formerly booming private sector companies (Time, 2 June, 1998, p. 35).

As a major player in the economic environment in the region, Indonesia adopted policies of economic deregulation opening up the economy to short-term foreign capital. Years of rapid economic growth attracted vast inflows of foreign capital in the 1990s, leading to over-borrowing and over-investment in non-productive areas. Further, dubious investments, such as those involving the speculative property development projects in Jakarta, were cheerfully funded by local banks, so long as the borrowers had the right government connections. For example, of the $70 billion in foreign debt held by Indonesia's private sector, a significant percentage is thought to be owed by companies owned or controlled by First Family members and President Suharto's cronies (Time, 26 January, 1998, p. 37).[4]

The regulatory framework in Indonesia was weak. For example, there were no bankruptcy laws and effective laws regulating the banking system. The combined effect of over-borrowing, over-investment, and lack of adequate bank regulation was fatal. In this situation, nobody was quite sure:

a. Who lent what to whom during the boom period?
b. What were the chances those loans would ever be repaid?
c. Would government allow bad banks and companies to go bankrupt in order to clean up the economic mess?[5]

Deutsche Bank estimated that non-performing loans amounted to 35% or more of total bank lending in Indonesia, Malaysia, South Korea, and Thailand (Economist, 17 October, 1998, pp. 85–86). In Indonesia, borrowers have stopped making payments on about 70% of domestic bank loans (Time, 1 November, 1999, p. 19).

The International Monetary Fund (IMF) recommended solutions designed to rescue Indonesia and other countries in the region from the crisis. For example, Indonesia was offered a $43 billion rescue package (Economist, 20 June, 1998, pp. 82–87). These solutions were strongly centered on fighting chronic corruption, monopolies, and bad procedures including those related to financial markets and banking structure. The IMF's solutions, however, generated mixed results. For example, one of the requirements was to follow tight monetary policies. Such policies pushed the interest rates up and high interest rates choked businesses adversely

affecting exports. In Indonesia, for example, interest rates reached 60%. As most of the large companies were extremely highly geared, debt was four or five times equity, recession in addition to high interest rates made them technically bankrupt. Also, the budget cuts that were necessary in implementing tight monetary policies have deflated economies. The mutually reinforcing effects of economic slowdown, asset price collapses, high interest rates, and banking crises in the region turned into a vicious circle in that the curtailment of bank credit depressed asset prices and further deepened recessions, in turn creating additional problems for banks (Time, 7 September, 1998, pp. 33–34).

In Indonesia, the economic crisis was followed by a political crisis. At the time when the economy was growing at a rapid rate, people enjoyed the benefits and tolerated corrupt politicians and authoritative rule, but with the economic slowdown, the situation changed quickly. The new pressures, for example, increased unemployment and shortage of essential items in the market, created a high level of unrest within the country and resulted in a change of government in 1998 ending the Suharto regime that lasted over 30 years.[6]

Although the Asian region, including Indonesia, still grapples with economic reform measures introduced locally or forced by international organizations, there appear to be signs of recovery. Most of the countries in the region now appear to have sound macroeconomic frameworks in place and have developed more focused monetary policies. In the case of Indonesia, the average GDP during the 5 years following the Asian crisis was about 3.4%. Extensive political and economic reforms were introduced since mid-1998. In December 2003, Indonesia graduated from the IMF loan program. The Indonesian Bank Restructuring Agency has successfully managed the US$80 billion rescue fund for the banking industry (Business Monitor International, Q1, 2005). Economic growth rose to 4.1 and 4.5% in 2003 and 2004, respectively. The country's external debt fell from US$150.89 billions at the height of the crisis in 1999 to US$131.39 billions in 2004. However, the pre-crisis impressive growth level is still far from being reached and the fixed capital formation remains 30% below its pre-crisis peek. The official figure for unemployment in 2003 ran at the high rate of 40% of the 103 million workforce. Inflation fell to about 5.6% in 2004 from its 60% level in the crisis years. (Business Monitor International, Q1, 2005). Indonesia's nominal GDP in 2003 was US$211 billions accounting for more than 30% of South East Asian GDP. However, on per capita basis it was US$959, which was the lowest amongst ASEAN. Currently, the exchange rate is around 9,100 rupiah to the US dollar.

THE ACCOUNTING ECOLOGY OF INDONESIA

This section describes the accounting scene in Indonesia from an ecological perspective using the framework developed by G&W. It highlights some important factors that are likely to impact on the accounting practices in the country.

Social Environment

Indonesia is the largest archipelago in the world with nearly 13,700 tropical islands stretching some 5,120 km from east to west between the Pacific and the Indian oceans. Indonesia makes up about 5 million square kilometers, of which 2 million represents land and the rest is sea area between islands. Indonesia's population of nearly 210 million people includes at least 300 distinct ethnic groups, most of which speak mutually unintelligible languages and have unique cultures and customs. The national language 'Bahasa Indonesia', which is spoken by about 90% of the population, provides a unifying link among these groups. Nearly two-thirds of the country's population live in Java where the capital Jakarta is situated (The Straight Times (Singapore), 22 May, 1999, p. 11). More than 85% of the population is Moslem, making Indonesia the largest Islamic nation in the world.

Table 1 shows a comparison of some cultural values between Indonesia and Anglo-Saxon countries.

The above table clearly shows the cultural differences between Indonesia and Anglo-Saxon countries. Indonesia is a large power distance and collectivist country. IFRSs are strongly influenced, however, by Anglo-Saxon values, which have been developed in an environment characterized by small

Table 1. Rankings of Cultural Values of Power Distance and Individualism.

Country	Power Distance[a]	Individualism[a]
Indonesia	43–44	6–7
United States	16	50
United Kingdom	10–12	48
Australia	13	49
New Zealand	4	45
Canada	15	46–47

Source: Hofstede (1983).

[a]These rankings are out of 50 countries.

power distance and individualism. Based on Gray (1988), the value orientation of Indonesia is likely to have a negative impact on the level of professionalism among accountants.

The Economic System

Indonesia has a unique type of capitalist system with significant government involvement, which has often been described as 'crony capitalism'. One of the defining features of this system is that the cozy relationship between governments, banks, and firms insulates businesses from market forces.

During the Suharto era, Indonesia experienced a major program of economic reforms aimed at deregulating the economy, which included capital investment (domestic and foreign), taxation systems, and financial services. With these changes, Indonesia took bold steps, for example, to open up industries previously closed to foreign investment and to allow 100% ownership by foreign investors in certain key areas. The foreign investors brought with them their accounting standards and practices, which were based on individualist values such as transparency. These standards were not in line with the cultural orientation of local companies.

The Political System

Since 1966, Indonesia has had a strong central executive occupied by the office of the President. The President is elected for a 5-year term by the 700 member People's Consultative Assembly (Majelis Permusyawaratan Appointees (MPA)). This is the highest authority in the nation and it provides for the establishment of the President, the House of People's Representatives or Indonesian Parliament (Dewan Perwakilan Rakyat (DPR)), the Supreme Audit Board, and the Supreme Court. Under the Constitution, the MPA is required to meet at least once every 5 years.

Many aspects of political behavior at all levels within contemporary Indonesia have their roots in the political culture of the pre-colonial Javanese kingdom which, according to Schrieke (1955, pp. 169–221), fits Max Weber's model of the patrimonial state. In this model, the central government is essentially an extension of the ruler's personal household and staff. Officials are granted their positions and the associated perquisites as personal favors of the ruler, and they may be dismissed or degraded at the ruler's personal whim. For example, the manner in which Suharto ruled the country shows a remarkable resemblance to this pattern (Time, 23 March, 1998, p. 33).

The student-led riots of early 1998, which toppled former President Suharto, have led to major political reforms. As a result, the military was

stripped of the seats reserved for it in the parliament and the country had its first-ever direct presidential election in September 2004. There have been some attempts at decentralization during the post-Suharto era, for example, Law No. 22/1999 pertaining to local governments and Law No. 25/1999 on fiscal decentralization. These are also in line with the 2000 IMF agreement with the government and Bank of Indonesia, which requires fiscal decentralization. However politically, Indonesia continues to be a large power distance society where people tend to accept that power in institutions and organizations is distributed unequally.

The Legal System

A national legal system did not exist in Indonesia until Dutch colonialism created an archipelago-wide state. Before then, many different legal orders existed independently within a wide variety of social and political systems. During the colonial period, the Roman–Dutch law assumed a prominent place in the country's legal system. But the various legal orders of the pre-colonial era also continued, creating a situation of legal pluralism.[7] The main sources of Indonesian law are (a) Adat, the traditional and customary laws of Indonesia's many ethnic and religious groups, (b) Syariah or Islam law (a form of Adat), and (c) surviving Dutch colonial law and European jurisprudence. Diga and Yunus (1997) explain some of the unique features of the Indonesian legal system as follows:

> The legal system is based upon Roman-Dutch law. The Criminal Law is codified, applying equally to all, but application of the Civil Law depends upon membership in one of three groups: Muslim, European and Alien Orientals (a classification which owes something to the Dutch colonial influence). The judicial system gives wide powers to the Shari'a courts over Muslims in civil matters, although Muslims have the right to elect to be dealt with by the secular courts (p. 283).

Lev (1972) explains the concept of justice within the Indonesian context as follows:

> Justice is not understood as the weighing of distinct interests in like cases, as the European goddess of justice does; she stands for a formal, ethical view of justice, the evolution of which depended upon a well-developed concept of private interests. In 1960, at a time of ideological concern for the expression of specifically Indonesian traditions, the goddess was replaced as Indonesia's symbol of justice by a banyan tree inscribed with the Javanese word pengajoman – shelter, succor – which connotes paternalistic protection (p. 299).

In 1945, Government Regulation provided that Dutch law could survive in accordance with the transitional provisions of the 1945 constitution only

if it was not contrary to that constitution. This decision was left in the hands of the President. As a result, even today the President is the de facto source of legal authority.

Organizational Environment

In explaining one of the main features of the indigenous mode of organization that was used to make the Republic of Indonesia, Rahardjo (1994, p. 495) states "Individualism is frowned on. The Indonesian state is a joint venture of the people based on the principle of gotong royong 'all works should be accomplished in a spirit of togetherness'." This is highlighted in the concept of musyawarah that is central to the Indonesian way of life, which means all points of view with regard to all aspects of a problem are discussed, compromises are made until agreement is reached by all concerned (McLennan, 1980, p. 28). The concept of musyawarah is not the same as the concept of majority view that is prevalent in Anglo-Saxon countries.

Various organizations within the country provide a mechanism for the ruler to govern. Different forms of business organization are available in Indonesia for private and public sector enterprises, including the Indonesian equivalent of the English limited liability company form known as the "Perseroan Terbatas" or PT company. This is a common type of business organization in Indonesia and is the type that is allowed for foreign investors. Indonesia has two privately operated corporate securities exchanges, the Jakarta Stock Exchange (JSE) (by far the larger) and Surabaya Stock Exchange (SSE). There are over 200 domestic companies listed on the JSE.

The principal source of capital for domestic companies is credit from the banking system, often at subsidized rates. Given the predominance of bank credit as a source of finance for business, the financing system in Indonesia fits Nobes' (1998) definition of a 'credit-insider' system. In a 'creditor insider' financing system, there is no pressure from the capital market for companies to publish audited financial information as the main providers of finance normally have direct access to information, including financial information. Nobes (1998, p. 166) argues that the main reason for international differences in financial reporting is different purposes for that reporting and that the financing system is relevant in determining the purpose of financial reporting. This will have an impact on the quality of information provided in company annual reports and the level of demand for auditing services.

Corporate governance in Indonesia is weak and recent scandals involving high profile people, the cases of Bank Negara and Bank Rakyat are examples of the consequences of weak corporate governance. In terms of the level of transparency, Indonesia was ranked close to the bottom of the list, 133 out of 145 countries, on the Corruption Perception Index in 2004 (Transparency International, 2004).

Professional Environment

The political conflicts that followed independence, however, significantly changed the impact of professional activity on society. For example, economics and commerce along with the associated legal and accounting processes lost their prominence to politics and became dependent on political influence and corruption. The economic policies of the Suharto era seemed to create a favorable economic environment for professional groups to grow, but there were various impediments to the development of professionalism, particularly in the social and political fronts.

Diga and Yunus (1997, pp. 285–287) provide an excellent brief account of the history of the Indonesian accounting profession. In Indonesia, the professional community represents a close link with the colonial past. During the colonial period, the Indonesians were not involved in any influential positions in the economic and political spheres, including professional activities such as accountancy and law. The Dutch dominated most aspects of business (Hadibroto, 1962). As a result, after independence in 1945, there was a shortage of trained personnel to manage the economy and the country (Briston, 1990, p. 204).

In 1954, almost a decade after independence, the government enacted the Accountancy Law. The Act states that the use of the title 'Accountant' is limited to graduates from state universities. This paved the way for indigenous people to join the profession without having a formal western education. However, given that the profession was still dominated by the Dutch, the local accountants were not allowed to sign audit report and as such they were treated as second-class auditors. Later, the relationship between Indonesia and the Netherlands worsened following the Irian Barat conflict and all Dutch accounting firms closed their offices in Indonesia by the end of 1958.

In 1957, the Indonesian Accounting Institute (IAI) (Ikatan Akuntan Indonesia) was established. Prospective IAI members can register within the Ministry of Finance under one of the following four membership categories:

1. Register A: members with an accounting degree who have also been in practice for several years, or run their own accounting practice, or headed a government accounting office;
2. Register B: foreign public accountants who had been accepted by the Indonesian government and had practiced in Indonesia for several years;
3. Register C: foreign internal accountants working in Indonesia; and
4. Register D: accountants who had graduated from the Faculty of Economics majoring in accountancy or holders of certificates which had been evaluated by the Expert Committee and considered to be equivalent to the accounting degree of a State university (Yunus, 1990, p. 62).

Most accountants are currently registered under category D.

Individual Environment

The IAI seems to have a mechanism to seek views from interested groups regarding proposed accounting standards. However, the extent to which the business community and other interested users are included in the process and the degree of transparency in the process are not clear.

In Indonesia, social values have a heavy influence on the individual environment. Within the political structure, concentration of power with the ruler is acceptable to the community. Legal traditions also emphasize harmony and patrimonial protection, rather than application of given rules. Various organizations within the country provide mechanisms for the ruler to operate. The role played by various professional groups within society is also strongly influenced by the ruler. In this environment, individuals are mindful of these realities, for example, in lobbying for accounting standards. One needs to be careful because individual judgment may even imply selfishness, absoluteness, belligerency, and unwillingness to compromise, traits that are foreign to the Indonesian society. As Lev (1972, p. 282) explains "Those who talk about rules as if they were absolute are likely to be obstructers, inborn trouble makers, anti-social fools, or worse."

Further, Indonesia, being a large power distance society, people may not be concerned about participating in decision-making processes. This may have implications for the extent to which they respond to exposure drafts issued by accounting standard setters. On the other hand, the manner in which such responses are treated at the decision-making level will also be affected by the cultural value of large power distance. In other words, those who make important decisions may not feel the need to seriously consider such responses.

In general, the traditional cultural values of Indonesian society tend to promote the needs of the community at large as opposed to the needs of individuals. With modernization and industrialization, however, these traditional values have met the developing individualistic and liberal patterns of life headlong.

Accounting Environment

The Suharto era led to an increase in the US influence on all aspects of business including accounting.[8] In 1975 it was decided that accounting education in Indonesia should follow only US concepts (Yunus, 1990, p. 54). The US provided aid and grants for technical assistance and for upgrading Indonesia's education systems, for example, through Ford Foundation grants. In addition, US accounting was transferred to Indonesia through multinational companies, international accounting firms, and textbooks which replaced the translated Dutch texts in the teaching of accounting in universities. Further, a decree issued in 1976 encouraged the establishment of foreign accounting firms in Indonesia.

A Code of Ethics for public accountants was introduced in 1987, dealing with attitude, independence, professional skill, responsibility to clients, and other professional accountants. The norms embodied in the principles and standards of the Code of Ethics were taken primarily from statements of accounting norms in the US. Some were also taken from the relevant pronouncements of the Australian and Dutch professional bodies (Yunus, 1990, p. 64). The IAI was a member of the International Accounting Standards Committee (IASC) and currently it is a member of the International Federation of Accountants (IFAC).

In 1997 a ministerial decree was issued to regulate the membership in the accounting profession. Although it stated that accounting practice should not be limited to nationals as long as the certification exam of the IAI is passed, most of the applicants were local Indonesians since the Indonesian language was used in the exam.

Regulatory Framework

The regulatory framework for accounting and financial reporting has three levels. They are, Presidential decrees, regulations issued by relevant government agencies, and accounting standards issued by the IAI.

Presidential Decrees

Various Presidential decrees issued from time to time constitute laws that have an impact on accounting and financial reporting. Until March 1996 when the new Companies Act (Basic Law of Limited Liability Companies No. 1 of 1995 (Undang Undang Perseroan Terbatas)) came into effect, most commercial transactions in Indonesia were regulated by the outdated Dutch Commercial Code[9] and the Civil Code[10] of 1847. The Commercial Code provided in broad terms the record-keeping requirements for business enterprises. For example, it required that any person carrying on a business activity must keep records sufficient to allow determination of that person's rights and obligations (presumably assets and liabilities). However, it did not specify how this was to be accomplished.

The Companies Act 1995 contains more detailed requirements for financial reporting. It requires companies to prepare their accounts in accordance with the Standards of Financial Accounting and to explain the reasons when these standards are not followed (Article 58). Further, Article 59 requires annual accounts of companies to be audited by a public accountant. The Act also provides for government backing for IAI standards (Diga & Yunus, 1997, pp. 287–295).

Although foreign investors opened the door for international accounting firms, foreign investors, and international accounting firms had to understand the environment in which accounting operates in Indonesia.

Government Agencies

The Capital Market Operations Board (Badam Pelaksana Pasar Modal (Bapepam)) is the overall regulator for the securities market and is directly responsible to the Minister of Finance. In conjunction with the privately operated JSE and SSE, the Bapepam specifies the listing requirements for companies that intend to raise funds through public issue of securities.[11] It has powers and functions similar to the US Securities and Exchange Commission (US SEC). Recent reforms in securities regulations indicate a shift towards a US SEC style regulatory framework. In regard to financial reporting of public listed companies, the Bapepam supported the accounting profession's decision to allow IASs in 1994. The job of supervising foreign investment falls on the Capital Investment Coordinating Board (Badn Koordinasi Penanaman Modal (BKPM)) that administers and approves foreign investment in the majority of economic sectors.

There are other institutions that are responsible for regulating specific sectors. For example, the Bank of Indonesia, in addition to administering the country's monetary policy, undertakes the task of prescribing financial

reporting requirements for all banks and other financial institutions. Pertamina is responsible for regulating the oil and gas industry, which includes the financial reporting requirements. Finally, the Ministry of Finance administers the Accountancy Law and is responsible for overseeing the activities of the Directorate General of Taxation and the Bapepam.

Accounting Standards

The government has refrained from imposing uniform accounting standards. Instead companies are allowed to select their own accounting policies, subject to the reporting rules specified in legislation, administrative pronouncements, and accounting standards. The primary responsibility for developing detailed financial reporting standards rests with the IAI, which consults with government agencies, for example, the Bank of Indonesia, and other private sector bodies, for example, stock exchange.

Indonesian accounting standards draw heavily upon US sources (Ikatan Akuntan Indonesia, 1989). The first set of accounting standards, Indonesian Accounting Principles (Prinsip Akuntansi Indonesia) formulated by the IAI in 1973 was directly adopted from Accounting Research Study 7 entitled "Inventory of Generally Accepted Accounting Principles for Business Enterprises" published by the AICPA in 1965. These standards were the reference for auditors when testifying on the compliance by Indonesian firms with Indonesian accounting principles. The IAI carried out a major revision to these principles and issued a revised set in 1984. The accounting principles issued in 1984 were also based on the US accounting pronouncements. In addition, the IAI issues statements of accounting standards on specific topics of relevance to accounting practitioners.

However, accounting as a supporting service for a modern business sector has not kept pace with the process of economic transition in Indonesia (Schwarz, 1994, p. 65). Consequently, a great deal of business activity in the private and state sectors remains clouded by ambiguity and uncertainty. The economic crisis in the late 1990s highlighted the problem of a lack of adequate measurement and disclosure practices by Indonesian firms.

Although the institutional framework related to accounting in Indonesia follows the pattern that exists in the US and accounting standards draw heavily upon US sources, enforcement of accounting rules remains a major problem. Recent experience has raised concerns about the adequacy of enforcement mechanisms. For example, as mentioned earlier, there have been incidents involving massive loans made by financial institutions to politically well-connected individuals which have been inappropriately disclosed and improperly valued in the financial statements, undermining

public confidence in accounting reports (Lichauco, 1993; EBRI Editor, 1994, cited in Craig & Diga, 1996, p. 251). The UN report on the Asian financial crisis prepared for the 1999 meeting of the UN's accounting expert group concludes that "as a result of this non-compliance with IASs, users of financial statements failed to note the weakening condition and performance of the corporations and banks" (Cairns, 1998). The government agencies charged with monitoring compliance are either not supported adequately or overburdened with other responsibilities. A shortage of qualified accountants and auditors is also a major contributing factor.

ANALYSIS AND DISCUSSION

It is asserted in the literature that: (a) as a country becomes richer the tendency would be for that country to become more individualistic (Hofstede, 1980, p. 80) and (b) there is a positive relation between the degree of individualism in a society and the level of professionalism within the accounting profession (Gray, 1988).[12] The assertion that there is a positive relationship between the level of individualism and the wealth of a country is based on the assumption that wealth creation is driven by private initiatives. The impact of individualism on the degree of professionalism would seem to be linked to the nature of competition among firms. The argument is that when competition is driven by individualism, managers of firms are under pressure to exercise their professional skills to outperform their competitors, leading to an increase in their level of professionalism (Sudarwan & Fogarty, 1996, pp. 475–476).

The situation in Indonesia does not seem to fit the pattern described above because the economic growth and increased competition, particularly prior to 1997, did not generate a parallel development in accounting. In Indonesia, as mentioned earlier, wealth creation was achieved mainly through government initiatives, and as a result, an increase in national wealth failed to cause an increase in the degree of individualism in society. However, despite the low level of individualism in society, there has been an increase in the level of competition among business firms, a feature usually associated with high level of individualism (Sudarwan & Fogarty, 1996). The reason being that competition was driven by government initiatives not by individualism. In this situation, access to government authority replaces the need for professionalism as a strategy for outperforming competitors. Therefore, the experience in Indonesia suggests that accounting and the level of economic growth may not necessarily be positively related.

The position of most skilled groups in any society depends on the extent to which their professional services are appreciated and demanded and their values generally accepted by other institutional subsystems. In the case of Indonesia, social values tend to support a mixture of traditional and charismatic authority. As a result, professionals are likely to be weak and the procedures followed by professionals tend to lose meaning and impact (Lev, 1972, p. 260). In Indonesia, professionals seem to have lost their prominence to politics and become dependent on political influence. Politics is a game played not more or less according to rules of professional conduct, but according to rules of influence, money, family, social status, and military power.

The current status of the Indonesian accounting profession represents a case of split personality in that it is Dutch in its qualification structure but its training and philosophy are American (e.g., Briston, 1990; Yunus, 1990). In most developing countries, both the legal and accounting systems were imported from the same place.[13] In the case of Indonesia, however, this was true only for the colonial era. As mentioned earlier, during the subsequent period, particularly since the 1960s, many aspects of Indonesian accounting have been influenced heavily by the US or Anglo-Saxon accounting standards and practices. Siddik and Jensen (1980, p. 76) state that:

> Although the trend of accounting principles and standards in Indonesia are heavily influenced by U.S. practice, their application is still Dutch. The most notable Dutch influence is the application of replacement cost theory in the valuation of assets … . Another distinctive Dutch influence still extant is a decimal numbering classification for general ledger account … . The Indonesian Tax Ordinance is based on regulations prepared by the Dutch in the 1930s.

This 'split personality' of the accounting profession would seem to be responsible at least partly for the lack of progress made in the development of accounting as a reliable source of information for internal and external decision making. This is a factor that contributes to the inadequacy of transparency and accountability in government and business even today.

There are also several aspects of Indonesia's social environment that can be described as unique compared to what is normally expected in a western society. Examples include its crony capitalism, its political system based on the patrimonial state, and its legal traditions that place emphasis on paternalistic protection rather than on the application of given rules. These unique features of Indonesian society are likely to have an effect on many aspects of accounting, for example, accounting regulation and enforcement of accounting standards.

IFRSs in the Indonesian Context

IFRSs are designed to facilitate a particular financing system, 'equity-outsider system' (Nobes, 1998). In equity-outsider systems, commercial pressures give the strongest power over financial reporting to professionals, i.e., rules made by professional accountants, independent bodies, stock exchanges and other equity market regulators. However, within the credit-insider system in Indonesia, the forces that generate commercial pressures are not strong. Furthermore, as described earlier, the manner in which the economic system operates tends to insulate businesses from market forces, thereby effectively removing a condition that is essential for IFRSs to work satisfactorily.

There seems to be a mismatch between the context that exists in Indonesia and that in which IFRSs have been developed. The issue of contextual mismatch goes deeper into the basic societal characteristics. The feudal system that existed in Europe played a role in the development of some of the concepts and ideologies of Anglo-Saxon accounting. The accounting records that provided the data required by the feudal system reflected the paramount concern with control, serving a political role. The concept of public interest or altruistic service motive also developed in a feudal environment, an environment in which obligation was emphasized, independence was unknown, and justice was arbitrary (Velayutham & Perera, 1995, p. 89). Furthermore, there was a contractual aspect implicit in the European feudal institutional structure. However, the feudal system has not been part of the Indonesian social fabric. The economic base of the Indonesian ruling class was not independent land ownership but the system of appanage benefices. A part of the patrimonial rulers' policy was to prevent such appanages from becoming hereditary (and thus ultimately the basis for a more strictly feudal social structure) and to scatter the appanages attached to a particular position in order to prevent local consolidation of economic power which might ultimately give rise to a type of entrenched landlordism. The appanage system in effect meant that the land of the realm "belonged" to the ruler and its economic surplus (including the labor of the peasants who tilled it) was the ruler's gift, to be distributed at the ruler's discretion to deserving officials. The contractual aspect is conspicuously absent in these relationships (Anderson, 1972, p. 47). In the absence of a feudal social structure in Indonesia, it is clear that the evolution of accounting has taken place in a different social context.

Nobes (1998) alludes to the dangers of inappropriate transfer of accounting technology. Following his thesis, one could argue that, given

Indonesia's 'credit-insider' financing system, the paraphernalia of Anglo-Saxon accounting, for example, extensive disclosures, consolidations, external auditors, and so on, which are more appropriate for 'equity-outsider' financing systems, would be an expensive luxury. There may also be potential problems of relevance due to cultural and other differences (e.g., Perera, 1989a, 1989b). Sudarwan and Fogarty (1996) examined the association between national cultural and accounting values in Indonesia.

The legal environment in Indonesia has a direct impact on how the professions like accounting are regulated. For example, the concept of professional self-regulation, which recognizes the importance of the concept of private interest, is taken for granted under IFRSs and is not established in Indonesian society. Further, the legal system in Indonesia is different from that of Anglo-Saxon countries in that it highlights paternalistic protection, whereas the Anglo-Saxon legal traditions are based on private interest. These issues make the acceptance of IFRSs in Indonesian society problematic.

Further, Islam as a religion strongly influences every facet of a Moslem's life, including business activities. For example, Islam advocates good behavior in conducting business and, at the same time, discourages Moslems to advertise the fact that they have behaved that way. This is likely to cause challenges in enforcing the disclosure requirements of IFRSs.

To the extent that businesses are insulated from market forces, the achievement of the objective of implementing IFRSs is likely to face challenges as the accounting numbers in financial statements would be difficult to interpret. The cultural attributes associated with the political and economic systems are likely to impact negatively on the level of acceptance of IFRSs which have been developed on the assumption that market forces are allowed to operate.

CONCLUDING REMARKS

Cultural factors such as secrecy and lack of transparency often constrain the supply of information in financial markets (Gray, 1988). Applying Gray's (1988) analysis, given Indonesia's lower level of individualism and professionalism and large power distance, its accounting profession is likely to rank highly in terms of both conservatism and secrecy. These accounting values would result in a low level of transparency in financial reports.

Lack of transparency and accountability in organizations has been identified as a major cause for the economic problems in Indonesia and many other Asian countries. A fundamental question that needs to be asked here is whether accountability and transparency are cultural practices rooted in certain value orientations that are in conflict with the traditional Asian values? For example, transparency as emphasized in the Anglo-Saxon tradition may not be equally acceptable to Islamic traditions in Indonesia.

The possibility that the use of IFRSs in Indonesia might trigger a change from a 'credit-insider' to an 'equity-outsider' financing system should not be ruled out. Some changes have been made to the associated institutional framework. Given that accounting is capable of providing a vehicle to ensure transparency in the use of resources, it could play a role in regaining investor confidence and improving the relationship between banks and their client companies.[14] The growth of the Indonesian economy is also expected to strengthen the role of the accounting profession in setting and implementing financial reporting standards. However, some of the structural issues in society referred to earlier, such as inadequate regulatory and enforcement mechanisms, and cronyism, are likely to act as impediments in this process. In addition, language could also be an issue. In most cases, the language and the accounting systems were imported from the same place. But in Indonesia, the language of the colonial masters is different from that of the IFRSs. The subtle and not readily evident effect of Indonesian culture on accounting at individual, organizational, and national levels cannot be ignored.

NOTES

1. For a review of this literature, see Meek and Saudagaran (1990).

2. Accounting infrastructure includes producers and users of information, information intermediaries, laws and regulations that govern the production, transmission, and usage of information, and regulatory bodies. (Lee, 1987, p. 79).

3. By mid-December more than $1billion a day was flowing out of South Korea. As a result, foreign exchange reserves had fallen to less than $10 billion. Default was about 10 days away (Time, 12 January, 1998, p. 24).

4. See also, Time, 24 May, 1999, pp. 36–48 for further details.

5. For example, in Indonesia, 90% of domestic companies were considered technically bankrupt (Time, 2 March, 1998, p. 37) and at least half of the 222 banks (deregulation in 1998 resulted in a proliferation of banks) were also considered technically bankrupt (Time, 26 January, 1998, p. 37).

6. For example, in 1998, the number of unemployed in Indonesia was reaching 20 million (Time, 2 March, 1998, p. 37).

7. For a discussion of legal pluralism, see Hooker (1975).

8. Until 1960s, the teaching of accounting in polytechnics and universities, following the Dutch tradition, was done as part of economics and business economics using translated Dutch texts.

9. Wetboek van Koophandel (Dutch); Kitab Undang-Undang Hukum Dagang (Indonesian).

10. Burgerlijk Wetboek (Dutch); Kitab Undang-Undang Hukum Perdata (Indonesian).

11. For listing requirements of the JSE (see Diga & Yunus, 1997, p. 292).

12. Professionalism exists where there is a preference for the existence of individual professional judgment and the maintenance of professional self-regulation, as opposed to compliance with prescriptive legal requirements and statutory control (Gray, 1988).

13. It has been pointed out that legal systems influence the way in which accounting rules are promulgated and enforced as well as the nature of the rules themselves (e.g., Meek & Saudagaran, 1990; Baydoun & Willett, 1995).

14. The IMF rescue package included conditions related to bad procedures.

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LATIN AMERICAN BANKING INSTITUTIONS TRADING ON NEW YORK STOCK EXCHANGE: CONVERGENCE–DIVERGENCE OF LATIN AMERICAN ACCOUNTING STANDARDS AND US GAAP

Salvador Marin Hernandez, Mercedes Palacios Manzano, Alejandro Hazera and Carmen Quirvan

ABSTRACT

The objective of this study is to analyze the degree of de facto harmonization and convergence between the generally accepted accounting principles (GAAP) of Latin American banking institutions and US banking institutions. We examine 20-F reports of all Latin American credit institutions which quoted shares on the New York Stock Exchange during the period 1998–2003. We also examine the bank financial reporting regulatory environment for three countries. The results show an emerging harmonization between many areas of financial reporting. However, for

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some areas, there has been little convergence. Also, movement toward harmonizing bank reporting standards has been slow. Thus, there is a need to continue efforts at harmonization in order to reduce the degree of discretion in financial reporting.

INTRODUCTION

In the late 1990s the United States and many countries in Latin America approved treaties, such as NAFTA and MERCOSUR, which increased the economic interdependence between countries in the western hemisphere. In some cases the relations between the United States and Latin American nations grew closer than the relations between Latin American countries themselves. Along with this economic integration, some research studies have attempted to analyze the convergence between Latin American accounting standards and International Financial Reporting Standards (IFRS) (e.g., Street, Ruiz De Chavez, & Cocina Martinez, 2003). Other studies have examined the degree of financial reporting harmonization between Latin American countries and the United States (Davis-Friday & Rivera, 2000).

In spite of this research, little is known with respect to the degree of accounting harmonization of Latin American banks with US standards. Knowledge concerning the quality of financial reporting for the banking sector is crucial for four reasons. First, as in other developing regions, banks in Latin America constitute a large source of capital that is becoming increasingly integrated with international financial markets. Second, poor financial reporting standards and practices by Latin American financial institutions have been cited as a factor which has contributed to several of the region's financial crises (e.g., Mexico, Argentina, and Ecuador). Most notably, poor standards and practices regarding loan classification (as performing/non-performing) and disclosure were cited as factors which allowed Latin American banks to conceal the high degree of credit risk in their loan portfolios prior to the onset of financial crises.[1] Third, on an international level, Latin American banks are coming under increasing pressure to enhance their operational efficiency (i.e., profit and cost efficiency). Fourth, many countries are attempting to enhance compliance with new international capital adequacy standards under "Basel II."[2] These new guidelines place greater emphasis on market discipline in promoting institutions' capital adequacy. Thus, it is increasingly important for financial

institutions to provide an economically reliable (versus legally literal) perspective of their financial performance and position.

BACKGROUND AND LITERATURE REVIEW

Empirical research on harmonization has been of two general types: (1) studies analyzing national accounting standards (de jure harmonization) and (2) studies analyzing the accounting practices of companies (de facto harmonization) (Tay & Parker, 1990).

Several prior studies have examined the progress of international accounting harmonization by examining whether official national accounting standards are in compliance with International Accounting Standards (de jure harmonization) (for a review of this work see Larson & Kenny, 1999; Street & Larson, 2004). The results of these studies indicate that national accounting standards are converging with international standards, although a number of significant differences remain to be addressed before convergence is achieved (Street & Larson, 2004). The harmonization of accounting regulations for Latin American countries has been addressed by the American Free Trade Agreement Committee for Cooperation on Financial Reporting Matters in a report entitled "Significant differences in GAAP in Canada, Chile, Mexico and the United States" (Financial Accounting Standards Board, 2002). This publication identifies generally accepted accounting principles (GAAP) differences among the accounting pronouncements issued in those countries, as well as GAAP differences between those countries and IASB standards.

Other studies have examined corporate financial statements to determine the degree of harmonization in accounting practices (de facto harmonization) (Meek & Saudagaran, 1990). Street, Gray, and Bryant (1999) and Street and Gray (2002) examined the extent to which companies claiming to comply with IASs were doing so in practice and the nature and significance of measurement and disclosure non-compliance. The findings are that there is a significant extent of non-compliance with IAS, especially in the case of IAS disclosure requirements. Street and Gray (1999) investigated the consistency of US practice with IAS through an analysis of the annual reports of large multinational US companies (Street & Gray, 1999) while Street, Nichols, and Gray (2000) examined the US GAAP reconciliation by non-US companies complying with IAS. The results generally indicate that the impact of accounting differences between IASs and US GAAP is narrowing, although there are still some significant issues to be resolved. In

further contrasting IASB and US standards, Tarca (2004) examined the degree of company harmonization with US versus IASB standards. The results show that multinationals listed on US exchanges prefer US GAAP and that firms listed in regulated markets use US GAAP while firms listed on the over the counter (OTC) market prefer IASC standards. In an indication that US GAAP may constitute a cost barrier to listing, Ashbaugh (2001) provides evidence that OTC listed firms did not voluntarily raise their level of disclosure to SEC requirements for companies listed on formal exchanges and that IAS may constitute a method of lowering reporting costs.[3]

From a regional perspective, only a few studies have examined the differences between Latin American accounting practices and international standards. Street et al. (2003) examined the degree of financial statement harmonization for companies from six Latin American countries against IFRS. Davis-Friday and Rivera (2000) analyzed the 20-F report of Mexican companies trading in the NYSE during the period 1995–1996. The results suggest that the differences between Mexican and US GAAP income and book value are immaterial. Rueschhoff and Strupeck (1998) surveyed enterprises from developing countries, including Mexico, Argentina, and Chile. The findings generally highlight the fact that differences in accounting principles cause extreme variations in reported net income, stockholders' equity, and equity returns for some developing country firms.

From a methodological perspective, early studies on harmonization used Gray's (1980) Index of Conservatism (IC). This index has mostly been used to compare net income. Subsequently, Weetman, Jones, Adams, and Gray (1998) developed an index of comparability that has been used to measure the degree of comparability between the net income and stockholders' equity calculated under local GAAP and a selected country of reference. Most of these studies analyze the impact of accounting differences using US GAAP reconciliation, since the reconciliation is part of the Form 20-F. They use US GAAP as a benchmark, and compare with other GAAPs such as UK GAAP (Weetman & Gray, 1990, 1991; Weetman et al., 1998; Adams, Weetman, Jon, & Gray, 1999), GAAPs of other European countries (Hellman, 1993; Goldberg & Godwin, 1992; Whittington, 2000), Australian GAAP (Norton, 1995), Japanese GAAP (Cooke, 1993), Dutch GAAP (Vergoosen, 1996), and international GAAP (Street et al., 2000). There are others that use IAS as the yardstick (Adams, Weetman, & Gray, 1993) or others such as Gray (1980) that use profits according to the standardized method of analysis and presentation of company accounts developed by the European Federation of Financial Analysts Societies (EFFAS). Rueschhoff

and Strupeck (1998) and Davis-Friday and Rivera (2000) are the only studies on US GAAP reconciliation that have included companies from developing countries.

EXAMINATION OF 20-Fs FOR 1998–2003

Survey Sample

As described above, there has been considerable recent research on harmonization. While some of the research has focused on Latin American countries, in general, there has been no examination of harmonization by Latin American banks. In order to examine the degree of convergence between Latin American banks' financial statements and the financial statements that would be prepared under US GAAP, we obtained the financial statements for all of the Latin American banking institutions quoted on the New York Stock Exchange from 1998 to 2003. Many banks financial reporting practices are based on specialized industry requirements, such as capital requirements and risk management standards. Thus, the 20-F reconciliation may provide a degree of evidence concerning the degree to which Latin American bank financial reporting practices correspond with the "best" practices of international institutions.

We examine the 20-F reports at two levels. First, using Weetman et al.'s (1998) comparability index, we examine trends in harmonization for all the 20-F reports filed by Latin American banks for the period 1998–2003. In this context, we identify the specific items that generated the largest differences in net income and stockholders' equity. We also assess the comparability that exists between Latin American and US accounting practices; the degree of convergence between accounting standards; and the frequency and materiality of the adjustments on net income and stockholders' equity. Second, in order to provide a perspective of the institutional factors surrounding the evolution of banks' financial reporting, we examine the financial reporting environment for banks in three countries.

The initial survey (Table 1) was composed of sixty 20-F reports, including: 6 from Argentina, 17 from Brazil, 19 from Chile, 6 from Peru, 6 from Colombia, and 6 from Panama. Six firms were eliminated from the sample. Four of these firms prepared financial statements following US GAAP (Itau Bank, Bradesco Bank, Brazilian Union Banks, and the institution Latin American Bank of Panama) and therefore did not prepare

Table 1. Number of 20-F Reports for Sample Firms by Year and Country.

Year	Country						
	Argentina	Brazil	Chile	Peru	Columbia	Panama	Total
1998	1	2	2	1	1	1	8
1999	1	3	4	1	1	1	11
2000	1	3	4	1	1	1	11
2001	1	3	3	1	1	1	10
2002	1	3	3	1	1	1	10
2003	1	3	3	1	1	1	10
Total	6	17	19	6	6	6	60

a reconciliation. Credicor (Peru) presented its consolidated financial statements under international accounting standards, and was consequently not included in our survey.

Design of the Study

The basis for the study was item number 18 of form 20-F. This section of the form provides the reconciliation of net income and stockholders' equity (between local and US GAAP). This section also presents the adjustments in the reconciliation. For determining the degree of comparability that exists between Latin American and US accounting practices, we calculated the index of comparability as proposed by Gray (1980) and modified by Weetman et al. (1998). This index analyzes the total impact of the adjustments on net income and stockholders' equity.

Based on a study conducted by the IASB in 2001, we determined the adjustments of most importance to net income and shareholders' equity. The reconciling items were classified into 16 categories which were also separated into adjustments to net income and stockholders' equity. Table 2 shows the categories of reconciling adjustments.

We converted the reconciliation to US dollars and performed the following three part analysis:

1. analysis of the index of comparability of Gray (1980);
2. analysis of the frequency of the use of adjustments;
3. analysis of the quantitative impact of the adjustments.

Table 2. Classification of Adjustments Prepared in 20-F Report.

Net Income[a]	Stockholders' Equity[a]	Adjustments
AD1	ZAD1	Taxation
AD2	ZAD2	Pensions and other post-retirement benefits
AD3	ZAD3	Business combinations
AD4	ZAD4	Goodwill
AD5	ZAD5	Investments
AD6	ZAD6	Tangible fixed assets
AD7	ZAD7	Intangible assets
AD8	ZAD8	Financial instruments
AD9	ZAD9	Foreign exchange
AD10	ZAD10	Capital instruments and debt
AD11	ZAD11	Loan losses
AD12	ZAD12	Provisions and reserves
AD13	ZAD13	Derivatives
AD14	ZAD14	Assets received in lieu of payment
AD15	ZAD15	Dividends
AD16	ZAD16	Minority interest

[a]Classification of item according to IASB (2001) study.

Analysis of the Index of Comparability of Gray (1980)

In order to measure the differences between net income and stockholders' equity as calculated according to the country's standards and US GAAP, we calculated Gray's index of comparability for net income and stockholders' equity by country and year. The index is based on the following formulas:

$$\mathrm{ICni}_i = 1 - \left[\frac{\mathrm{NIusa}_i - \mathrm{NIdom}_i}{|\mathrm{NIusa}_i|}\right] \tag{1}$$

where ICni_i is the index of comparability for net income, NIusa_i the net income according to US GAAP, and NIdom_i the net income according to domestic GAAP; and

$$\mathrm{ICse}_i = 1 - \left[\frac{\mathrm{SEusa}_i - \mathrm{SEdom}_i}{|\mathrm{SEusa}_i|}\right] \tag{2}$$

where ICse_i is the index of comparability for shareholders' equity, SEusa_i the shareholders' equity according to US GAAP, and SEdom_i the shareholders' equity according to domestic GAAP.

If the value of the index is greater than 1, the accounting practices of the country of origin are more optimistic than the yardstick US GAAP (i.e., the

results calculated under domestic standard are higher than under US GAAP). If the index is less than 1, the accounting practices of the country of origin are more pessimistic or more conservative (the results calculated under domestic standards are less than under US GAAP). If the value is equal to 1, there is no difference between the results under local and US standards.

We used the Kolmogorov–Smirnov test and determined that the variables did not follow a normal distribution. This raised the question of whether Latin American and US GAAP provide amounts of net income and stockholders' equity that are significantly equal. The test was formulated under the null hypothesis: the results under both standards provide equivalent results. Statistically, we contrasted the equality of the means of the net income and shareholders' equity calculated under each set of standards by applying the Wilcoxon test for two related samples.

Analysis of Frequency of Use of Adjustments

We analyzed the frequency of the use of adjustments by country and year. We report only those adjustments that were present in at least 30% of the records.

Analysis of Quantitative Impact of Adjustments

Since the reconciliation required by the SEC has detailed information of the different adjustments it is then possible to establish the relative effects of the various individual adjustments by constructing partial indices of comparability using the formula developed by Weetman and Gray (1991). We calculated partial indices by adjustment and accounting variable. This can be mathematically expressed on the basis of the following formulas:

$$\mathrm{ICad}_{i,j} = 1 - \left[\frac{\mathrm{ad}_{i,j}}{\mathrm{NIusa}_i}\right] \tag{3}$$

where $\mathrm{ICad}_{i,j}$ is the partial index by adjustment j on net income and $\mathrm{ad}_{i,j}$ the adjustment j to net income; and

$$\mathrm{ICzad}_{i,j} = 1 - \left[\frac{\mathrm{zad}_{i,j}}{|\mathrm{SEusa}_i|}\right] \tag{4}$$

where $\mathrm{ICzad}_{i,j}$ is the partial index by adjustment j on shareholders' equity and $\mathrm{zad}_{i,j}$ the adjustment j to shareholders' equity.

After we contrasted the null hypothesis, we determined significant differences between the means of indices of comparability of the institutions classified by country and year. We used the Kruskal–Wallis *H* test (for more than two samples), similar to analysis of variance (ANOVA) (both non-parametric).

RESULTS

As shown in Table 3, the overall net income of Latin American financial institutions was 64% greater (mean IC = 1.64) than that of US institutions while the Latin American institutions' stockholders' equity was only 6% higher (mean IC = 1.06). These findings suggest that Latin American accounting standards are less conservative than the US standards with respect to both net income and stockholders' equity. In addition, as shown by the standard deviations in Table 3, the adjustment to net income (SD = 3.08) showed a greater variation than the adjustment to stockholders' equity (SD = 0.73).

Table 4 presents the results of the Wilcoxon test. The non-parametric tests indicate no statistically significant differences between Latin American and US net income. However, the differences between accounting standards were statistically significant at a 5% level with respect to the calculation of stockholders' equity.

In order to analyze the evolution of the IC, we calculated its annual mean for the period of study (1998–2003). Fig. 1 shows a close comparability between the institutions' stockholders' equity under Latin American and US GAAP; however, the opposite relationship was found with respect to net

Table 3. Descriptive Statistics by Year for Weetman et al.'s (1998) Index of Comparability.

Index of Comparability	1998	1999	2000	2001	2002	2003	Overall
Net income							
Mean	1.77	3.80	0.94	1.25	1.60	0.24	1.64
Minimum	0.89	0.58	−0.93	0.69	1.02	−2.80	−2.80
Maximum	2.27	17.39	1.57	2.01	3.10	1.16	17.39
SD	0.62	6.66	0.94	0.61	0.86	1.74	3.08
Stockholders' equity							
Mean	0.90	0.86	0.88	1.52	1.13	1.12	1.06
Minimum	0.67	0.68	0.71	0.75	0.48	0.52	0.48
Maximum	1.17	1.06	0.99	4.06	2.72	2.61	4.06
SD	0.20	0.15	0.11	1.42	0.91	0.85	0.73

Table 4. Wilcoxon *p*-Values for Weetman et al.'s (1998) Index of Comparability (IC).

IC	Year						Overall	Country		
	1998	1999	2000	2001	2002	2003		Argentina	Chile	Columbia
NI	0.46	0.91	0.24	0.89	0.04*	0.34	0.32	0.46	0.00*	0.24
SE	0.71	0.24	0.02*	0.50	0.68	0.50	0.03*	0.34	0.00*	0.46

*Significant at 5% level.

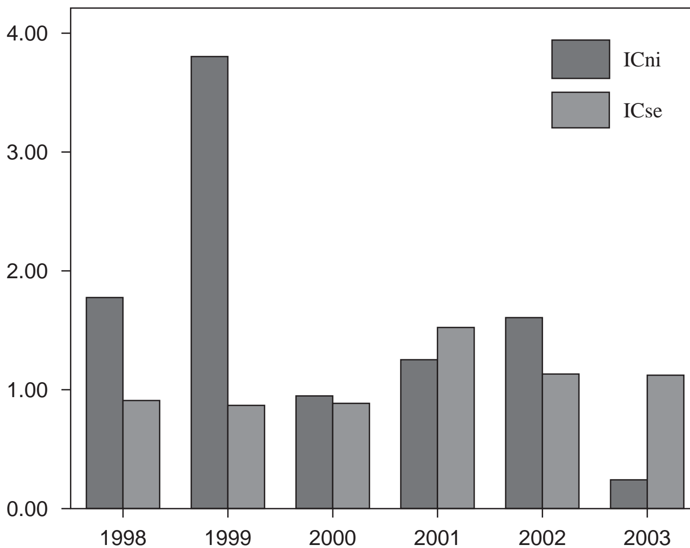

Fig. 1. Index of Comparability by Year. Based on Weetman et al.'s (1998) Index of Comparability. ICni: Index of Comparability for Net Income. ICse: Index of Comparability for Shareholders' Equity.

income. The IC for net income in 1998–1999 was higher than 1. Thus, for those years the results calculated under Latin American standards were more optimistic than those calculated following US standards. For 2000–2002 the value of the IC for net income was close to 1. Thus, net income showed a trend toward convergence. However, this trend reversed in 2003 when the net income calculated according to Latin American standards became smaller than US net income. This variability contrasts with IC for stockholders' equity, which was close to 1 for all five years.

Table 5. Percentage of Banks including 20-F Reconciliation Adjustments.

Reconciliation Adjustments	Net Income	Stockholders' Equity
Taxation	100.00	99.96
Pensions and other post-retirement benefits	54.84	61.29
Business combinations	38.71	54.84
Goodwill	77.42	9.03
Investments	83.87	100.00
Tangible fixed assets	9.68	25.81
Intangible assets	19.35	25.81
Financial instruments	64.52	58.06
Foreign exchange	25.81	19.35
Capital instruments and debt	0.00	6.45
Loan losses	93.55	100.00
Provisions and reserves	12.90	19.35
Derivatives	32.26	32.26
Assets received in lieu of payment	25.81	35.48
Dividends	0.00	61.29
Minority interest	9.68	25.81

The calculation of the frequency of the use of adjustment (Table 5) reveals the accounting treatments for which there was less comparability (since they were present in the majority of the observations). The most frequent adjustment for both net income and stockholders' equity was for the treatment of taxes, which was present in 100% of the adjustments for net income and in 99.96% of the adjustments for stockholders' equity. Other significant adjustments were for loan losses (93.55% for net income and 100% for stockholder's equity), investments (83.87% for net income and 100% for stockholders' equity), goodwill (77.42% for net income), and dividends (61.29% for stockholders' equity).

Table 6 shows the frequency of adjustment by year. Adjustments for some items increased during the period of study. These included minority interest and financial instruments (in net income), the adjustment for goodwill (in stockholders' equity), and business combinations (in both net income and stockholders' equity). The adjustments for other accounting treatments decreased, including the adjustments for foreign exchange (in both net income and stockholders' equity) and investments (in net income). In general, Table 6 shows that there was no decrease in the percentage of adjustments performed during the period of study.

In order to measure the impact of different adjustments on net income and stockholders' equity, we calculated the partial indices for those adjustments

Table 6. Percentage of Banks that included 20-F Reconciliation Adjustments by Year.

Adjustment	Year											
	1998		1999		2000		2001		2002		2003	
	NI	SE	NI	SE	NI	SE	NI	SE	NI	SE	NI	SE
Taxation	100	100	100	100	100	100	100	100	100	100	100	80
Pensions	50	50	50	66	50	66	60	60	60	60	60	60
Business combinations	25	50	16	50	16	50	60	60	60	60	60	60
Goodwill	75	75	83	83	83	83	100	100	60	100	60	100
Investments	100	100	83	100	83	100	80	100	80	100	80	100
Tangible fixed assets	0	25	0	33	0	33	20	20	20	20	20	20
Intangible assets	25	25	16	33	16	33	20	20	20	20	20	20
Financial instruments	25	25	66	66	33	66	80	80	80	60	60	40
Foreign exchange	50	25	33	50	33	33	0	0	20	0	20	0
Capital instruments	0	0	0	16	0	16	0	0	0	0	0	0
Loan losses	100	100	83	100	83	100	100	100	100	100	100	100
Provisions and reserves	25	25	16	33	16	33	0	20	20	0	0	0
Derivatives	0	0	16	16	16	33	60	60	60	40	40	40
Assets received in lieu of payment	0	0	16	33	16	50	40	40	40	40	40	40
Dividends	0	50	0	66	0	66	0	60	0	60	0	60
Minority interest	0	25	0	33	0	33	20	20	20	20	20	20

that were present in at least 30% of the records. Table 7 presents the means of the partial indices. Goodwill (ICad4: 1.37) and taxes (ICad1: 1.19) had the largest quantitative impact on domestic net income. Since the value of these indices was greater than 1, these adjustments involved a decrease from the domestic GAAP to US GAAP net income. Conversely, intangible assets (0.98), foreign exchange (0.95), loan losses (0.99), derivatives (0.98), and minority interest (0.99) produced a positive correction in Latin American financial institutions' net income. For shareholders' equity, the most important adjustment was for loan losses (ICzad11: 1.15), which was deducted from the domestic GAAP stockholders' equity in order to recalculate to US GAAP. Goodwill (ICazd4: 0.88) constituted a second important adjustment to stockholders' equity (which increased net income by 12%).

Fig. 2 shows the temporal evolution of partial indices. The indices for taxes (ICad1), goodwill (ICad4), and foreign exchange (ICad9) decreased during the period studied. However, in evidence of an emerging accounting harmonization, the indices for investments (ICad5) and financial instruments (ICad8), showed a contrary trend. Finally, the adjustment for loan losses (ICad11) showed both increases and decreases during the years 1998–2003.

Table 7. Means of Weetman and Gray (1991) Partial Indices for 20-F Reconciliation Adjustments.

Reconciliation Adjustment	Net Income		Stockholders' Equity	
	$ICad_j^a$	Overall	$ICzad_j^a$	Overall
Taxation	ICad1	1.19	ICzad1	0.95
Pensions and other post-retirement benefits	ICad2	1.00	ICzad2	1.01
Business combinations	ICad3	1.04	ICzad3	0.99
Goodwill	ICad4	1.37	ICzad4	0.88
Investments	ICad5	1.02	ICzad5	0.99
Tangible fixed assets	ICad6	1.00	ICzad6	1.01
Intangible assets	ICad7	0.98	ICzad7	1.00
Financial instruments	ICad8	1.11	ICzad8	1.05
Foreign exchange	ICad9	0.95	ICzad9	0.99
Capital instruments and debt	ICad10	1.00	ICzad10	1.00
Loan losses	ICad11	0.99	ICzad11	1.15
Provisions and reserves	ICad12	1.00	ICzad12	1.00
Derivatives	ICad13	0.98	ICzad13	1.04
Assets received in lieu of payment	ICad14	1.00	ICzad14	1.00
Dividends	ICad15	1.00	ICzad15	1.01
Minority interest	ICad16	0.99	ICzad16	0.99

[a]Classification of item according to IASB (2001) study.

Fig. 3 shows the temporal evolution of partial indices over stockholders' equity. While the adjustments for taxes (ICzad1) and goodwill (ICzad4) evolved in a positive manner, the quantitative impact for both adjustments on stockholders' equity decreased slightly. Conversely, the quantitative impact of the adjustments for loan losses (ICzad11) and derivatives (ICzad13) initially increased, but declined after 2001.

Tables 8 and 9 indicate the results of the application of the Kruskal–Wallis test for net income and shareholders' equity. With respect to net income, the test provides evidence that the adjustment for derivative accounting constituted a significant difference (at a level of 10%) depending on the year of the 20-F report while the adjustment for tangible fixed assets constituted a significant difference (at the level of 1%) depending on the country. With respect to shareholders' equity, the adjustments for business combinations and financial instruments were largely affected by the year of the 20-F report. The adjustments for pensions, goodwill, investments, fixed assets, intangible assets, loan losses, provisions and reserves, dividends, and minority interest constituted significant differences (at a level of 10%) which depended on the bank's home country.

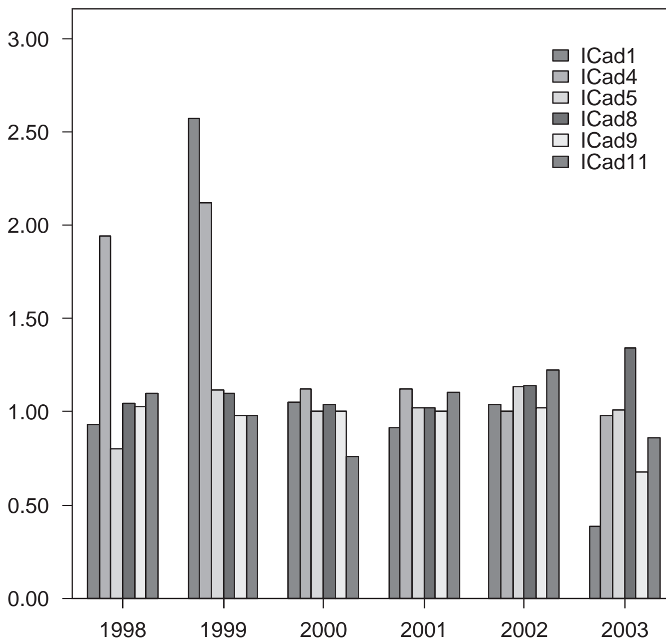

Fig. 2. Temporal Evolution of Partial Indices of Comparability for Net Income, where ICad1: Partial Index for Adjustment for Taxes to Net Income; ICad4: Partial Index for Adjustment for Goodwill to Net Income; ICad5: Partial Index for Adjustment for Investments to Net Income; ICad8: Partial Index for Adjustment for Financial Instruments to Net Income; ICad9: Partial Index for Adjustment for Foreign Exchange to Net Income; ICad11: Partial Index for Adjustment for Loan Losses to Net Income. Partial Indices are based on Weetman and Gray (1991).

EXAMINATION OF HARMONIZATION FOR THREE COUNTRIES

As indicated by the results provided above, a degree of convergence seems to be emerging between the accounting practices of Latin American banks and US GAAP. However, material adjustments continue for several areas, including taxes, loan losses, investments, and goodwill. In order to gain insight into the economic and institutional forces which may affect the trend toward convergence, we examined the economic and financial reporting

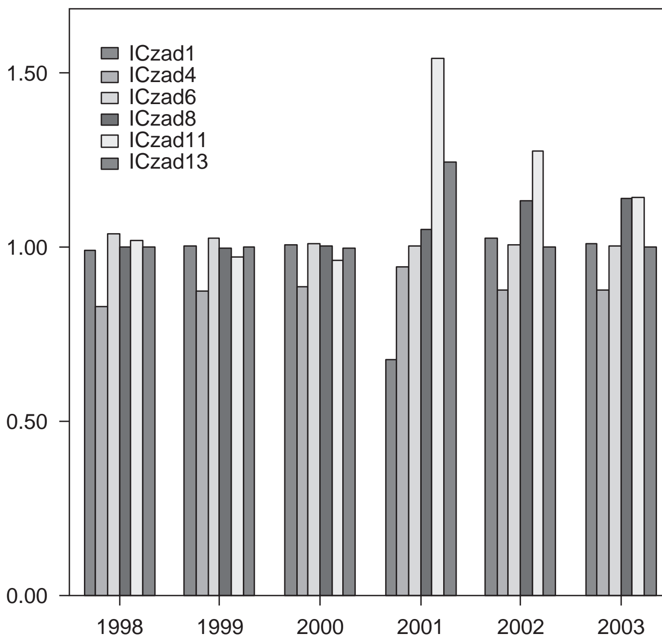

Fig. 3. Temporal Evolution of Partial Indices of Comparability for Stockholders' Equity, where ICzad1: Partial Index for Adjustment for Taxation to Stockholders' Equity; ICzad4: Partial Index for Adjustment for Goodwill to Stockholders' Equity; ICzad6: Partial Index for Adjustment for Tangible Fixed Assets to Stockholders' Equity; ICzad8: Partial Index for Adjustment for Financial Instruments to Stockholders' Equity; ICzad11: Partial Index for Adjustment for Loan Losses to Stockholders' Equity; ICzad13: Partial Index for Adjustment for Derivatives to Stockholders' Equity. Partial Indices are based on Weetman and Gray (1991).

trends and the temporal evolution of the IC (for net income and shareholders' equity) for Argentina, Chile, and Colombia.[4] In general, the countries seem to be harmonizing general purpose GAAP at a faster rate than the specialized GAAP for banks.

Argentina

For several decades, the Argentine economy was characterized by periods of low or negative growth and high and variable levels of inflation. In response,

Table 8. Kruskal–Wallis Test for Partial Indices of Comparability for Net Income and Stockholders' Equity.

Reconciliation Adjustment	Partial Indices of Comparability			
	NI		SE	
	Year	Country	Year	Country
Taxation	0.43	0.58	0.50	0.43
Pensions and other post-retirement benefits	0.68	0.12	0.99	0.00*
Business combinations	0.10	0.51	0.03*	0.69
Goodwill	0.25	0.73	0.68	0.01*
Investments	0.33	0.89	0.33	0.01*
Tangible fixed assets	0.99	0.00**	0.99	0.00*
Intangible assets	0.82	0.16	0.99	0.00*
Financial instruments	0.27	0.64	0.03*	0.15
Foreign exchange	1.00	1.00	0.34	0.30
Capital instruments and debt	0.69	0.37	1.00	1.00
Loan losses	0.42	0.10	0.67	0.00*
Provisions and reserves	0.10	0.88	0.77	0.00*
Derivatives	0.08*	0.81	0.87	0.61
Assets received in lieu of payment	1.00	1.00	0.27	0.62
Dividends	0.73	0.41	0.89	0.00*
Minority interest	0.33	0.89	0.99	0.07**

Note: Partial Indices are based on Weetman and Gray (1991).
*Significant at 10% level.
**Significant at 1% level.

Table 9. Index of Comparability by Country.

Index of Comparability	Argentina	Chile	Columbia
Net income			
Mean	0.63	2.26	0.69
Minimum	−2.80	0.77	−0.93
Maximum	2.01	2.01	1.81
SD	1.74	3.70	0.90
Stockholders' equity			
Mean	2.02	0.79	0.97
Minimum	0.90	0.48	0.85
Maximum	4.06	14.39	1.17
SD	1.30	1.18	0.12

Note: Based on Weetman et al.'s (1998) Index of Comparability.

in the late 1980s and early 1990s, the Argentine government undertook several reforms to modernize the nation's economy and to remove impediments to foreign investment. These steps involved the establishment of a currency board which tied the value of the Argentine peso to the US dollar.

As a result of these reforms, from 1991 to the middle of 1998 inflation tempered and the economy experienced growth. At the end of 1998, however, economic growth slowed and the economy entered into a long recession. In 2002 the country was forced to abandon the currency board (effectively devaluing the peso). This policy reignited inflation and deepened the recession. Correspondingly, the country entered a financial crisis which included mass withdrawals of deposits and freezing of depositors' accounts, loan defaults, constitutional protection actions by depositors, the ordering of precautionary measures, and the suspension of court-enforced collections.[5] The crisis grew so severe that successive Presidents resigned.

The volatility of the crisis seems to have been reflected in the IC for Argentine institutions. As shown in Table 9, the net income index for Argentinean financial entities was 0.63 while the stockholders' equity index was 2.02. Thus, Argentinean accounting practices tended to be more conservative than US GAAP in measurement of net income but less conservative in measurement of stockholders' equity.[6]

As shown in Fig. 4, the greatest disparities between US and Argentinean net income occurred in 2003, when the index dropped to less than -2.00 while the IC for stockholders' equity (Fig. 5) increased to ~ 4.00 in 2001 and 3.00 in 2003. Thus, for these years, the shareholders' equity calculated under Argentine GAAP was greater than the shareholders' equity under US GAAP.

As shown in Table 10, with respect to net income, the accounting treatments for taxes (0.46) and foreign exchange (0.74) involved an increase of net income from Argentinean GAAP to US GAAP. The adjustment for foreign exchange may reflect the effective devaluation of the Argentine peso. The adjustment for financial instruments (1.38) produced a large opposite adjustment. With respect to shareholders' equity, the largest adjustment was for loan losses (1.88), followed by financial instruments (1.26). Since the value of these indices is more than 1, these adjustments involved a decrease from the Argentinean to US GAAP stockholders' equity. The adjustment for loan losses may reflect the large loan write-offs which occurred during the country's financial crisis.

While the volatility of the financial crisis may have obscured movement toward harmonization, the country seems to have proactively attempted to harmonize general purpose GAAP; however, efforts to harmonize the

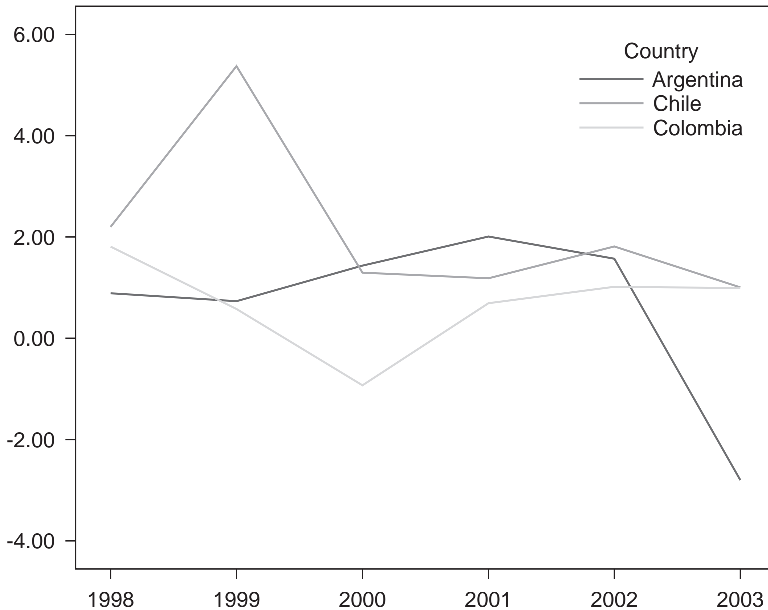

Fig. 4. Temporal Evolution of Index of Comparability for Net Income by Country and Year. Based on Weetman et al.'s (1998) Index of Comparability for Net Income.

specialized GAAP for banks have been more measured. In 1998 Federación Argentina de Consejos Profesionales de Ciencias Económicas (FAPCE), the principal Argentine accounting standard-setting group, commenced a project to harmonize Argentine GAAP with IFRS. The principal objective of the project was to promulgate technical resolutions which would maintain Argentina's more important accounting rules, but incorporate specific IFRS in instances where no Argentine rule existed. In December 2000 the project resulted in the promulgation of the following technical resolutions:

Technical Resolution 16 – Conceptual Framework for Professional Accounting Standards.
Technical Resolution 17 – Professional Accounting Standards: Issues Concerning General Application.
Technical Resolution 18 – Professional Accounting Standards: Specific Technical Issues.

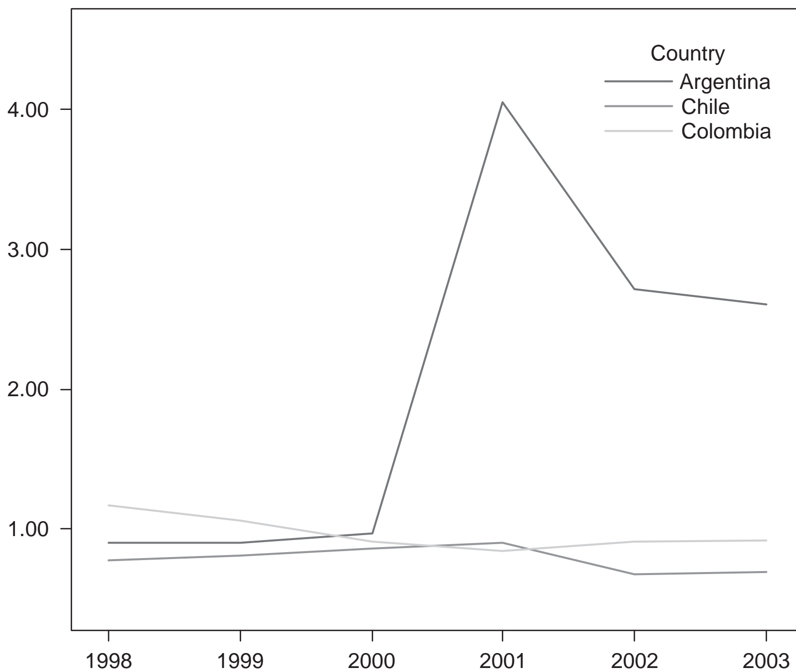

Fig. 5. Temporal Evolution of Index of Comparability for Stockholders' Equity by Country and Year. Based on Weetman et al.'s (1998) Index of Comparability for Shareholders' Equity.

Technical Resolution 19 – Modified Argentine GAAP to correspond with IAS with respect to consolidations and business combinations.

In contrast to this proactive movement toward harmonizing general purpose GAAP, modifications to bank financial reporting standards seem to have been reactive to the economic crisis. Specialized standards for financial institutions are promulgated by the country's Central Bank (Banco Central de la República de Argentina, 1999, 2005). In general, the Bank's publications focus on accounting systems and financial statement format. These rules are updated frequently. However, publications dealing with recognition and measurement issues for specific financial statement items seem to have been issued in reaction to the financial crisis. For example, in a reflection of concerns regarding the understatement of loan reserves, in 2005 the Central Bank issued the publication "Previsiones Mínimas por Riesgo de

Table 10. Partial Index of Comparability by Country.

Reconciliation Adjustments	Argentina		Chile		Colombia	
	NI	SE	NI	SE	NI	SE
Taxation	0.46	0.75	1.52	0.99	0.91	1.01
Pensions and other post-retirement benefits	1.02	1.03	0.98	1.00	1.04	1.01
Business combinations	1.00	1.00	1.07	0.98	0.99	1.00
Goodwill	1.10	0.93	1.58	0.81	1.01	1.00
Investments	1.01	1.00	1.03	0.99	0.98	0.97
Tangible fixed assets	1.00	1.00	1.00	1.00	1.00	1.06
Intangible assets	0.92	1.04	1.00	1.00	1.00	1.00
Financial instruments	1.38	1.26	1.06	0.99	1.00	1.00
Foreign exchange	0.74	1.00	1.00	0.99	1.00	1.00
Capital instruments and debt	1.00	1.00	1.00	1.00	1.00	1.00
Loan losses	0.99	1.88	1.05	0.97	0.78	0.93
Provisions and reserves	1.00	1.00	1.00	1.00	1.00	1.00
Derivatives	0.96	1.20	0.98	0.99	1.00	1.00
Assets received in lieu of payment	1.00	1.00	1.00	1.00	1.00	1.00
Dividends	1.00	1.00	1.00	1.03	1.00	1.00
Minority interest	1.00	1.00	0.97	0.99	1.01	1.00

Note: Based on Weetman and Gray's (1991) Partial Index of Comparability.

Incobrabilidad" (Minimum loan loss provisions). This publication requires that Argentine institutions reserve 100% of non-performing loans for non-secured loans that have a high probability of non-collectibility and 50% of secured loans that may be uncollectible. Additionally, on a pre-crisis basis, the Central Bank issued (1999) regulations entitled "Veracity of accounting records." The statement emphasizes that false accounting records are a violation of law and emphasizes that the existence of all legal financial instruments and collateral must be objectively verifiable. Thus, Argentine bank financial reporting seems to be harmonized to the extent that Argentine financial institutions utilize general purpose GAAP; however, the specialized standards for banks may need a greater degree of harmonization.

Chile

After many years of dictatorship, since the late 1980s Chile has rapidly developed a democratic political system and undertaken many economic reforms. The latter have included the signing of a Free Trade Agreement

with the United States and the development of a national pension plan which has been held up as a model for other nations. As a result of these trends, the Chilean economy has experienced continued growth, expanded trade with Asia, and increased integration with international financial markets. In a reflection of the latter, in the late 1990s Chilean financial authorities began a program to adopt the provisions of the Basel II accord.

In an indication of the increased economic openness, the accounting practices of Chilean banks showed a degree of movement toward harmonization with US GAAP. The index of comparability for net income for Chilean institutions was 2.26 (Table 9). Thus, Chilean accounting practices tended to be less conservative than US GAAP in measurement of net income. The index of comparability for stockholders' equity was 0.79 (Table 9), indicating that US stockholders' equity was 21% greater than the same stockholders' equity measured in accordance with Chilean GAAP.

In a sign of emerging convergence between Chilean GAAP and US GAAP in the measurement of net income (Fig. 4), the index approached 1 toward the end of the sample period. The mean value of the index of comparability for shareholders' equity was below 1.00 during all years (see Fig. 5). Thus, Chilean accounting practice was more conservative than US GAAP in measurement of stockholders' equity. The Wilcoxon tests indicate significant differences (at a level of 5%) between Chilean and US fundamental accounting variables (Table 4).

The adjustments with the greatest impact on net income (Table 10) were for goodwill (1.58) and taxes (1.52). These adjustments required a decrease from net income calculated under Chilean GAAP to US GAAP net income. The adjustment with the largest impact on shareholders' equity was also goodwill, which required (0.81) an adjustment in the opposite direction.

In spite of the movement toward harmonization for net income, formal efforts to converge Chilean GAAP with US or IASB rules have been slow. This measured progress is seen in both efforts to harmonize general standards as well as the specialized standards for financial institutions. With respect to the former, until the mid-1990s Chilean financial reporting standards were mostly based on US GAAP. At the end of 1997, the country's College of Accountants approved Technical Bulletin 56. This Bulletin stated that the primary sources of Chilean GAAP were:

1. the Technical Bulletins of the College of Accountants of Chile;
2. IASB standards;
3. other recognized international standards setters;
4. practices and pronouncements recognized as GAAP.

The Bulletin also indicated that in the absence of a specific standard published by the College of Accountants, the corresponding IASB standard was to be used. At present, there still exist significant differences between domestic standards and IFRS.

With respect to specialized standards for financial institutions, legal authority for setting bank financial reporting standards is described in Article 15 of General Banking Act (1997), which states that Superintendent of Banks and Financial Institutions "… shall set the rules of the general applicability for the filing of the balance sheet and other financial statements of the institutions …." In this respect, over many years, the Superintendent has promulgated rules in separate publications which address specific bank accounting issues. Nevertheless, in order to place financial reporting rules under one source, in 2005 the Superintendent initiated a project to place all the domestic financial reporting rules in one publication and to adopt IAS for important areas of financial reporting.[7]

However, the project is not expected to result in a new set of unified financial reporting standards until the end of 2007. The most notable effort with respect to a specific item is Bank Circular 3.345 (2005) which contains regulations which require banks to comply with rules regarding financial instruments similar to those contained in IAS 39.

Colombia

In 1998 and 1999, the Colombian economy experienced a severe liquidity crisis, which resulted in one of the worst economic crises in Colombia's history. In the second half of 1999, the government adopted a series of measures to counter the economic crisis and promote an economic turnaround. These included seeking financing from multilateral organizations, relief for mortgage debtors, and financial restructuring of economically viable companies. Since 2000, the economy has shown slightly positive results, although it has not recovered its historic growth rates. In 2003, the Colombian economy's basic indicators continued to show a positive trend, suggesting a stable macroeconomic environment. Relative political calm has helped to generate investment incentives.

The IC for net income in Colombia was 0.69 (see Table 9). This result implies that US standards are more optimistic than Colombian GAAP in the calculation of net income. Net income calculated under US GAAP standards was 31% greater than net income according to Colombian standards. The IC for stockholders' equity was 0.97, which indicates

neutrality in measurement of stockholders' equity with respect to the effect of accounting standards. In terms of temporal trend, the index of comparability for net income and stockholders' equity converged to 1, which evidences a close approximation to US standards (see Figs. 4 and 5).

Finally, for Colombian financial institutions the partial indices approximated 1 (Table 10), which implies that the reconciling items (from Colombian net income and shareholders' equity to US GAAP income and equity) were small. The only noteworthy item was the adjustment for loan losses (for shareholders' equity) (0.78), which required a decrease in Colombian GAAP equity.

The closeness between Colombian and US financial reporting may reflect the underlying history of Colombian standards. Colombian GAAP, which are promulgated by the Technical Council for Public Accounting (created in 1993), were originally based on US GAAP and international standards (Rahman & Schwarz, 2003).[8] However, as emphasized by a recent World Bank report (Rahman & Schwarz, 2003), the standards are less detailed than US GAAP, and may thus allow for excessive accounting treatments, and lack disclosure requirements. Also, in spite of the influence of US standards, several differences continue between Colombian and US GAAP (Rahman & Schwarz, 2003, p. 9). These include that Colombian accounting:

- lacks guiding principles on inventory valuation and related disclosures;
- fails to discuss accounting for construction contracts;
- provides contradictory approaches to recognizing deferred taxation;
- does not cover segment reporting requirements; and
- lacks clear-cut accounting rules and detailed disclosure requirements in such other areas as finance leases, employee benefits, foreign currency transaction and translation, business combinations, investments in associates and joint ventures, earnings per share, provisions and contingencies, and financial instruments.

The report by Rahman and Schwarz (2003, p. 9) emphasizes that as of 2003 very little effort had been made to reconcile these differences with FASB or IASB standards.

The lack of harmonization efforts extends to the specialized GAAP for banks. These standards were traditionally promulgated in circulars by the Superitendencia Bancaria (Superintendent of Banks). Many of these rules differ from domestic Colombian as well as from US or IASB standards.

With respect to US GAAP, these differences include that:

- Colombian banks are required to compute the inherent risk of non-performing loans on a loan by loan (rather than aggregate) basis and
- there are no unified methods for business combinations in Colombia.

More recently, the country has undertaken a project to restructure and streamline the financial regulatory system, including the creation of the new Superintendent of Finance (which merges the Superintendents of Banks and Securities). Authorities hope that this entity will promote more rapid integration with international financial markets and regulations, including financial reporting.

CONCLUSION

In general this research finds that for Latin American banking institutions there is an emerging harmonization between the net income and stockholders' equity calculated under following local accounting standards and US accounting standards. The trend toward smaller differences between net income and shareholders' equity may result from adoption of the Basel II treaty regulations (e.g., capital adequacy) by some Latin American banking institutions after their recent investment and acquisition by foreign financial institutions. Nevertheless, we found some accounting practices for which it is necessary to encourage efforts focused toward harmonization.

The frequency of quantitative and qualitative adjustments is evidence of the efforts performed by the Latin American banking sector and supervisory agencies to adopt international banking regulatory standards (e.g., capital adequacy), strengthen their own financial position, and increase the adoption of international standards of internal administration (e.g., risk management systems).

The examination of individual countries places some light on the manner in which harmonization is taking place. In Argentina, the accounting profession has implemented a comprehensive program toward harmonization. Thus, general purpose financial reporting standards which affect fundamental aspects of bank financial reporting (e.g., business combinations) may reflect international GAAP. However, the Central Bank seems to have been reactive (to crisis events) in adopting specialized GAAP, such as standards for loan risk assessment. In Chile the government has engaged in many economic reforms; however, a harmonization program for bank financial reporting is not expected to be completed until the end of 2007. In

Colombia, traditional GAAP were based on US standards. However, Colombian standards leave room for accounting choice and do not require disclosure. Also, the government has recently undertaken a transformation of the financial regulatory apparatus. Thus, efforts to undertake a comprehensive harmonization program seem distant.

Thus, while the study found that the financial reporting of Latin America financial institutions is gradually converging with US practices, large disparities remain in key areas. Further study is needed concerning the impact of regulatory structure and economic crisis on bank accounting harmonization.

NOTES

1. Other important weaknesses regarded standards for related party transactions, valuation of financial instruments (on both the asset and liability sides of the balance sheet), goodwill, and price level adjustments (for inflation).
2. The Basel II agreement is based on three "pillars." The first concerns capital adequacy. In contrast to Basel I, this "pillar" places greater emphasis on the development of adequate internal control and risk management systems in managing credit and other forms of risk. The second pillar requires that regulatory authorities take a greater role in overseeing that banks develop adequate internal control and risk management strategies and systems (rather than merely overseeing compliance with rules). The third pillar places importance on market discipline in ensuring adequate capital.
3. These findings may reflect current listing requirements for American Depository Receipts, which require firms listing on regulated market to conform to US GAAP but allow OTC listed firms to file under domestic standards.
4. Brazilian banks were not included with the country by country analysis since their financial statements were consolidated directly under US GAAP.
5. On January 2002, the Argentine Congress approved Law No. 25,561 on Public Emergency and Exchange System Reform that introduced dramatic changes to the economy model and that amended the Convertibility Law approved in 1991. The new law empowers the Federal Executive to implement, among others things, additional monetary, financial, and exchange measures to overcome the economic crisis.
6. The results may be interpreted as saying that for the period 1998–2003 US net income was 37% higher than the same net income measured in accordance with Argentinean GAAP and that Argentinean stockholder's equity was 102% higher than the same stockholder's equity according to US GAAP.
7. For a description of this project, see Bank Circular 3.345 (2005), published by the Chilean Superintendency of Banks and Financial Institutions.
8. The Colombian constitution provides the Congress with the sole authority to set standards. In 1990, the Congress created the Central Board of Accountancy as the principal accounting regulatory body. This body, which was placed under the Ministry of Education, consists of various professionals including government

officials, practicing accountants, and academics. In 1993, the Congress created the Technical Council for Public Accounting. This group, which was placed under the Central Board of Accountancy, is the principal legal standard-setter.

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GERMAN REPORTING PRACTICES: AN ANALYSIS OF RECONCILIATIONS FROM GERMAN COMMERCIAL CODE TO IFRS OR US GAAP

Judy Beckman, Christina Brandes and Brigitte Eierle

ABSTRACT

This paper presents the results of research analyzing reconciliations of net income and stockholders' equity from reports prepared according to Germany's Commercial Code (HGB) to either International Financial Reporting Standards (IFRS) or US Generally Accepted Accounting Principles (US GAAP). We describe the distribution of the reconciling items and assess their value relevance to firm market values 3 months after the financial statement date. The work helps to identify many issues not apparent from research that focuses only on promulgated accounting standards. Among other things, the research presented in this paper demonstrates that, when reconciling to IFRS or US GAAP, German companies must reverse significant software and film licensing revenue. Other areas of significant difference, not surprisingly, show greater conservatism in reporting under HGB than IFRS or US GAAP, particularly in asset capitalizations and write-offs as well as in accruals of provisions and reserves. The latter category is value relevant to the

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firms' market values after controlling for all other categories of reconciling items from HGB to either IFRS or US GAAP, indicating that German markets value these companies' provisions and accruals under the German reporting system.

INTRODUCTION

While it was in existence, Germany's Neuer Markt required listed companies to report under an internationally accepted set of accounting and reporting standards, either International Accounting Standards (IAS; now IFRS) or U.S. Generally Accepted Accounting Principles (US GAAP).[1] The objective of this system was to require companies to adopt greater transparency in reporting than is the norm under the German Commercial Code (hereafter, HGB) in order to support investors' interests in this market for financing smaller, high growth, younger (i.e., more risky) firms (Kersting, 1997, p. 227). In 1998, under pressure from business interests supporting the move toward allocation of capital via financial markets other than the traditional banking system, German lawmakers enacted a law (the *Kapitalaufnahmeerleichterungsgesetz*: KapAEG – Capital Raising Act) allowing all listed companies to provide full sets of consolidated financial statements under 'internationally accepted accounting standards' – namely IFRS or US GAAP (KapAEG, 1998, Art. 292a HGB).[2] Prior to 1998, firms listing on the Neuer Markt reported under HGB and provided a reconciliation to net income and stockholders' equity determined under IFRS or US GAAP, along with full footnote disclosures supporting these reconciliations, similar to the reporting done for U.S. SEC Filings on Form 20-F; some continued to do so after the 1998 law was enacted. For this study we found and examined the financial statements of 22 firms, which made this choice during the years 1995 through 2002.[3]

These data are useful for providing background information when observing the 2005 implementation of IFRS in the European Union, for Germany in particular. Though the IFRS requirements have changed since the time period that the Neuer Markt was in operation, the reporting requirements have not changed for several of the areas at issue in the results of this research (e.g., revenue recognition). In other areas of interest (e.g., reversals of provisions, reserves and write-downs recorded under HGB; accounting for investments), the reporting requirements under IFRS implemented since the Neuer Markt was in operation are similar to the

requirements under US GAAP. Thus, the comparison to reporting under US GAAP requirements also can be a useful benchmark for assessing the effects of the events of 2005 in Europe on financial reporting by German companies. In only one area – accounting for business combinations – have the reporting requirements changed for both US GAAP and IFRS so that the reconciling amounts discussed in this study might differ significantly in the observed implementation of IFRS in Europe in 2005 and beyond.

The analysis presented in this paper helps to uncover the most common reconciling items found in practice and those for which the greatest differences exist in actual reporting practices under the German accounting system when compared to internationally accepted systems of reporting. By highlighting those areas that have the greatest actual financial statement impact, we avoid focusing our analysis equally on the promulgated accounting standards and instead focus on the areas of most practical importance. Admittedly, companies using IFRS and US GAAP may avoid some reconciling items with strategic choices by selecting accounting policies consistent with both HGB and their choice of either IFRS or US GAAP (e.g., in cases in which there is no rule under HGB or when one of the accounting choices is acceptable under both systems). We cannot avoid the impact of this issue on the results of the analysis presented in this paper. Further, we cannot identify the impact of German companies' choices to use the consolidation adjustment to avoid reconciling items. Since the focus of this research is on those differences which arise in actual practice, these results are presented after company managements have used what they apparently believe are the best reporting strategies given their individual circumstances. Perhaps, then, the reconciling items presented here may be construed as the ones most frequently unavoidable in practice. Finally, these reconciliations are examined from a time prior to adoption of IFRS 1, "First-time Adoption of International Financial Reporting Standards" which provides exemptions from the retrospective application of IFRS (IFRS 1.13–1.25E) respectively, and even prohibits the retrospective application of IFRS in specific areas (IFRS 1.26).

VALUE RELEVANCE OF RECONCILING ITEMS BETWEEN NATIONAL AND INTERNATIONAL ACCOUNTING SYSTEMS

Gassen and Sellhorn (2006) investigate adoption of IFRS by publicly traded German firms following passage of the 1998 law referenced above;

their data are sampled through the year 2004. Relative to a matched sample of firms reporting under HGB, they find that firms adopting IFRS have earnings with greater persistence, less predictability, and more conservatism and thus conclude that the IFRS-adopting firms' earnings are of higher quality than those of the firms in the matched sample. They do not examine the value relevance of IFRS earnings vis-à-vis HGB earnings for either stock returns or firm market values. Bartov, Goldberg, and Kim (2005) examine the value relevance of German firms' earnings as reported under HGB, US GAAP, and IFRS for buy and hold stock returns, but not firm market values. They find that, for profitable German firms, US GAAP- and IFRS-based earnings are more value-relevant than earnings determined under HGB requirements. In contrast, for Germany's Neuer Markt firms in particular, Leuz (2003) examines the relationships between earnings, as determined under either US GAAP or IFRS, and bid-ask spreads, trading volumes, and dispersion of analyst forecasts. He finds essentially no significant differences that would lead to indications of greater quality or information usefulness of earnings reported under US GAAP as opposed to IFRS.

Clearly, the literature investigating value relevance of information under different financial reporting systems has produced mixed results to date. Further, none of the research described in the preceding paragraph investigates specific reconciling items between HGB reported amounts and either US GAAP or IFRS amounts. Prior literature has investigated such specific reconciling items in other settings and has examined their value relevance for both firm market values and stock returns. Barth and Clinch (1996) undertake such an analysis for U.K., Australian, and Canadian firms. They find that, in addition to net income and shareholders' equity as reported under domestic GAAP for U.K. and Australian firms, US GAAP accounting for goodwill, asset revaluations, deferred income taxes, and pensions is value relevant for firms' share prices and/or returns; for Canadian firms, it is only the interest capitalization accounting difference that is value-relevant. Harris and Muller (1999) also examine both market value and share returns models to investigate value relevance of differences between IFRS (then, IAS) and US GAAP-reported amounts as presented in Form 20-F reconciliations. They find some evidence that reconciliations to US GAAP- from IFRS-reported amounts are value relevant. Even though they summarize information about individual reconciling items, they do not examine the value relevance of those categories of reconciling items.

METHODOLOGY

We use a metric developed by Gray (1980) and used by Weetman (1998) to analyze the information provided in these reconciliations and make direct comparisons of these reporting systems. This metric allows us to examine both the total reconciliation between net income and stockholders' equity amounts as reported under HGB, IFRS, and US GAAP and the individual reconciling items making up those totals. This analysis allows us to uncover the specific sources of greatest variation in actual practice. We uncover at least one issue that is not obvious by examining just the standards in order to make a comparison of reporting under Germany's HGB to the IFRS. That is, when they reconcile to net income and stockholders' equity as determined under IFRS, several German companies in the entertainment industry must reduce income and equity from amounts reported under HGB. This difference in revenue recognition practice is not noted in comparisons of accounting practice regulations (Nobes, 2000; see also Haller, 2003, p. 121; Macharzina & Lager, 2004, p. 271). A similar result for software revenue recognition is found in the reconciliations from HGB to US GAAP. More consistent with expectations, however, are significant reversals of provisions and accruals, as well as asset write-downs, when reconciling from HGB to either IFRS or US GAAP.

After summarizing the reconciliations items, we next consider the value relevance of these reconciling items for firm market values, measured 3 months after the year-end financial statement date as the common stock price times the numbers of shares outstanding. We find that certain of the significant reconciling items between the reporting systems are priced in the market value of the firm above the pricing of earnings as reported under HGB.

INDEX OF COMPARABILITY

Gray (1980) developed the index of comparability (IC) to assess the extent of harmonization or divergence in profit measures between different accounting and reporting standards. More recently, Weetman (1998) used this technique to assess harmonization or divergence between UK accounting standards and both IFRS and US GAAP. This study uses their method to summarize the reconciliations provided by German companies between net income and shareholders' equity based on HGB, IFRS, and US

GAAP. Since the technique is used in this study to identify the extent of change from HGB requirements to internationally accepted reporting systems (IFRS or US GAAP), the mathematical expression is used in this research slightly differently than in those prior studies. In this study, reconciling items are deflated by the absolute value of net income as reported under HGB requirements. The indices of comparability for net income and stockholders' equity reported under HGB and IFRS are as follows:

$$\mathrm{ICNI}_{i,t} = 1 - \left[\frac{\mathrm{NIIFRS}_{i,t} - \mathrm{NIHGB}_{i,t}}{|\mathrm{NIHGB}_{i,t}|}\right] \tag{1}$$

where $\mathrm{ICNI}_{i,t}$ index of comparability for net income for firm i at time t; $\mathrm{NIIFRS}_{i,t}$ net income according to IFRS for firm i at time t; $\mathrm{NIHGB}_{i,t}$, net income according to HGB for firm i at time t

and

$$\mathrm{ICSE}_{i,t} = 1 - \left[\frac{\mathrm{SEIFRS}_{i,t} - \mathrm{SEHGB}_{i,t}}{|\mathrm{SEHGB}_{i,t}|}\right] \tag{2}$$

where $\mathrm{ICSE}_{i,t}$, index of comparability for shareholders' equity for firm i at time t; $\mathrm{SEIFRS}_{i,t}$, shareholders' equity according to IFRS for firm i at time t; $\mathrm{SEHGB}_{i,t}$, shareholders' equity according to HGB for firm i at time t.

Similarly, the indices of comparability for net income and stockholders' equity reported under HGB and US GAAP are as follows:

$$\mathrm{ICNI}_{i,t} = 1 - \left[\frac{\mathrm{NIUSGAAP}_{i,t} - \mathrm{NIHGB}_{i,t}}{|\mathrm{NIHGB}_{i,t}|}\right] \tag{3}$$

where $\mathrm{ICSE}_{i,t}$, index of comparability for net income for firm i at time t; $\mathrm{NIUSGAAP}_{i,t}$, net income according to US GAAP for firm i at time t; $\mathrm{NIHGB}_{i,t}$, net income according to HGB for firm i at time t

and

$$\mathrm{ICSE}_{i,t} = 1 - \left[\frac{\mathrm{SEUSGAAP}_{i,t} - \mathrm{SEHGB}_{i,t}}{|\mathrm{SEHGB}_{i,t}|}\right] \tag{4}$$

where $\mathrm{ICSE}_{i,t}$, index of comparability for shareholders' equity for firm i at time t; $\mathrm{SEUSGAAP}_{i,t}$, shareholders' equity according to US GAAP for firm i at time t; $\mathrm{SEHGB}_{i,t}$, shareholders' equity according to HGB for firm i at time t.

A value of 1.0 for the index for comparability for both net income and stockholders' equity indicates that there is no difference between the two sets of accounting standards. An index greater than 1.0 indicates that the net income or shareholders' equity reported under HGB is greater than the one reported under IFRS or US GAAP (or an HGB loss or cumulative deficit is not as large as an IFRS or US GAAP loss or cumulative deficit). An index value less than 1.0 indicates that the net income or shareholders' equity reported under HGB is less than the one reported under IFRS or US GAAP (or HGB loss or cumulative deficit is larger than an IFRS or US GAAP loss or cumulative deficit).

PARTIAL INDEX OF COMPARABILITY

Since the reconciliation from the HGB to IFRS or US GAAP has detailed information of the different reconciling items, it is possible to establish the relative effects of the various reconciling items by calculating partial indices of comparability (PIC) using the formula developed by Weetman and Gray (1991). We calculated PIC for each of 13 selected reconciling items using the following equation to provide a relative measure of the contribution of each reconciling item:

$$\mathrm{PICNI}_{i,j,t} = 1 - \left[\frac{\mathrm{RIIFRS}_{i,j,t}}{\left|\mathrm{NIHGB}_{i,t}\right|}\right] \tag{5}$$

where $\mathrm{PICNI}_{i,j,t}$, partial index of comparability for reconciling item j to net income for firm i at time t under IFRS; $\mathrm{RIIFRS}_{i,j,t}$, amount of reconciling item j to net income for firm i at time t under IFRS

and

$$\mathrm{PICSE}_{i,j,t} = 1 - \left[\frac{\mathrm{RIIFRS}_{i,j,t}}{\left|\mathrm{SEHGB}_{i,t}\right|}\right] \tag{6}$$

where $\mathrm{PICSE}_{i,j,t}$, partial index of comparability for reconciling item j to stockholders' equity for firm i at time t under IFRS; $\mathrm{RIIFRS}_{i,j,t}$, amount of reconciling item j to shareholders' equity for firm i at time t under IFRS

and

$$\mathrm{PICNI}_{i,j,t} = 1 - \left[\frac{\mathrm{RIUSGAAP}_{i,j,t}}{\left|\mathrm{NIHGB}_{i,t}\right|}\right] \tag{7}$$

where $PICNI_{i,j,t}$, partial index of comparability for reconciling item *j* to net income for firm *i* at time *t* under US GAAP; $RIUSGAAP_{i,j,t}$, amount of reconciling item *j* to net income for firm *i* at time *t* under US GAAP
and

$$PICSE_{i,j,t} = 1 - \left[\frac{RIUSGAAP_{i,j,t}}{|SEHGB_{i,t}|} \right] \quad (8)$$

where $PICSE_{i,j,t}$, partial index of comparability for reconciling item *j* to stockholders' equity for firm *i* at time *t* under US GAAP; $RIIFRS_{i,j,t}$, amount of reconciling item *j* to shareholders' equity for firm *i* at time *t* under US GAAP.

CATEGORIES OF RECONCILING ITEMS

Thirteen categories were developed to summarize the reconciling items at the lowest level of common groupings among the sample firms. Interestingly, while the focus of the effort to encourage financial information under internationally accepted standards is to present information that is comparable across companies and thus relevant for investors' decision-making purposes, comparability across firms in this sample is weak. Many reports group items differently and use different captions for similar items. For example, items related to accounting for business combinations include differences between IFRS or US GAAP and HGB in accounting for goodwill, in-process research and development, and other differences in consolidation procedures. Some firms segregate each of these items, others group goodwill and in-process research and development, and still others combine all items related to business combinations into one category.

A summary of the authoritative literature for each of these categories of reconciling items is presented in Appendix.

Business Combinations (Goodwill and R&D)

IFRS and US GAAP Reconciliations

The differences in reconciling stockholders' equity in particular are significant, despite the fact that many differences in this area of accounting are combined under this caption. Given the fact that US GAAP reconciliations drive the significance of this category, the following

comments focus primarily on those reconciliations. According to HGB, goodwill is measured similarly to the way it is measured under US GAAP; but a positive balance which arises on first-time consolidation of subsidiaries can be offset directly against consolidated retained earnings or capitalized as goodwill and amortized over either 4 years starting the year after acquisition or its expected useful life (Art. 309, para. 1 HGB).[4] This approach conflicts with US GAAP (APB 16 during the time period under study) which required, at the time, for goodwill to be capitalized and amortized over its expected useful life, not to exceed 40 years. Offsetting this value against stockholders' equity, which is an option under HGB, is not allowed under US GAAP and never has been. Two other issues related to business combination costs also are treated differently between US GAAP and HGB and give rise in practice to differences in goodwill amounts. First, contingent components of a purchase price are treated differently under these two accounting systems and give rise to timing differences related to goodwill. Second, in-process research and development costs, recognized and expensed immediately at acquisition under US GAAP, are not recognized separately under HGB. Practically, then, under HGB those items are included in goodwill.

Another difference between the two reporting systems relates to consolidation of subsidiaries. Except for size-based exemptions and exemptions available for intermediate holding companies under HGB, in general consolidated financial statements must be prepared if (a) the parent has a participating interest in a subsidiary and both the parent and the subsidiary are managed on a unified basis by the parent (*einheitliche Leitung*) (Art. 290, para. 1 HGB) or (b) control exists (i.e., the parent owns the majority of the voting rights, or has the right to appoint or remove the majority of the members of the administrative, management, or supervisory board and is at the same time a shareholder or member of the subsidiary, or based on contractual rights or the articles of incorporation the parent has the right to exercise a dominant influence over the subsidiary) (Art. 290, para. 2 HGB). The HGB permits excluding some subsidiaries from consolidation, such as those for which severe long-term restrictions substantially prevent the parent undertaking to exercise its rights (Art. 296, para. 1, No. 1 HGB), subsidiaries for which the information necessary for the preparation of the consolidated financial statements cannot be obtained without incurring disproportionate expenses or undue delay (Art. 296, para. 1 No. 2 HGB), subsidiaries that were exclusively acquired with a view to resale (Art. 296, para. 1 No. 3 HGB), and minor subsidiaries that are in sum immaterial for giving a true and fair view (Art. 296, para. 2 HGB).[5]

Under US GAAP, subsidiaries that may be excluded from consolidation have been limited by FASB Statement No. 94, *Consolidation of All Majority Owned Subsidiaries,* and FASB Interpretation No. 46 (FIN 46), *Consolidation of Variable Interest Entities*, an interpretation Accounting Research Bulletin No. 51 (ARB 51), *Consolidated Financial Statements*. These standards require consolidation of all majority-owned subsidiaries unless control over the subsidiary is temporary (which is also one of the exceptions to consolidation allowed under HGB). In addition, FIN 46 generally requires consolidation of all companies whose financial results will benefit, or whose financial losses will affect, the parent company in question. This consolidation requirement is avoided only if a subsidiary is formed for a specific purpose and meets the criteria established in FASB Statement No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities*, to be treated as a qualified special-purpose entity. Again, this exception relates to control: generally, if an entity is formed for a specific purpose that cannot be altered by the parent company and which is limited to specific activities, if the entity is "demonstrably distinct" from the parent, and if the entity holds only certain financial assets, then it is considered to be a qualified special purpose entity and is not consolidated by the parent.

Asset Capitalization and Write-Off Differences

IFRS Reconciliations

The major differences between HGB and IFRS in asset capitalization and write-off policies arise due to recognition of development costs under IAS 38 and differences in accounting for film assets in the entertainment industry. These differences result in statistically significant reconciling items between HGB and IFRS stockholders' equity. According to IAS 38, an intangible asset shall be recognized in the financial statements if the definition of an intangible asset is met, the future economic benefits attributable to the asset will probably flow to the company, and the cost can be measured reliably. These criteria lead to one of the significant differences under IFRS as opposed to both German HGB and US GAAP: IFRS require recognizing development costs as assets whereas neither of the other standards do (FASB, 1999, pp. 451–462; Art. 248, para. 2 HGB; IAS 38; FAS 2). In accordance with IAS 38, Advanced Medien AG, Centrotec AG, and TV-Loonland AG capitalized film license rights and development expenditures at acquisition costs, and then amortized them on a straight-line basis.

Furthermore, under IAS 20, "government grants in the form of investment subsidies and grants are distinguished on the assets side from capitalized development expenses," as described in Centrotec's 1999 Annual Report (p. 34). This practice, too, generally differs from that under US GAAP and also is uncovered in reconciliations to that basis of reporting (see below).

This category of reconciling items also includes adjustments due to accelerated, tax-driven depreciation rates in use in Germany. With respect to tax-driven depreciation rates, CDV Software Entertainment AG, MAN AG, SMS AG, and VIAG, for example, applied higher depreciation rates for fixed assets according to tax regulations than is allowed under IFRS. The depreciation of those assets in accordance with IFRS is done using the straight-line method. In its 1999 financial statements, Intertainment AG took write-offs permitted by tax law and HGB, but was required to take these items into account over a period of 4 years under IFRS because the company could not take the additional depreciation allowed under HGB.[6]

US GAAP Reconciliations

Differences between US GAAP and German reporting standards in the area of asset capitalization policies primarily relate to issues with accelerated, tax-driven depreciation methods similar to those noted above under IFRS reconciliations; accounting for government grants for asset acquisitions; and accounting for value-added taxes (VATs) paid. As is the case with the reconciliations to IFRS, income and stockholders' equity under HGB sometimes uses higher depreciation rates than are acceptable under US GAAP; as well, low value assets being charged to expense at the acquisition date under HGB also results in some reconciling items.[7] Furthermore, under US GAAP, government grants are deferred and amortized over the expected useful life of the related asset. As described in Edel Music's 1999 financial statements, "if government grants have reduced the acquisition cost of an asset…under German GAAP, the acquisition cost will be increased and the amount will be credited to a special reserve for government grants" (p. 54). Under HGB, Edel Music capitalizes and depreciates VAT; its value-added recoveries are recorded as other operating income (Edel Music Annual Report, 1999, p. 54).[8] Under US GAAP, capitalized VAT is treated as a long-term receivable rather than property, plant, and equipment; thus, neither depreciation nor other operating income is recognized. Furthermore, under US GAAP, interest costs for constructed assets must be capitalized and depreciated once the plants begin operations. Under HGB, capitalization is permitted under certain circumstances, but not required (Art. 255, para. 3 HGB). According to Statement of Financial Accounting Standards

No. 86 (FAS 86), *Accounting for the Cost of Computer Software to Be Sold, Leased, or Otherwise Marketed,*" and Statement of Position (SOP) 98-1 *Accounting for the Costs of Computer Software Developed or Obtained for Internal Use*, software development costs must be capitalized and amortized over the expected useful life of the software. Under HGB, development costs for assets to be internally used (also including computer software) are expensed immediately (Art. 248, para. 2 HGB); in contrast, costs of development activities for a specific customer are part of production cost and need to be capitalized (Ballwieser, 2001, p. 1305).

Accounting for Pension Plans

IFRS and US GAAP Reconciliations
Under HGB, pension accruals may be calculated using a different method than is allowed under US GAAP or IFRS, since, for obligations to pre-retirement holders of prospective benefits, the HGB does not prescribe a specific measurement method (Mayer-Wegelin, Kessler, & Höfer, 2004, notes 373–377). Furthermore, under US GAAP (according to FAS No. 87 *Employers' Accounting for Pensions*) and IFRS (according to IAS 19, *Employee Benefits*), pension accrual calculations must address expected future increases in salaries, which is usually not done under HGB. In addition, under HGB the recognition of a pension liability is not mandatory for pensions for which the employee received the vested rights before January 1987. Moreover, according to German commentaries interest rates used in the calculation of the pension liability may range between 3 and 6% (Ballwieser, 2001, pp. 1316–1317; Coenenberg, 2005, p. 403).[9] Interest rates used under US GAAP- and IFRS-based calculations must consider current market rates of interest for long-term obligations. Consistently, revaluation of pension accruals recorded under German law results in a liability increase and a reduction of stockholders' equity in order to reconcile to the amount calculated per IAS 19 or US GAAP's FAS 87. The results do not show statistically significant differences.

Exchange Rate Differences

IFRS and US GAAP Reconciliations
IFRS practices under IAS 21, *The Effects of Changes in Foreign Exchange Rates,* are substantially similar to the requirement according to US GAAP.

Differences exist between both of these reporting systems and German practices with respect to the rates used to translate foreign currency transactions and the resultant income statement effect of the gains and losses. Though HGB does not require a specific method for the translation of foreign currency financial statements (Ordelheide, 2001, pp. 1397–1399), the realization principle (Art. 252, para. 1 No. 4 HGB) – prohibiting the recognition of unrealized gains – must be considered. Compliance with the historical cost principle (Art. 253, para. 1 HGB) generally prohibits assets from being valued above historical cost and prohibiting liabilities from being valued below their settlement value when applying the temporal method for translation. Therefore, under German practice, foreign currency receivables and payables are translated at the exchange rate in effect on the date at which the originating transactions occur unless translating at the rate in effect on the balance sheet date would lower the receivable or increase the liability, in which case the rate at the balance sheet date is used. In other words, German practice in this area is to not report unrealized exchange gains. In contrast, under US GAAP and IAS 21, these assets and liabilities are translated at the exchange rate prevailing on the balance sheet with unrealized gains and losses recognized in the income statement. One company, Schwarz Pharma AG, also describes its procedures for translating foreign subsidiaries' financial statements, given the lack of specific requirements in HGB for both translation procedures and translation rates. In its footnotes to 1998 statements prepared under HGB, Schwarz Pharma states that it uses the functional currency conversion concept and follows the "modified current rate method of the function currency translation concept" (Schwarz Pharma Annual Report, 1998, p. 62). Balance sheet items are translated (independently from the income statement) using the average rate of exchange on the balance sheet date and the equity capital [is translated] at historical rates. Any differences resulting from the conversion of the balance sheet were netted against retained earnings without affecting income (Schwarz Pharma Annual Report, 1998, p. 62).

This description seems consistent with US GAAP, but treatment of income statement items apparently differs from that under US GAAP. The company states that:[10]

> Depreciation, expenses and income have generally been converted using the average annual rate and the result has been converted using the rate of exchange on the balance sheet date. Differences resulting from conversion at average rates in the statement of income were included in other operating income or other operating expenses. (Annual Report, 1998, p. 62)

All translation adjustments are included directly in stockholders' equity, via comprehensive income but not net income, under US GAAP and Schwarz Pharma followed this practice (Annual Report, 1998, p. 85). Nonetheless, their reconciliation to US GAAP net income uses the caption 'exchange rate difference'; their footnotes do not disclose foreign currency transactions, and so the reconciling item must stem from some difference in procedures for the translation process. It is notable that the GAS No. 14 (promulgated in 2003 and further revised in 2005) now recommends an accounting treatment similar to IAS 21 for the translation of consolidated financial statements.[11]

Stock Purchase and Stock Option Plans

US GAAP and IFRS Reconciliations

Two types of reconciling items were noted from this research, those for employee stock purchase plans and those for employee stock option plans. Regarding stock purchase plans, under US GAAP, discounts inherent in these plans are considered to be *potential* compensation expense. That is, no compensation expense need be recorded if "…a discount from the market price of the stock is no greater than would be reasonable in an offer of stock to stockholders or others" (APB 25, para. 7). In practice, that discount threshold generally is considered to be 5%. In contrast, for example, Deutsche Telekom employees purchased shares at a discount of 40% during the time period under study; the company disclosed in its 1998 annual report that "under German GAAP, the proceeds of the offering were recorded net of such discounts. Under US GAAP, the discount is treated as compensation expense" (p. 107).

Regarding stock option plans, since the HGB does not provide any specific rules on the recognition and measurement of compensation expense in this area, various accounting treatments have been developed in the literature (for an overview see Coenenberg, 2005, pp. 335–337) resulting in inconsistent accounting treatments among firms. In contrast, US GAAP now requires costs for incentive stock option plans to be fully recognized as of the grant date; during the time period under study, APB Opinion 25 required stock options that were issued "in the money" to be recorded as compensation expense. In the U.S., most employers, however, establish incentive-based plans that avoided recording compensation expense under APB Opinion 25 with exercise price set equal to share values on the date of grant of the options.

For the companies reporting this reconciling item, the impact on income is substantial: one out of those three firms (SGL Carbon) shows an index of 1.36 in 1999 and 1.11 in each of the years 1998 and 1997. The range of partial indices clearly shows that this item results in lower income under US GAAP than under German reporting standards because of earlier recognition of this expense. On the other hand, this item does not arise in any of the IFRS-HGB reconciliations.

Provisions, Reserves, and Write-Downs for Impairments

IFRS and US GAAP Reconciliations

Lump-sum allowances that are taken on accounts receivable under German GAAP to cover general concerns over credit risks (Coenenberg, 2005, pp. 239) are not allowed under either IFRS or US GAAP. The financial statement reconciliations to US GAAP-based income clearly show that the possibilities to form provisions and to record write-downs are significantly more restrictive under US GAAP than under HGB in both general industry practices as well as in the banking industry in particular (see further discussion below). For example, as described in Edel Music's 1997 through 1999 financial statements, under US GAAP, "lump-sum allowances for doubtful accounts are not allowed … if an impairment is not probable" (p. 54). As well, "accruals for contingent liabilities are only to be established if it is likely that the liability has been incurred and that the obligation can reasonably be estimated" (Edel Music Annual Report, 1999, p. 54) whereas under HGB, the recognition of provisions for uncertain liabilities and loss contingencies is permitted or may even be required.

In addition to write-downs available to all businesses, the HGB allows companies in the banking industry to recognize 'a fund for general banking risks' as a special item on the passive side (Art. 340g HGB). This item must be eliminated under both IFRS (see e.g., DG Bank Annual Report, 1998, p. 48) and under US GAAP (see e.g., DePfa Bank Annual Report, 1999, p. 40).

Another issue generating significant reconciling items in this area is the fact that the HGB permits tax-based depreciation (Art. 254 HGB; see also Ballwieser, 2001, p. 1311). To the extent that tax-driven depreciation exceeds the depreciation calculated for commercial purposes, the amount can be recorded in a special reserve to improve transparency (Art. 281, para. 1 HGB). These special reserves resulting from solely tax-driven depreciation recorded in equity are eliminated under both IFRS and US GAAP. It is

notable that, due to recent legislative amendments, these solely tax-based depreciation items are required to be eliminated in consolidated financial statements since 2003 (Art. 298, para. 1 HGB).

Regarding the valuation of provisions in Germany, the general rule is that provisions are shown at the amounts required in accordance with prudent business judgment. This approach contrasts with both IFRS and US GAAP, and thus the items that are included in this area are very similar in both groups of reconciliations. Whereas provisions are recognized under IFRS only to the extent to which liabilities to third parties exist, the HGB also allows, and in some cases requires, provisions without existing obligations to third parties (e.g., provisions for repair and maintenance not undertaken in the current year and expected to be made up within the first three month of the following year). In addition, due to the prudence principle, the probability threshold for recognizing provisions is lower under German accounting rules than under IFRS. Reconciliations between US GAAP and HGB also uncover provisions for solely internal obligations allowed in German financial reporting but removed from financial statements prepared under US GAAP. Furthermore, the US GAAP reconciliations uncover items because of the fact that, in compliance with the HGB's prudence principle, estimated costs of employee separations must be provided for on the basis of the company's announced intention to reduce its workforce, but under US GAAP, these costs are accrued in the period the employee accepts the offer of termination. In addition, under HGB, maintenance costs "related to the financial year but only incurred within the first 3 months of the following year" are required to be accrued at each period end (Deutsche Telekom Annual Reports, 1997–1999). Under US GAAP, maintenance costs are recognized in the periods in which they are incurred. All of these items result in timing differences, which may impact income recognition in either direction in any particular year.

Revenue Recognition

IFRS Reconciliations

Reconciling items in this category generally stem from licensing contracts. One example stems from Advanced Medien's 1999 and 1998 reconciliations. Under IFRS, with regard to the commercial utilization of license rights, a sale was assumed to exist if the license rights were transferred to the customer for a period of time exceeding 90% of the remaining life of the license. Otherwise, a transfer of usage rights was assumed to exist. In this

case, the sales revenue is recognized pro rata over the duration of commercial utilization. Sales attributable to future years are shown as deferred income.

In summary, these results indicate that HGB reporting practices are less conservative than are those under IFRS for recognizing revenues from film licensing fees, though the resulting comparability indices are not statistically significant due to the small sample size.

According to IAS 18, revenue recognition for construction contracts and services follows the percentage-of-completion method, whereas the percentage-of-completion method is not allowed under German GAAP; HGB revenue recognition follows the completed-contract method resulting from the realization principle (Art. 252, para. 1 No. 4 HGB).

The HGB itself does not contain specific industry rules for the recognition of revenues from film licensing fees. The accounting treatment depends on the interpretation of the commercial substance of the underlying contract and is in practice often aligned to tax requirements due to a lack of specific HGB rules (as for example as specified in the Medienerlass issued by the Ministry of Finance in 2001).

US GAAP Reconciliations

The most interesting finding in the area of revenue recognition also is related to software, an area in which US accountants have developed a restrictive pronouncement, the AICPA's Statement of Position (SOP) 97-2, "Software Revenue Recognition." The provisions of this standard require that revenues from licenses be recognized if there is sufficient evidence that a contract has been concluded, delivery has been made, the license fee has been fixed and is determined, and receipt of payment is probable. Income from consulting services and training at prescribed future dates is recognized as soon as the service has been provided. However, under HGB, SAP, for example, is able to recognize software revenue earlier than it may under US GAAP. It is the realization principle (Art. 252, para. 1, No. 4) that determines the recognition of revenues from the sale of goods or rendering services under HGB. According to uncodified principles of orderly accounting, revenues resulting from the sale of goods are realized as soon as the good is provided, that is the risk of ownership has been transferred. In 1998, SAP's reconciliation shows that stockholders' equity was reduced by 12% for this item. This finding demonstrates one area in which German accounting principles apparently do not require greater emphasis on prudence than do US standards. On the other hand, similar to results found for the reconciliations to IFRS, HGB revenues recorded for long-

term construction in progress under the completed-contract method generate reconciling items to US GAAP which uses the percentage of completion method. The resulting partial indices for revenue recognition issues thus fall on both sides of neutral and, due to small sample sizes, are not significant.

Accounting for Investments

IFRS Reconciliations

During the time period covered by this study, IAS 25 was in effect to address accounting for investments. This IAS has been superseded and accounting for investments is now addressed by IAS 39, *Financial Instruments: Recognition and Measurement.* While no income statement reconciling items were required of companies in this sample while IAS 25 was in effect, the new IAS 39 requirements are similar to those followed under US GAAP. Accordingly, companies currently converting from HGB-based financial statements to IFRS will more likely need to make adjustments similar to those shown under US GAAP and discussed below.

Several shareholders' equity reconciliations also show adjustments related to the area of accounting for joint ventures and conversion to the equity method of accounting for holdings between 20 and 50% of joint ventures and associates. IAS 31 addresses accounting by an investor for its interest in a jointly controlled entity; this standard, as does the HGB for consolidated financial statements (Art. 310 and 311 HGB), allows either proportionate consolidation or equity method accounting for these investments.[12] In contrast to IFRS, however, the HGB allows choosing between the book value method and the share capital method when applying the equity method (Art. 312, para. 1 HGB, Haller, 2003, p. 124)[13] and requires eliminating income from inter-company transactions only if the information necessary to do this is available (Art. 312, para. 5 HGB). In addition, under the HGB the equity method need not be applied if the investment is of minor relevance for presenting a true and fair view (Art. 311, para. 2 HGB).

US GAAP Reconciliations

Under US GAAP and current IFRS requirements, marketable securities are categorized as trading, available for sale, or held to maturity.[14] Trading or available for sale securities are reported at fair value at the balance sheet date, while held to maturity securities are reported at historical cost. Under both sets of standards, unrealized gains and losses on marketable equity

securities held in trading portfolios are shown in the income statement while unrealized gains and losses on available-for-sale portfolios are taken directly to stockholders' equity. IAS 39, however, allows more flexibility in categorizing investments into these portfolios than does the US GAAP standard and thereby provides more flexibility to measure a financial asset or liability at fair value, including gains and losses in income. HGB requires following the historical cost principle and permits lower of cost or market valuation for non-current financial assets even if impairments are only temporary in nature. Resulting reconciliations from HGB to both US GAAP and IFRS then can be expected to be as pervasive and significant for both net income and stockholders' equity.

Financial statements of associated companies accounted for under the equity method generate reconciling items because of different valuation principles under US GAAP as opposed to German HGB. Furthermore, negative goodwill from capital consolidation must be recognized in profit or loss under German HGB if it becomes apparent that the amount corresponds to a realized profit upon the balance sheet date or if expenses that were anticipated at the acquisition date are incurred (Art. 309, para. 2 HGB).[15] Under US GAAP during the time period under study (APB 17), any negative goodwill left after reducing long-term assets to zero was amortized to income; requirements promulgated via FAS 141, *Business Combinations* now stipulate these items must be treated as an extraordinary gain (para. 45), effectively reducing the effect of the previous treatment to 1 year.

Leasing

US GAAP and IFRS Reconciliations

Leasing transactions result in the one widespread (12 of 59 reconciliations) case in which the median of HGB-reported stockholders' equity is significantly higher than that of US GAAP-reported amounts. German reporting rules do not address the issue of lease capitalization as do US GAAP and IFRS; accordingly, in German practice, the accounting treatment is aligned to tax regulations which, as compared to IFRS, are more rule-based. According to IAS 17, *Leases*, financial leases should be capitalized if all rewards and risks of ownership are transferred to the lessee, and depreciation should be recorded in a fashion similar to that recorded for other long-lived assets. Conceptually, US GAAP and HGB/German tax law also have the same intent, but these two systems contain more detailed rules than do IFRS to assess whether the risks and rewards of ownership have

changed hands. As well, reconciling items may also result from differing valuation methods for the corresponding balance sheet amounts. Adjustments for these items result in lower shareholders' equity in all cases, and lower net income in almost all cases, under US GAAP than under German reporting. These results likely stem from the effects of leases' earlier years or from leasing activity, which is continually growing.

Inventory/Costs of Goods Sold

IFRS Reconciliations

"Under IAS 2, costs of general administration are not to be included in the cost of manufacture." (Centrotec AG Annual Report, 1999, p. 35). Such administrative costs apparently were capitalized in the inventory amount (the HGB provides an option to include administrative expenses for measuring cost, Art. 255, para. 2 HGB), requiring a reduction of net income and stockholders' equity in the reconciliation process.

US GAAP Reconciliations

Under HGB, Schwarz Pharma AG includes in inventory only direct materials and labor cost (as permitted under Art. 255, para. 2 HGB), while US GAAP and IFRS require full cost accounting for inventories. As well, "inventory risks were allowed for by devaluation" in Schwarz Pharma's financial statements (Schwarz Pharma Annual Report, 1998, pp. 84–85). In the case of growing inventory balances, these differences in reporting practices would result in higher net income under US GAAP than under German reporting standards. The impact on stockholder's equity shows this effect. Over time, US GAAP based income is higher than German GAAP, as one would expect given that the US GAAP essentially requires deferring the recognition of some manufacturing costs by including them in inventory balances.

Deferred Taxes

IFRS and US GAAP Reconciliations

In principle, German standards require using the income determined for financial reporting as the basis for taxation; consequently, while deferred taxes are recorded in German financial statements prepared under HGB (Art. 274 and Art. 306 HGB), companies stray further from German tax law

when adjusting to IFRS or US GAAP. In addition, for differences arising in individual financial statements and resulting in deferred tax assets, the HGB provides an option to capitalize a deferred tax asset (Art. 274, para. 2 HGB). It is not surprising, then that almost all companies in the sample, reconciling to either US GAAP or IFRS, require adjustments related to deferred taxes. Additional items that generate deferred taxes include the fact that, under HGB, deferred taxes are not recorded for temporary differences, which are not expected to reverse in the foreseeable future.

Under both IAS 12 and FAS 109, deferred taxes are accounted for using the balance sheet liability method. Consequently, the types of reconciling items uncovered in reconciliations to US GAAP-based reporting are similar to those for reconciliations to IFRS-based income and stockholders' equity. In reconciling to IFRS, one company discusses differences from HGB requirements in the area of tax loss carry forwards for which deferred tax assets are usually not permitted under HGB by stating:

> The potential tax benefit from carrying forward a tax loss should generally not be included in net profit or loss until realized, unless existing deferred tax credit balances will reverse or can be reversed in the carry-forward period or there is assurance beyond reasonable doubt that future taxable income will be sufficient to utilize the loss. (Centrotec AG, 1999, *Annual Report*, p. 35)

Under IFRS and US GAAP, deferred tax assets and liabilities are established in all cases of temporary differences; deferred tax assets are then valued in accordance with IAS 12 and with FAS 109 using an allowance account if realizability of the item is in question. Under IFRS and US GAAP, deferred taxes are determined based on the differences between financial statement and tax bases of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. Reporting income tax expense by including deferred taxes generally will result in increased expenses; the effect will attenuate when reporting higher income under US GAAP than under German HGB.

Other Items

There is much greater variability in amounts reported in this category for reconciliations to IFRS as opposed to US GAAP, but lack of disclosures make it impossible to comment on the reasons for that difference. The significant net income difference for median reported amounts in this category thus cannot be explained.

REGRESSION MODELS FOR VALUE RELEVANCE

To assess the value relevance of the total of all the reconciling items and the 13 individual reconciling items mentioned above, regression models analogous to the model used by Harris and Muller (1999) are developed to regress the market capitalization (measured as the share price multiplied by the firms' common shares outstanding 3 months after the fiscal year-end) of the sample firms on the book value and current period earnings as reported under HGB as well the total of all of the reconciling items to IFRS or US GAAP for both net income and stockholders' equity.

The following base model is used to assess the value relevance of total reconciling items:

$$\mathrm{MKTCAP}_i = \alpha_0 + \alpha_1\mathrm{NIHGB}_i + \alpha_2\mathrm{SEHGB}_i + \alpha_3\mathrm{NIDIFF}_i + \alpha_4\mathrm{SEDIFF}_i + \alpha_5\mathrm{OUTSH}_i + \varepsilon \quad (9)$$

where MKTCAP, market capitalization 3 months after the financial statement date, the due date for annual financial reports containing the reconciliations data for firm i; NIHGB_i, reported amounts of net income according to HGB for firm i; SEHGB_i, reported amounts of stockholders' equity according to HGB for firm i; NIDIFF_i, total of all reconciling items disclosed by firm i in reconciliation from net income according to HGB to net income according to IFRS or US GAAP; SEDIFF_i, total of all reconciling items disclosed by firm i in reconciliation from stockholders' equity according to HGB to stockholders' equity according to IFRS or US GAAP; OUTSH, common shares outstanding 3 months after the financial statement date for firm i.

We also run 13 regression models to separately identify the value relevance of the 13 individual categories of reconciling items. To do so, we include as individual regressors each category of reconciling item and express the remaining 12 reconciling items in total using the following model:

$$\mathrm{MKTCAP}_i = \alpha_0 + \alpha_1\mathrm{NIHGB}_i + \alpha_2\mathrm{SEHGB}_i + \alpha_3\mathrm{NIDIFF}_i + \alpha_4\mathrm{SEDIFF}_i + \alpha_5\mathrm{OUTSH}_i + \alpha_6\mathrm{RINI}_{i,j} + \alpha_7\mathrm{RISE}_{i,j} + \varepsilon \quad (10)$$

where $\mathrm{RINI}_{i,j}$, amount of reconciling item j to net income for firm i under IFRS or US GAAP; $\mathrm{RISE}_{i,j}$, amount of reconciling item j to stockholders' equity for firm i under IFRS or US GAAP.

Both models use undeflated variables but include the total shares outstanding as of the financial statement date as a proxy for scale following

techniques used by Harris and Muller (1999) and Barth and Clinch (1996). Reported *t*-statistics are adjusted for heteroscedasticity following the White (1980) method. Data used in the regressions are winsorized at the 5 and 95% percentile amounts for all variables. As Harris and Muller (1999) note, this procedure is consistent with the suggestions of Barth and Kallapur (1996).

DATA COLLECTION PROCEDURES

Developing the sample for this analysis began with a list of international financial statements of German corporations collected from the financial press for the Seminar for International Accounting at Goethe-Universität, Frankfurt am Main, Germany (Weber, 2000). This file listed 154 German companies (updated August 18, 1999) that provided or planned at that time to provide financial statements according to IFRS or US GAAP. Some of these companies provided financial statements according to HGB, or reconciliation between the two sets of standards, in addition to the other statements. Research efforts to extend this list (e.g., by examining websites of various stock exchanges) resulted in a list, as of June 15, 2000, of 46 German companies that provided reconciliations between HGB- and IFRS-based or US GAAP-based net income and shareholders' equity for any of the years 1995–1999, inclusive. Of these 46 firms, 22 provide reconciliations of both net income and stockholders' equity from IFRS or US GAAP to HGB to serve as a basis for analysis similar to that undertaken by Harris and Muller (1999). To extend the dataset, we include all available reconciliations prepared by these firms through the year 2002. The resulting dataset includes 59 firm-year reconciliations by 22 firms, the bulk of which were prepared during the years 1998 through 2000 as shown in Table 1.

Sample Firms Descriptive Statistics

The sample companies represent a wide range of firm sizes, as shown in Table 2. Consistent with findings by Leuz (2003), IFRS-adopting firms during this time period in Germany tended to be smaller than those adopting US GAAP. The sample of firms adopting US GAAP includes Deutsche Telekom, which skews the reported means and standard deviations.

Table 3 presents the mean, median, minimum, and maximum values for the indices of comparability for net income and shareholders' equity and the

Table 1. Number of Reconciliations and Firms with Distribution by Year.

Year	Reconciliations		
	IFRS	US GAAP	Total
1995	0	1	1
1996	0	3	3
1997	0	6	6
1998	3	8	11
1999	5	15	20
2000	2	9	11
2001	0	4	4
2002	0	3	3
Total number of reconciliations	10	49	59
Total number of firms	7	15	22

PIC for net income and shareholders' equity for the 13 individual reconciling item categories identified through this research for the overall sample of 59 reconciliations analyzed for the years 1995 through 2002 for 22 firms. Table 4 presents the same information for reconciliations from HGB to IFRS for the 10 reconciliations analyzed for the same time period for 7 firms and Table 5 presents the same information for reconciliations from HGB to US GAAP for the 49 reconciliations analyzed for 15 firms.

This tables highlights those indices of comparability and the PIC for the reconciling items that are significantly different from 1, the amount representing even parity between HGB and either US GAAP or IFRS. The pattern that emerges demonstrates that the significant differences are nearly all evidence of conservative reporting under HGB. The mean and median index of comparability for stockholders' equity reconciliations are significantly less than one, as well as the reconciling items of business combinations; asset capitalization and write-off differences; adjustments of provisions, reserves and accruals; accounting for investments; and inventory/cost of goods sold accounting. It is interesting to note that the categories of items that are significant relate to areas typically representing mechanisms by which German reporting results in income smoothing: the categories of asset capitalization and write-off differences and adjustments of provisions, reserves, and accruals. Leasing transactions comprise the only category in which less conservatism is shown in HGB recorded amounts than in US GAAP amounts. In these comments, the notion of conservatism is identified in accordance with the U.S. FASB as a preference "that possible

Table 2. Descriptive Statistics for Sample Firms.

	Mean	Median	SD	Minimum	Maximum
All firms combined ($n = 59$)					
Market value	15,677,312	916,920	38,359,523	13,080	255,092,573
Net income (loss) under HGB	199,890	4,265	3,958,872	(24,587,000)	5,926,000
Net income (loss) under IFRS or US GAAP	365,337	5,939	3,391,801	(22,098,000)	9,269,000
Stockholders' equity under HGB	7,476,531	133,907	14,705,357	(37,944)	66,301,000
Stockholders' equity under IFRS or US GAAP	8,441,786	151,614	16,479,936	(17,303)	73,704,000
Shares outstanding	434,244	20,934	1,020,112	1,200	4,197,749
IFRS firms ($n = 10$)					
Market value	1,852,898	297.390	4,185,586	14,940	13,597,604
Net income (loss) under HGB	84,775	2,738	241,960	(2,310)	771,028
Net income (loss) under IFRS	82,961	2,231	235,036	(241)	749,563
Stockholders' equity under HGB	559,848	47,027	1,505,640	8,332	4,828,129
Stockholders' equity under IFRS	904,059	44,149	2,597,014	9,423	8,285,996
Shares outstanding	10,529	8,900	11,044	1,200	32,580
US GAAP firms ($n = 49$)					
Market value	18,498,621	1,196,874	41,554,539	13,080	255,092,573
Net income (loss) under HGB	223,382	4,881	3,958,872	(24,587,000)	5,926,000
Net income (loss) under US GAAP	422,965	8,574	3,724,337	(22,098,000)	9,269,000
Stockholders' equity under HGB	8,888,099	212,925	15,775,716	(37,944)	66,301,000
Stockholders' Equity under US GAAP	9,980,098	355,859	17,681,966	(17,303)	73,704,000
Shares outstanding	520,717	21,404	1,101,075	2,900	4,197,749

Note: All amounts are in thousands of euros except shares outstanding, which are in thousands of shares.

Table 3. Distributional Properties for Reconciliations from HGB to IFRS or US GAAP Combined.

	Net Income					Stockholders' Equity				
	No.	Mean	Median	Min	Max	No.	Mean	Median	Min	Max
Index of comparability	59	−0.18	0.90***	−49.46	2.35	59	0.84***	0.91***	0.09	1.19
Partial indices of comparability for individual reconciling items										
Business combinations (goodwill + R&D)	33	0.53	1.00	−15.80	1.59	34	0.92***	0.98***	0.28	1.11
Asset capitalization and write-off differences	48	−7.70	1.00	−412.46	1.46	47	0.91***	0.96***	−0.04	1.06
Pension	37	0.99	1.00	0.72	1.11	35	1.00	1.00	0.94	1.11
Exchange rate differences	24	1.00	1.00	0.74	1.30	19	1.00	1.00	0.91	1.05
Stock plan	13	1.09*	1.06*	0.99	1.36	9	0.99	1.00	0.93	1.02
Adjustments of provisions, reserves and write-downs	26	1.10	0.36	1.01	3.21	31	0.96*	0.99***	0.35	1.05
Revenue recognition	8	63.43	0.98	0.55	500.89	9	1.06	1.00	0.84	1.40
Changes in accounting for investments	18	0.96	0.99*	0.70	1.05	26	0.96***	0.98***	0.79	1.00
Leasing	12	1.00	1.00	0.96	1.07	12	1.00	1.01*	0.93	1.02
Expenses of stock issuance	18	−6.54	0.43***	−118.59	0.98	3	0.98	0.98	0.96	0.99
Inventory/costs of goods sold	9	1.16	1.03	0.62	2.86	10	0.96**	0.87*	0.96	1.02
Deferred taxes	56	1.47	1.00	−1.56	28.57	56	0.99	1.00	0.58	1.48
Other	38	0.18	0.99**	−26.97	1.18	35	1.02	1.00	0.94	1.48

*Indicates significant difference from 1.00 at *p*-values of 0.10, or less.
**Indicates significant difference from 1.00 at *p*-values of 0.05, or less.
***Indicates significant difference from 1.00 at *p*-values of 0.01, or less.

Table 4. Distributional Properties for Reconciliations from HGB to IFRS.

	Net Income					Stockholders' Equity				
	No.	Mean	Median	Min	Max	No.	Mean	Median	Min	Max
Index of comparability	10	−4.21	1.00	−49.46	1.37	10	0.93	1.00	0.28	1.19
Partial indices of comparability for individual reconciling items										
Business combinations (goodwill + R&D)	5	−2.39	0.98	−15.80	1.00	6	1.02	1.00	1.11	0.99
Asset capitalization and write-off differences	8	−50.64	1.00	−412.46	1.37	7	0.95	0.99**	0.75	1.00
Pension	3	0.98	0.99	0.94	1.01	3	1.04	1.0	1.00	1.11
Exchange rate differences	0					0				
Stock plan	0					2				
Adjustments of provisions, reserves and write-downs	2	1.03	1.03	0.99	1.05	5	0.83	0.97	0.35	1.02
Revenue recognition	1	500.89	500.89	500.89	500.89	2	1.20	1.20	1.00	1.40
Changes in accounting for investments	0					1	1.00	1.00	1.00	1.00
Leasing	5	0.99	0.99	0.96	1.00	5	0.99	1.00	0.93	1.00
Expenses of stock issuance	3	−39.67	−1.07	−118.59	0.97	0				
Inventory/costs of goods sold	2	1.04*	1.04	1.03	1.04	3	1.01	1.01	1.00	1.02
Deferred taxes	8	4.57	1.23	0.41	28.57	8	0.93**	0.95***	0.82	1.00
Other	7	−3.11	0.99	−26.97	1.02	4	1.13	1.02	1.00	1.48

*Indicates significant difference from 1.00 at *p*-values of 0.10, or less.
**Indicates significant difference from 1.00 at *p*-values of 0.05, or less.
***Indicates significant difference from 1.00 at *p*-values of 0.01, or less.

Table 5. Distributional Properties for Reconciliations from HGB to US GAAP.

	Net Income					Stockholders' Equity				
	No.	Mean	Median	Min	Max	No.	Mean	Median	Min	Max
Index of comparability	49	0.64***	0.87***	−3.21	2.35	49	0.82***	0.90***	0.09	1.07
Partial indices of comparability for individual reconciling items										
Business combinations (goodwill + R&D)	28	1.05	1.01	0.61	1.59	28	0.90***	0.97***	0.28	1.01
Asset capitalization and write-off differences	40	0.89**	1.00	0.06	1.46	40	0.91***	0.95***	−0.04	1.06
Pension	34	.99	1.00	0.72	1.11	32	0.99	1.00	0.94	1.02
Exchange rate Differences	24	1.00	1.00	0.74	1.30	19	1.00	1.00	0.91	1.05
Stock plan	13	1.09**	1.06**	0.99	1.36	9	0.99	1.00	0.93	1.02
Adjustments of provisions, reserves and write-downs	24	1.10	1.01	0.36	3.21	26	0.98*	1.00***	0.76	1.05
Revenue recognition	7	0.94	0.97	0.91	1.29	7	1.01	1.00	0.84	1.18
Changes in accounting for investments	18	0.96	0.99*	0.70	1.05	25	0.96***	0.98***	0.79	1.01
Leasing	7	1.01	1.02	0.96	1.07	7	1.01***	1.01**	1.01	1.02
Expenses of stock issuance	15	0.07***	0.65***	−3.42	0.98	3	0.98	0.98	0.96	0.99
Inventory/costs of goods sold	7	1.20	0.97	0.62	2.86	7	0.93***	0.92**	0.87	1.00
Deferred taxes	48	0.96	0.99	−1.56	1.98	48	1.00	1.00	0.58	1.48
Other	31	0.92	1.00	−1.14	1.18	31	1.01	1.00	0.94	1.17

*Indicates significant difference from 1.00 at *p*-values of 0.10, or less.
**Indicates significant difference from 1.00 at *p*-values of 0.05, or less.
***Indicates significant difference from 1.00 at *p*-values of 0.01, or less.

errors in measurement be in the direction of understatement rather than overstatement of net income and net assets'' leading to ''...understatement for its own sake ... , since the greater the understatement of assets the greater the margin of safety the assets … as security for loans or other debts.'' (FASB, 1980, para. 92–93).

The net income reconciling items show overall conservatism as well but the categories of items of significance are not nearly as informative as those for the reconciling items for shareholders' equity. Overall, the median HGB net income amounts are significantly lower than those for US GAAP and IFRS, though that significance is not found for the mean, perhaps because of the wide variance in the data and our small sample size. The overall significant median appears to be driven most significantly from stock issuance expenses simply because those costs are netted against the proceeds of issuances, not expensed, under international reporting standards. Alternatively, stock purchase plans with significant differences from current stock prices available in the marketplace are not shown as expenses under HGB reporting as they are under international systems' requirements, hence this is the one category of net income adjustments showing significantly higher reported amounts of net income under HGB than under international systems. Accounting for investments also contributes to the overall median showing conservatism in reporting under HGB practices. Finally, the category of ''Other'' clearly consistently includes some adjustments stemming from conservative reporting under HGB, but what constitutes this category is not disclosed in the financial statements.

VALUE RELEVANCE OF THE RECONCILING ITEMS

The results presented in Table 6 assess the value relevance of the total reconciling item and the 13 individual reconciling items uncovered in this research to the market capitalization value of the sample firms.

The overall model shows a significantly positive relationship between firm market values and current period net income as reported under HGB, adjustments to IFRS or US GAAP, and the number of common shares outstanding. In the remaining 13 regressions, 3 items are value-relevant for the firms in our sample: adjustments to remove the effects of provisions, reserves, and write-downs; pension adjustments; and the adjustment for stock issuance expenses.

The results for the reconciling item entitled provisions, reserves, and write-downs demonstrate that this reconciling item affects the market

Table 6. Value Relevance of the Reconciling Items to the Sample Firms' Market Values.

Regression Model		Intercept	Variables						
			SEHGB	NIHGB	NIDIFF	SEDIFF	OUTSH	RINI	RISE
No reconciling items	Coefficient	1,286,354	0.59	3.64	1.15	0.77	13.77		
	t-value	2.89***	0.81	2.32**	0.27	0.32	1.76*		
Reconciling item									
Business combinations	Coefficient	1,458,907	0.63	3.49	−7.91	−1.04	13.83	−535.52	−39.58
	t-value	3.32***	0.90	2.10**	−1.00	−0.46	1.81*	−1.11	−1.39
Asset capitalization and write-off diff.	Coefficient	1,050,195	0.24	3.61	−4.34	0.18	16.02	−0.78	0.57
	t-value	2.11**	0.42	2.17**	−0.22	0.10	2.08**	−0.77	1.03
Pensions adjustments	Coefficient	937,580	0.46	4.05	−2.27	−2.66	18.05	76.01	−11.83
	t-value	3.22***	0.84	3.09***	−0.54	−1.39	2.72***	2.44**	−1.90*
Exchange rate differences	Coefficient	1,353,682	0.64	3.65	−0.47	−0.98	13.26	14.38	−13.50
	t-value	3.08***	0.81	2.43***	−0.10	−0.36	1.6	0.20	−0.26
Stock plans	Coefficient	590,218	0.72	3.54	−2.33	−0.90	13.33	−297.93	236.87
	t-value	1.41	1.08	2.35***	−0.69	−0.37	1.99*	−1.21	1.35
Provisions, reserves and write-downs	Coefficient	1,186,073	0.73	3.79	1.27	−1.66	11.20	24.92	10.38
	t-value	2.86***	0.76	2.61***	0.14	−0.47	0.77	0.20	2.40***
Revenue recognition	Coefficient	878,648	0.50	3.53	−1.34	−0.19	14.53	−108.96	−446.41
	t-value	2.97***	0.68	2.34***	−0.31	−0.08	1.85*	−0.16	−1.18

Investments	Coefficient	1,429,286	0.40	3.56	4.11	−1.08	14.17	−100.77	3.67
	t-value	2.96***	1.05	2.17***	0.810	−0.45	2.56***	−1.40	1.42
Leasing	Coefficient	1,321,892	0.60	3.62	−1.12	−0.83	13.67	2616.12	−29.22
	t-value	2.86***	0.82	2.31***	−0.26	−0.34	1.74*	0.75	−1.64
Stock issuances expenses	Coefficient	1,018,177	0.64	3.42	−1.57	−0.68	13.07	256.96	−1975.7
	t-value	1.81*	0.91	2.17***	−0.39	−0.29	1.82*	1.03	−1.74*
Inventory/cost of goods sold	Coefficient	1,334,413	0.58	3.64	−1.14	−0.75	13.81	113.26	−31.00
	t-value	2.73***	0.79	2.32***	−0.26	−0.31	1.75*	1.42	−0.75
Deferred taxes	Coefficient	706,881	−0.10	5.35	−1.47	1.34	20.33	13.58	0.64
	t-value	1.74*	−0.11	3.41***	−0.27	0.51	1.54	1.48	0.48
Other	Coefficient	1,229,186	0.74	3.92	3.05	−1.70	11.74	−1.39	−0.75
	t-value	2.45**	1.24	2.96***	0.53	−0.08	1.75*	−0.08	−0.36

*Indicates significant difference from 1.00 at p-values of 0.10, or less.
**Indicates significant difference from 1.00 at p-values of 0.05, or less.
***Indicates significant difference from 1.00 at p-values of 0.01, or less.

capitalization of the firm significantly and positively. This result can be interpreted in one of two ways. First, companies generate actual cash savings by taking provisions and reducing taxes, supporting a market valuation for these reconciling items. One would expect, however, that this scenario would result in a significant coefficient on the deferred taxes variable. An alternate explanation is that the market prices reflect the conservatism and expected income smoothing made possible by the provisions, reserves, and write-downs taken in German financial statements.

Our results also indicate that pension adjustments that increase net income when going from HGB to IFRS or US GAAP are significantly associated with higher firm market values, while adjustments requiring increases to stockholders' equity to move from HGB to US GAAP or IFRS are associated with lower firm market values. Given that HGB pension accounting requirements are not as specific as US GAAP or IFRS, these market valuations are difficult to interpret. To compare to prior research, Barth and Clinch (1996) include pension-reconciling items in various models investigating value relevance to both stock prices and returns. They find that pension-reconciling items have significant explanatory power, at least for Australian firms. However, they do not predict the expected sign for this item and their results also show some positive and some negative coefficients as well. Furthermore, the impact of pensions on firm valuation may relate to interest rate sensitivity of the firm in question (see Klumpes, 2006). The important point, then, is that the information is value relevant to German market participants above and beyond amounts reported under the HGB system.

Finally, the association between stock issuance expense adjustments and market values of the firm seems to be just a logical correlation and may not be a meaningful concern for this analysis. Alternatively, they may reflect a market reaction to reductions of equity value from costly stock issuance transactions.

SUMMARY AND CONCLUSIONS

In this research, we investigate financial statement footnote disclosures by 22 firms making 59 reconciliations of net income and stockholders' equity as reported under HGB to either IFRS or US GAAP. We identify 13 categories of reconciling items based on these footnote disclosures. Reconciling items that differ significantly, and pervasively, between HGB and either IFRS or US GAAP are found primarily in areas that evidence

German companies' propensity to write-off assets immediately and to accrue provisions in excess of those allowed under internationally accepted systems of reporting. Shareholders' equity reconciliations further support the notion that German companies create hidden reserves that will help future income. Regression of firm market values on these reconciling items also shows that the German companies' reconciling item stemming from provisions, reserves, and accruals are value relevant to in addition to the relevance of current period income as reported under HGB.

In contrast to this finding of German conservatism in reporting and market valuation, we note that leasing transactions generate significant differences between HGB and both IFRS and US GAAP which overall evidence greater German aggressiveness rather than conservatism in this area. The differences, however, are not found to be value relevant to this sample of firms. Finally, we find differences in revenue recognition practices for software and film licensing transactions that also evidence greater aggressiveness, rather than conservatism, in German reporting relative to US GAAP and IFRS, but these reporting differences are not found to be significant, possibly due to the small sample size available for this research.

One reporting problem uncovered from this research effort is that making comparisons between HGB and either IFRS or US GAAP required significant efforts and assumptions on the part of these researchers. Similar reconciling items were described differently in the sample companies' footnotes; reconciling items were grouped differently, preventing some detailed comparison of specific reconciling items that are listed in the footnotes.

IMPLICATIONS FOR FUTURE RESEARCH

The research undertaken in this paper uncovers many possibilities for further investigation. Comparing the value relevance of reconciling items uncovered in this research to those found when German firms prepare Form 20-F reconciliations may afford another opportunity to view U.S. market valuation of reserves that provide the possibility for future income smoothing. Comparison of results found in this research, if possible, to accounting changes by German firms initially applying IFRS as currently configured also will allow investigation of similarities or differences to US GAAP as applied in actual practice. This investigation could provide further evidence on the enduring question of whether the U.S. Securities and Exchange Commission will accept financial statements prepared under IFRS without reconciliation to US GAAP.

NOTES

1. The Neuer Markt was in existence from March 1997 to June 2003.

2. In 2002, this option to apply IFRS or US GAAP instead of HGB rules to prepare the consolidated financial statements was even further extended to all groups with either a parent or a subsidiary with publicly traded shares or debt securities (publicly traded groups). The option expired with the enactment of the European Union's Regulation (EC) No. 1606/2002, on the Application of International Accounting Standards, which requires (with specific transitional exemptions) all publicly traded parent companies to prepare their consolidated financial statements according to IFRS from 2005 and beyond (European Parliament and Council, 2002).

3. Not only did companies listed at the Neuer Markt take advantage of applying IFRS or US GAAP, but also many others did as well including, for example, companies listed abroad, especially those listed or planning a listing at the NYSE (e.g., SAP). Therefore, not all firms included in this sample were traded on the Neuer Markt.

4. The HGB permits two variants of the purchase method: the book value method and the revaluation method (Art. 301 HGB). In both cases assets and liabilities acquired are recognized in the consolidated balance sheet at their fair values. Differences exist however with regard to minority interests. Under the book value method, in contrast to the revaluation method, the minority's interests in the assets and liabilities are not recognized at fair values. The book value method is comparable to US GAAP as practiced under the parent-company theory. However, under the book value method (since 2002 no longer for the revaluation method) the recognition of fair value adjustments is restricted to acquisition cost, which is not the case under US GAAP. The German Accounting Standard (GAS) No. 4 Acquisition Accounting in Consolidated Financial Statements (issued in 2000, revised in 2003 and 2005) now requires the application of the revaluation method.

5. For details see Ordelheide (2001, p. 1387). Until 2004 a subsidiary had to be excluded from consolidated financial statements if its activities were so different from the activities of the group that its consolidation would have conflict with the requirement to present a true and fair view. The exclusion of subsidiaries with very different activities was (due to EU requirements) abolished in 2004, as it was abolished under US GAAP via issuance of FAS 94.

6. To diminish tax influence on group accounts solely tax-based depreciation, amortization, or special reserves recorded in equity are no longer allowed in consolidated financial statements for financial years beginning after December 2002 (Art. 298 HGB).

7. This option available under the German Income Tax Code (Art. 6, para. 2 Einkommensteuergesetz) has become general accounting practice and is therefore regarded as being in compliance with HGB accounting requirements (Ernsting, Haeger, & Küting, 2004, note 54).

8. Given HGB requirements that capitalization be done only when the VAT is non-refundable (Ballwieser, 2001, p. 1298; Knop & Küting, 2004, note 20), it is presumably the case that only unusual recoveries of the VAT are recorded in this way, but the financial statement footnote does not explicitly state this fact.

9. The tax law requires a rate of 6% for discounting pension obligations. The value for the pension obligation calculated for taxation is regarded as minimum value for the commercial accounts (Mayer-Wegelin et al., 2004, note 374).

10. This practice of translating revenues and expenses using the average rate and translating net profit by using the closing rate is due to a lack of specific rules in the HGB and is not unusual in Germany although it is not in line with international requirements. (Küting & Weber, 2003, p. 162)

11. The GASs issued by the German Accounting Standards Board – the private standard setting body in Germany established in 1998 – do not have the same authority as codified law. After approval by the Federal Ministry of Justice they are however considered to represent principles of orderly accounting (Grundsätze ordnungsmäßiger Buchführung – GoB) applicable to consolidated financial statements (Art. 342, para. 2 HGB; Haller, 2003, p. 103). That is, GAS are regarded as authoritative interpretations of principles of orderly accounting for consolidated financial statements (Flower & Ebbers, 2002, p. 171). For more details see Appendix.

12. GAS No. 9 Accounting for Investments in Joint Ventures in Consolidated Financial Statements (issued 2001 and further revised in 2003 and 2005) also allows either the application of the equity method or proportionate consolidation for joint ventures.

13. For further explanations of these two methods see Ordelheide (2001, pp. 1409–1410).

14. In contrast to US GAAP, current IAS 39 defines the category "financial asset or financial liability at fair value through profit or loss" and allows management to designate items in this category on initial recognition when certain conditions are met. This category thus includes financial assets/liabilities held for trading as well as financial instruments that meet the requirements in IAS 39.9 and were, upon initial recognition, designated to be included in it (IAS 39.9).

15. GAS No. 4 *Acquisition Accounting in Consolidated Financial Statements* (issued in 2000, revised 2003 and 2005) requires a negative goodwill that does not relate to future expenses or losses to be recognized as income on a systematic basis over the remaining useful life of the depreciable assets.

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APPENDIX. REFERENCES TO AUTHORITATIVE LITERATURE

This appendix presents the standards establishing authoritative requirements in the literature related to each of the 13 categories of reconciling items identified in this research. Key to acronyms: APB: Accounting Principles Board (the organization of the American Institute of Certified Public Accountants (AICPA) responsible for establishing US GAAP until 1973); EGHGB: Introductory Act to the German Commercial Code (using the German language abbreviation); FAS: Statement of Financial Accounting Standards issued by the Financial Accounting Standards Board (FASB); FIN: Interpretation of a FAS issued by the US FASB; HGB: German Commercial Code (using the German language abbreviation); GAS: German Accounting Standard(s) issued by the German Accounting Standards Board; IFRS: International Financial Reporting Standards; IAS: International Accounting Standards; US GAAP: United States Generally Accepted Accounting Principles.

APPENDIX. (*Continued*)

Reconciling Item	IFRS (IAS)	US GAAP	HGB
Business combinations (goodwill + in-process R&D) • Goodwill capitalized and amortized generally over no more than 20 years under IAS 22, and over 40 years under APB Opinions 16 and 17[a] • Under HGB, goodwill may be offset against reserves or capitalized and amortized either at a rate of at least 25% starting the year after acquisition or over its estimated useful life[b] • Under HGB, subsidiaries may be excluded from group accounts if – severe long-term restrictions impair the parent's ability to exercise its rights (Art. 296, para. 1 No. 1 HGB), or – the information required for the preparation of the consolidated financial statements cannot be obtained without disproportionate expenses or undue delay (Art. 296, para. 1 No. 2 HGB), or – the investment in the subsidiary is exclusively held for resale (Art. 296, para. 1 No. 3 HGB), or – the inclusion of the subsidiary is immaterial for providing a true and fair view – if more than one subsidiary is regarded as being immaterial, then these subsidiaries must be in total immaterial for providing a true and fair view in order to qualify for the exemption (Art. 296, para. 2 HGB) Entities that are due to exemptions not consolidated in full must be included in the group accounts using the equity method unless the investor does not have a significant influence over the entity or the investment is immaterial for providing a true and fair view (Art. 311 HGB)[c]	IAS 22 (revised 1998) Business Combinations IAS 27 Consolidated and Separate Financial Statements IAS 37 Provisions, Contingent Liabilities, and Contingent Assets IAS 38 Intangible Assets	APB Opinion 16[a], Business Combinations APB Opinion 17[a] FAS 95 Consolidation of All Majority Owned Subsidiaries	Art. 309, para. 1 HGB Art. 290 HGB Art. 296, para 1 and 2 HGB Art. 311 HGB
Asset capitalization and write-off differences: • Development cost recognition is allowed under IAS 38 (and also was under IAS 9) but not under FAS 2. Under HGB internally generated non-current intangible assets (generally also including research and development costs) may not be recognized • Government grants: According to IFRS and USGAAP, a receivable is recognized when there is reasonable assurance that the enterprise will comply and the grants will be received. Income recognition is matched to cost incurrence. Grants related to assets either offset asset cost or are	IAS 20 Accounting for Government Grants and Disclosure of Government Assistance IAS 9, Research and Development Costs (for periods beginning before June 30, 1999)	FAS 2, Accounting for Research and Development Costs US GAAP has no specific standards related to accounting for government grants APB12, Omnibus Opinion-1967: Disclosure of Depreciable Assets and Depreciation	Art. 248, para. 2 HGB HGB does not have a specific rule related to accounting for government grants. The accounting practice is strongly influenced by tax requirements

presented as deferred income. There is no HGB rule dealing with accounting for government grants, leading to differing accounting practices. Two usual accounting practices are aligned to tax requirements: either offset government grants against acquisition cost or recognize them directly in profit or loss. Commentaries also allow recognizing a grant directly in equity under a special heading with subsequent recognition in profit or loss when the asset for which the grant has been received is depreciated. This treatment is not allowed for tax purposes. • Depreciation rate differences	IAS 38 Intangible Assets (particularly, Development Costs) after June 30, 1999 IAS 16, Property, Plant, and Equipment		
Pensions • HGB, IFRS, and US GAAP requirements are similar, all structured to recognize employment retirement benefit costs (and other post-employment benefits, such as health care costs) in the period in which the benefits are earned by the employee, rather than when they are paid by the employer. Under HGB, for retired employees the obligation must be measured at its present value (Art. 253, para. 1 HGB). For the calculation of pension obligations for pre-retirement holders of prospective benefits the HGB does not contain specific measurement rules. Therefore, in practice various actuarial methods are applied (often aligned to tax requirements though the tax value is regarded as minimum value). Future salary increases and benefit trends are usually not taken into account. Commentaries suggest a rate between 3 and 6% to discount pension obligations. • Recognition of a pension liability is not mandatory for pensions for which the employee received the vested right before January 1987 (Art. 28 EGHGB).	IAS 19 (revised 2002), Employee Benefits	FAS 87, Employers' Accounting for Pensions FAS 106, Employers' Accounting for Postretirement Benefits Other Than Pensions	Art. 253, para. 1 HGB Art. 249, para. 1 HGB Art. 28 EGHGB
Exchange rate differences IFRS and US GAAP requirements are substantially similar; HGB does not require a specific translation method for converting foreign currency financial statements. However the realization principle (Art. 252, para. 1 No. 4 HGB) and the historical cost principle (Art 253, para. 1 HGB) must be considered when applying the temporal method.[d]	IAS 21, The Effects of Changes in Foreign Exchange Rates	FAS 52, Foreign Currency Translation	–
Stock option and stock purchase plans • Stock purchase plans: under US GAAP, no compensation expense need be recorded if a discount offered to employees is 5% or less. One German company recorded no compensation expense under German GAAP despite offering a 40% discount on employee stock purchases.	(Note: no reconciling items between IFRS and HGB were found in the sample. Current requirements under IFRS 2, Share-based Payment are	APB25, Stock Issued to Employees FAS 123 (revised) Stock Based Compensation	–

APPENDIX. *(Continued)*

Reconciling Item	IFRS (IAS)	US GAAP	HGB
• Stock option plans: IAS 19, in effect at the time of this study, did not require compensation expense to be recorded for equity compensation benefits, including stock options. IFRS 2 now has similar requirements to US GAAP under FAS 123 (revised). • The HGB is silent on the accounting treatment of stock option plans leading to inconsistent accounting treatments. Practice therefore ranges from recording share-based payments as compensation expense to non-recognition of such transactions.	similar to US GAAP under FAS 123R.) IFRS 2, Share-based Payment	FIN 44, Transactions involving Stock Compensation	
Adjustments of provisions, reserves, and accruals • Items recorded under HGB but reversed under US GAAP and IFRS are provisions for solely internal obligations and employee separations, lump-sum allowances for doubtful accounts, and loss contingencies. • Note on terminology: under US GAAP, "contingency" refers to any uncertainty: if a probable loss, then record a provision; under IFRS, a contingency is a possible outflow that probably will not come to pass, leading to only financial statement disclosure	IAS37, Provisions, Contingent Liabilities, and Contingent Assets	FAS 5, Accounting for Contingencies	Art. 249 HGB
Revenue recognition • IFRS reconciliations show reductions for film licensing revenue when reconciling from HGB • US GAAP reconciliations show reductions for software revenue recognition when reconciling from HGB, but increases for long-term construction contract revenue • The HGB does not include specific rules on revenue recognition for software or film licensing. Instead the realization principle applies which states that income is only recognized when the underlying economic transaction has been completed. Therefore, the percentage of completion method is generally not permitted under HGB.	IAS 11, Construction Contracts IAS 17, Leases IAS 18, Revenue	SOP 97-2 and SOP 98-9, Software Revenue Recognition ARB 45, Long-Term Construction-Type Contracts	Art. 252, para. 1 No. 4 HGB

Accounting for investments • This sample taken prior to 2000 uncovered no reconciling items between HGB and IFRS, but many for reconciliations to US GAAP. IFRS requirements under IAS 39 are now similar to US GAAP and so reconciling items in the future can be expected to be similar to those found for US GAAP. • Under HGB in consolidated financial statements investments in associates shall be accounted for applying the equity method (Art. 312 HGB). For investments in joint ventures in consolidated financial statements an option exists to use either the proportionate consolidation method or the equity method (Art. 310, para. 1 HGB).[e] To other financial assets the historical cost principle applies which prohibits fair value measurements above historical cost; HGB allows impairment losses to be recorded on non-current financial assets even if the impairment is only temporary in nature.	IAS 25, Investments IAS 31, Interests in Joint Ventures IAS 39, Financial Instruments: Recognition and Measurement	FAS 115, Investments in Debt and Equity Securities FAS 142, Intangible Assets	Art. 312 HGB Art. 310 HGB Art. 253 HGB Art. 279, para. 1 HGB
Leasing • IFRS and US GAAP requirements are similar, though US standards contain more detailed requirements to assess whether risks and rewards of ownership have changed hands. • Due to the lack of HGB rules on the accounting treatment of leasing accounting practice is usually aligned to tax rules. The applicable tax rules are in conceptual terms comparable to IFRS and US GAAP.	IAS 17, Leases	FAS 13, Accounting for Leases	
Expenses of stock issuance HGB requires expensing stock issuance costs; both IFRS and US GAAP require that they reduce the proceeds of the issuance.	SIC 17, Equity-Costs of an Equity Transaction		Art. 248, para. 1 HGB
Inventory/costs of goods sold An option available under HGB allows only direct costs of materials and labor in inventory; IFRS and US GAAP require full cost included manufacturing overhead. HGB also permits to include administrative overheads in the cost of inventories.	IAS 2, Inventories	ARB 43, Ch. 4, Inventory Pricing	Art. 255, para. 2 HGB

APPENDIX. *(Continued)*

Reconciling Item	IFRS (IAS)	US GAAP	HGB
Deferred taxes Though deferred taxes are recorded in German financial statements, companies stray further from tax law when implementing IFRS or US GAAP, so most entities record this reconciling item. In contrast to IFRS or US GAAP, deferred taxes are only recognized for timing differences under HGB (not temporary differences). In individual financial statements an option exists to recognize deferred tax assets (Art. 274, para. 2 HGB). Deferred taxes arising from consolidation procedures must be recognized regardless whether they are tax assets or tax liabilities (Art. 306 HGB).[f] No deferred tax assets may be recorded under HGB for unused tax loss carryforwards.	IAS 12, Income Taxes	FAS 109, Accounting for Income Taxes	Art. 274 HGB Art. 306 HGB

[a]APB 16 was superceded by FAS 141 in June 2001. This statement, along with FAS 142 has greatly changed the treatment of goodwill in business combinations. Goodwill is no longer amortized over its useful life, but is instead tested for impairment. The IASB introduced a similar approach with IFRS 3 in 2004 that replaced IAS 22.

[b]GAS No. 4 *Acquisition in Consolidated Financial Statements* (issued in 2000, revised 2003 and 2005) prohibits offsetting goodwill directly against reserves. Instead goodwill shall be recognized and amortized on a systematic basis over its estimated useful life (usually not exceeding 20 years).

[c]GAS No. 8 *Accounting for Investments in Associates in Consolidated Financial Statements* (issued in 2001, revised in 2003 and 2005) prohibits the application of the equity method for entities over which the significant influence is only temporary (GAS 8.6).

[d]GAS No. 14 *Foreign Currency Translation* (issued 2003, revised 2005) is very similar to IAS 21 and requires translating foreign currency transactions into the functional currency of the enterprise with exchange differences generally recognized in profit or loss. Exchange differences arising from the translation of the functional currency into the reporting currency shall be recognized directly in equity. GAS No. 4, however, still does not permit recognizing unrealized exchange gains resulting from monetary assets being valued above historical cost or monetary liabilities being valued lower than the ultimate settlement value (GAS No. 14.15). This accounting treatment would violate existing legislation and can therefore not be recommended by the GASC. The GASC therefore proposes to revise the existing HGB rules to allow the recognition of unrealized exchange gains and to bring German accounting practice more in line with international accounting principles (GAS No. 14 Appendix A4–A5).

[e]More detailed accounting treatments for investments in joint ventures and investments in associates in consolidated financial statements are set out by GAS No. 9 *Accounting for Investments in Joint Ventures in Consolidated Financial Statements* (issued in 2001 and further revised in 2004 and 2005) and GAS No. 8 *Accounting for Investments in Associates in Consolidated Financial Statements* (issued in 2001 and further revised in 2004 and 2005).

[f]GAS No. 10 *Deferred Taxes in Consolidated Financial Statements* (issued in 2002, revised in 2003 and 2005) requires for deferred taxes an accounting treatment similar to IAS 12. In contrast to IAS 12, however, GAS No. 10 applies a mixture of the timing and temporary concepts.