IFRS adoption and accounting quality: The case of South Africa

Daniel Ames[1]
Illinois State University, U.S.A

South Africa is an important country within the continent of Africa. Its full adoption of International Financial Reporting Standards (IFRS) in 2005 for listed firms is unique. In this paper, I study the effects of IFRS adoption on accounting quality. I define accounting quality as earnings quality and value relevance, and hypothesize that both will increase post IFRS adoption. In a variety of specifications, I find that the earnings quality is not significantly improved post adoption. I also find that the value relevance of major balance sheet components changes post adoption.

1. Introduction

Beginning in 1973, the Board of the International Accounting Standards Committee (IASC) began releasing International Accounting Standards (IAS). The primary purpose of these standards was to unify the financial reporting requirements of European firms. Beginning in April of 2001, the International Accounting Standards Committee (IASC) succeeded the IASC as the standard setting body for European firms. The IASC adopted the existing standards and subsequently began issuing additional standards called International Financial Reporting Standards (IFRS). Over time, the majority of developed countries have adopted IFRS requirements as a means of standardizing accounting practices internationally (PWC, 2011). The main holdout among developed economies is the United States, which continues to practice its own set of Generally Accepted Accounting Principles (GAAP).

The primary theoretical benefit of an international set of accounting standards is strongly enhanced comparability for users of financial statements, and ideally, improved capital allocation. IFRS is generally perceived to be more principle-based than GAAP, which is perceived to be more rule-based. Adopters generally perceive this as an advantage, since principle-based standards provide greater flexibility for differing situations. In practice, however, the implementation of a single set of (even principle-based) standards across differing legal, cultural, economic and political environments is complicated at best. As a result, an empirical verification of the benefits of IFRS adoption and implementation on a country-by-country basis is necessary.

Many of these analyses have been completed, either in an aggregate analysis of firms (Leuz et al. 2003; Barth et al. 2005; Ball 2006) or for a specific country (George 2008; Elbannan 2010; Zhou et al. 2009; Morais and Curto 2008). The list of countries whose IFRS adoption has been studied includes at least China, Portugal, Egypt and the United

---

[1] Correspondance to Daniel Ames, Email: dames@ilstu.edu

Kingdom. However, aside from Egypt, the literature is largely silent on the impact of IFRS adoption by countries on the African continent. While economic development in Africa lags behind several other continents in the aggregate, South Africa stands out. It has the largest economy on the continent (World Databank, 2010). It's development has been relatively impressive compared with other countries on the continent. Since 2005, firms listed on the Johannesburg exchange in South Africa are required to be in full compliance with IFRS. As a result of its importance globally as well as its decision to adopt IFRS completely in 2005, South Africa makes an excellent setting for an event study of the impact of IFRS adoption.

2. Literature Review and Hypothesis Development

The adoption of international financial reporting standards and the subsequent impact on financial reporting has been studied widely. George (2008) looks at the case of the United Kingdom, and finds that the adoption of IFRS reduces the incidence of earnings management, though the adoption by firms appears to be a strategic decision based on what will maximize the favorable appearance of the firm. George also finds that the value relevance of accounting information increases with the adoption of IFRS.

Elbannan (2010) finds in a sample of Egyptian companies adopting IFRS that the incidence of earnings management does not decrease post adoption, even though these standards were adopted relatively early (in 1997), and subsequently revised. Elbannan attributes the lack of improvement to the lack of enforcement of these standards by regulators and inadequate training of practitioners.

Zhou et al. (2009) examines the impact of adopting IFRS on earnings management in a sample of Chinese firms. Prior Chinese standards were rule-based compared to the principle-based IFRS. They find that post-adoption, earnings are less smooth, consistent with a decrease in earnings management. However, they did not observe an improvement in the timeliness of loss recognition. They conclude that the improvements of IFRS adoption are at least somewhat neutralized by more opportunities for earnings management under IFRS.

Morais and Curto (2008) in a sample of 30 Portuguese listed firms finds that after IFRS adoption, the smoothness of earnings decreased, which is consistent with Zhou et al. (2009) and may be interpreted as an improvement in earnings quality. However, they also find that the value relevance of accounting information decreases in the wake of IFRS adoption.

Perhaps the most widely cited in this arena is Leuz et al. (2003). They predict and find that firms' propensity to manage earnings in 31 countries is inversely related to investor protections in the country. Some of their findings are relevant here. For example, they assign, on the basis of four earnings management measures, an aggregate earnings management score to each of the countries in their sample. South Africa, for their sample period of 1990 to 1998 received an aggregate earnings management score of 5.8. This compares to the lowest aggregate earnings management score of 2.0 for the United States and the highest aggregate earnings management score of 28.3 for both Austria and Greece. During this period, Leuz et al. (2003) also report other accounting quality measures for South Africa during their sample period. For example, they assign the importance of 16.3 to the equity market in South Africa, compared to a score of 23.3 for the United States, and a score of 4.7 in Indonesia. They rate South African Legal enforcement during this period as 6.4 out of 10 compared to a 10.0 for Switzerland and a 9.5 for the United States. They rate South

African disclosures as high, with a rating of 70 during this period, compared to a 71 for the United States and a rating of 36 for Portugal. Outside investor rights were rated 5 out of 5, compared with a score of 5 out of 5 for the United States and a score of 0 out of 5 for Belgium. In all, prior to South Africa's adoption of IFRS, the reporting quality of financial statements seems relatively high. An ex ante high level of reporting quality will bias against finding results in my subsequent tests.

However, the Leuz et al. (2003) study does not consider the impact of IFRS adoption on accounting quality. Many of the other studies herein discussed focus on the impact of IFRS adoption in a country, but one country whose IFRS adoption has not been well documented in the literature is South Africa. South Africa is unique. Since 2005, in order to be listed on the Johannesburg stock exchange, firms must be in full compliance with IFRS. According to the IFRS:

> "The powerhouse and the great example has been South Africa. 'South Africa is a very good reference point for the other jurisdictions in Africa', says van Rooyen. 'Our company law makes provision for IFRSs and the Johannesburg stock exchange insists on IFRSs.' Paul Pacter agrees. 'South Africa has been the leader and the catalyst. Its national standards have been converging with IFRSs. In addition it requires IFRSs on the stock exchange', he says. 'That took care of the listed companies and South Africa was one of the few countries that did not go through an endorsement process. The stock exchange just said IFRSs are a requirement. Full stop. Very few countries do that. Elsewhere governments, for sovereignty reasons, feel the need to go through an endorsement process. South Africa uniquely said: 'We will adopt. End of story''" (IFRS, 2011).

The South African greater willingness to adopt IFRS in its entirety for exchange listed firms beginning in 2005 allows a clean setting to test both earnings management and the value relevance of accounting numbers post IFRS adoption.

As a generality, I expect IFRS implementation to improve accounting quality. Accounting quality is a term without a specific definition. However, Penman (2002) addresses the notion of accounting quality and suggests that the term be discussed in terms of shareholders' interests and the usefulness of accounting information in assisting them. Consistent with this view, then, one obvious component of *accounting* quality is *earnings* quality.

Cohen (2003) defines earnings quality as the extent to which accounting figures accurately portray the underlying financial health of a firm and the degree to which they result in future operating cash flows. Schipper and Vincent (2003) consider earnings quality as the degree to which reported earnings represent Hicksian income. Chan et al. (2004) view earnings quality as the extent to which operating fundamentals are captured by reported earnings. Yee (2006) considers that earnings quality has two components—(1) as a fundamental attribute of the firm and (2) as a financial reporting attribute. Firms report a potentially noisy signal, their earnings. This is the financial reporting attribute. The proximity of reported to fundamental, or true earnings, is the quality of earnings. Others ascribe conservatism to earnings quality (White et al., 2003; Penman and Zhang, 2002).

I use these definitions to inform my tests in this paper. For my purposes, earnings quality is the extent to which reported earnings match the fundamental, or true earnings, of

the firm. Since true earnings are unobservable, I will consider unmanaged earnings as a proxy for high quality earnings. I will thus use evidence of earnings management as a proxy for low earnings quality. Following Barth et al. (2005) and Morais and Curto (2008), I use several measures of earnings management.

International Financial Reporting Standards are designed to provide a high bar in terms of earnings quality. As a result, I expect that managers will have fewer opportunities to manage earnings after implementing IFRS in their financial reporting. Thus, I predict:

H1: Earnings management will decrease post IFRS adoption.

Value relevance is the second component of accounting quality that I address in this study. International Financial Reporting Standards are also designed to provide information to users of financial statements that is value relevant—that is to provide information to potential investors and creditors that is germane to their decisions regarding investment with a corporation. Beginning with Ball and Brown (1968), value relevance has been tested with stock price as an indicator of reactions to accounting information. In our tests, following Barth et al. (2005, 2008) and Morais and Curto (2008), I use stock price as a dependent variable and various financial reporting data as independent variables. It is my expectation that adopting IFRS will improve the value relevance of accounting information. That is, I expect that in the wake of IFRS adoption, users of financial statements will likely rely on reported information more in their decision making process. Thus, I predict:

H2: Value relevance will increase post IFRS adoption.

3. Sample selection and methodology

My sample consists of the entire universe of COMPUSTAT Global firms whose country code indicates that they are listed in South Africa. The result is 3,950 variables from 2000 through 2011, distributed roughly evenly over the years.

To test H1, that earning management will decrease post IFRS adoption, I employ a series of tests following Barth et al. (2005) and Morais and Curto (2008). The first of these is to test for significant differences in reported income pre and post IFRS adoption. I use the following logistic regression:

$$Post_{I,t} = \beta_0 + \beta_1 INITA_{I,t} + E \quad (1)$$

where

Post is an indicator variable equal to one for 2005 and later (post IFRS adoption), and zero otherwise (pre IFRS adoption).

Inita is the change in net income for firm i in year t relative to net income for firm i in year t-1 scaled by the corresponding change in total assets.

Next, I test the change in net income relative to operating cash flows pre and post IFRS adoption.

$$Post = \beta_0 + \beta_1 NICF_{I,t} + E_{I,t} \qquad (2)$$

where

ACCchg is the change in net income for firm i in year t relative to net income for firm i in year t-1 scaled by the corresponding change in operating cash flows.

Third, I employ a modified version of the model used by Morais and Curto (2008) to test for earnings management in the form of small positive earnings (Burgstahler and Dichev, 1997), in a model that includes a variety of control variables.

$$Post = \beta_0 + \beta_1 INITA_{I,t} + \beta_2 NICF_{I,t} + \beta_3 SIZE_{I,t} + \beta_4 growth_{I,t} + \beta_5 eissue_{I,t} + \beta_6 LEV_{I,t} + \beta_7 dissue_{I,t} + \beta_8 TURN_{I,t} + \beta_9 OCF_{I,t} + \beta_{10} SPOS_{I,t} + E_{I,t} \qquad (3)$$

where

Post is an indicator variable equal to one for 2005 and later (post IFRS adoption), and zero otherwise (pre IFRS adoption).

Inita is the change in net income for firm i in year t relative to net income for firm i in year t-1 scaled by the corresponding change in total assets.

NICF is aggregated net income for firm i in year t.

SIZE is the natural logarithm of total assets for firm i in year t.

GROWTH is percentage change in sales for firm i in year t relative to sales for firm i in year t-1.

EISSUE is percentage change in common stock for firm i in year t relative to common stock for firm i in year t-1.

LEV is total liabilities divided by the book value of equity for firm i in year t.

DISSUE is percentage change in total liabilities for firm i in year t relative to total liabilities for firm i in year t-1.

TURN is sales scaled by total assets for firm i in year t.

OCF is cash flows from operations for firm i in year t.

SPOS is an indicator variable that equals 1 if net income scaled by total assets is between 0 and .01.

In order to test value relevance, I merge the 3,950 observations from COMPUSTAT global with CRSP data. After this merge, 1,112 observations remain. To test value

relevance, I then regress the components of book value of equity as well as some income statement components on a firm's subsequent stock price. Specifically, I use a regression which contains the following variables based on Barth's methodology (2005):

$$Price_{I,t+1} = \beta_0 + \beta_1 TA_{I,t} + \beta_2 LT_{I,t} + \beta_3 POST_{I,t} + \beta_4 TA*POST_{I,t} + \beta_5 LT*POST_{I,t} + \beta_6 DA_{I,t} + \beta_7 DA_{I,t} + \beta_8 IT_{I,t} + \beta_9 DA*POST_{I,t} + \beta_{10} IT*POST_{I,t} + E_{It}$$
(4)

where

Price is the share price for firm i one period after the reported financial statements at time t, or t+1.

TA is total assets for firm i in year t.

LT is total liabilities for firm i in year t.

Post is an indicator variable equal to one for 2005 and later (post IFRS adoption), and zero otherwise (pre IFRS adoption).

DA is depreciation and amortization reported for firm i in year t.

IT is interest and taxes reported for firm i in year t.

4. Results

Table 1 represents the first test of H1, that IFRS adoption will decrease subsequent earnings management. A significant drop-off in reported earnings post IFRS adoption would be consistent with a decrease in earnings management as aggressive, earnings-enhancing reporting practices are eliminated or reduced. The results of this test indicate that there is a significant difference in the change in reported earnings post IFRS adoption, but the direction is positive as opposed to the negative coefficient anticipated (p-value <.05). This finding is different than expectation based on H1 as previously discussed. A brief discussion of possible factors that could contribute to this finding seems appropriate.

These results could potentially be attributable to macroeconomic factors. It may certainly be the case that the post-adoption period in South Africa yielded better results, on average, across the economy. This is an especially intuitive explanation given the status of South Africa as a rapidly developing country and economy. However, the post adoption period includes some generally positive years, such as 2005, 2006 and 2007, but also includes some very poor years for the global economy. These years, 2008 and 2009, are often referred to as the "financial crisis" or the "great recession". The following periods, 2010 and 2011 yielded tremendously positive results for some sectors of the global economy, though many still lag. South Africa, for a developing nation, has lagged behind in its recovery generally as measured by gross domestic product (GDP), experiencing not one, but three economic shocks in a relatively short span of time. These shocks included not only the financial crisis, but previously an electricity shortage, and subsequently a sharp increase in interest rates (Selassie, 2011). Taken together, it seems unlikely that macroeconomic factors are driving this increase in reported earnings post-IFRS adoption.

It may also be the case that IFRS is, in fact, less conservative with respect to revenue recognition. Street et. al (1999) study 221 companies claiming to comply with International Accounting Standards (IASs) in 1996. Their findings reveal significant non-compliance with a long list of IASs including "use of LCM for inventories; violation of the all-inclusive requirement for reporting profit/loss and of the strict definition of extraordinary items; failure to capitalize certain development costs; failure to provide all required disclosures for property, plant, and equipment, particularly those associated with revaluations; failure to comply with pension disclosure requirements; for companies operating in hyperinflationary economies, failure to restate foreign entities in accordance with IAS 29; and charging goodwill to reserves or amortizing goodwill over a period in excess of the 20 year limit" (Street et al. 1999). Based on these findings, it seems unlikely that an overabundance of conservatism is behind the increase in reported earnings.

Relatedly, it may be the case that auditors are more lenient under the new standards, either because their perceived risk is lower, or because auditing the new standards represents implementation problems. Finally, it may be the case that a monetary change or hyperinflation may have caused these differences. Indeed, as reported by Leuz et al. (2003), inflation in South Africa between 1990 and 1998 (in the pre IFRS adoption period) averaged 10.41% annually. This is roughly consistent with other developing nations such as India, Indonesia and Pakistan. In fact, the stated goal of regulators in the post adoption period was 3 to 6% inflation annually, according to Selassie (2011). It thus seems likely that inflation is a culprit in the surprising results found in table 1. Nevertheless, Leuz et al. (2003) do not consider the inflation rates of South Africa to qualify as hyperinflation, and keep South African data in their tests. Regardless of the cause, these results do not support H1.

Table 1: First test of H1: Logistic regression with POST as the Dependent Variable

$Post = \beta_0 + \beta_1 INITA_{I,t} + E_{I,t}$

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-0.1284	0.0339	14.3685	0.0002
Inita	1	2.282E-6	1.035E-6	4.8626	0.0274

P<0.01, p<0.05; n= 3,514
Source: Ames (2013)

Table 2 looks at the change in net income scaled by net cash flows pre and post IFRS adoption. This ratio of net income scaled by net cash[2] flows is intended to capture the degree to which reported earnings are a reflection of accruals (a less reliable and predictive component of earnings) and to which degree earnings are a reflection of cash (a more reliable and predictive component of earnings). A decrease in this ratio post adoption would indicate that reported earnings are composed less of accruals relative to cash flows, an indication of less earnings management. The results indicate that there is no significant difference in the ratios before and after IFRS adoption by firms in this sample (p-value > .35). By this measure, the quality of accounting numbers reported in South Africa remained relatively unchanged before and after IFRS adoption. This is also inconsistent with expectations as described in H1.

---

1. Other specifications of these models, not reported, suggest the earnings management did not decrease in the wake of IFRS adoption.

Table 2: Second test of H1: Logistic regression with POST as the Dependent Variable
$Post = \beta 0 + \beta 1NICFI,t + EI,t$

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	0.0251	0.0353	0.5030	0.4782
NCIF	1	2.511E-8	2.76E-8	0.8278	0.3629

p<0.01, p<0.05; n=3,205
Source: Ames (2013)

Table 3 represents a more complex test of H1 including Inita, NICF and SPOS as variables of interest, but including a variety of other factors as control variables following Morais and Curto (2008)[3]. The results of this table indicate that there was no significant change in Inita (pvalue > .35) or in this specification, NICF (p-value > .45). These results suggest that the adoption of IFRS in South Africa has not improved accounting quality with respect to reported earnings. Perhaps one positive signal is that even though, as previously discussed, South Africa has lagged behind other developing nations in the wake of the financial crisis in terms of GDP, there are present in these results some signs of positive economic development in the post IFRS adoption period. For example, firm size (measured as the log of total assets) increased significantly post IFRS adoption (p-value < .0001). Operating cash flows (ocf) increased significantly as well post adoption (p-value < .03). SPOS, which captures small positive earnings, was statistically insignificant (p-value> .75). The results of this table suggest that earnings management did *not* decrease post IFRS adoption.

Table 3: Third test of H1: Logistic regression with POST as the Dependent Variable
$Post = \beta_0 + \beta_1 INITA_{I,t} + \beta_2 NICF_{I,t} + \beta_3 SIZE_{I,t} + \beta_4 growth_{I,t} + \beta_5 eissue_{I,t} + \beta_6 LEV_{I,t} + \beta_7 dissue_{I,t} + \beta_8 TURN_{I,t} + \beta_{10} SPOS_{I,t} + E_{I,t}$

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-0.9202	0.1576	34.0804	<.0001
Inita	1	0.000018	0.000021	0.7557	0.3847
NICF	1	-6.71E-6	9.636E-6	0.4843	0.4865
size	1	0.1065	0.0206	26.7319	<.0001
growth	1	0.00398	0.0163	0.0597	0.8069
eissue	1	0.0363	0.0438	0.6856	0.4077
LEV	1	-0.00230	0.00205	1.2612	0.2614
dissue	1	1.6091	0.1604	100.6187	<.0001
TURN	1	-0.0598	0.0383	2.4355	0.1186
ocf	1	0.000047	0.000020	5.2210	0.0223
spos	1	0.0599	0.2353	0.0648	0.7991

p<0.01, p<0.05; n=2,885
Source: Ames (2013)

The second measure of accounting quality—value relevance is tested in Table 4. H2 says that post IFRS adoption, an increase in value relevance should be observed as investors pay more attention to reported values. The dependent variable is the trading price of the firm's in period t+1 relative to the reported financial statement items. This is the first test that involves a continuous dependent variable. This makes a traditional ordinary least squares regression the appropriate choice. The R-squared statistic (.3145) indicates that model explains over 31% of the variation in the firm's trading price. This value suggests that the model contains useful information in the evaluation of H2, and is roughly in line with the

R-squared statistics found in other international studies considering earnings management such as Leuz et al. (2003).

The results indicate that post IFRS adoption, assets explain significantly less of share prices than they did pre adoption (p-value < .001). Conversely, liabilities explain significantly more of share prices than they did post adoption (p-value <.001). Perhaps these results may be explained by a pre-IFRS over-reliance on assets relative to less reliably reported liabilities prior to international standard adoption. Alternatively, it could be the case that in the first several years after South Africa began adhering to International Financial Reporting Standards, the market was unable to properly value stated assets due to a lack of familiarity with the new standards, or a lack of consistency in application. Another possibility is that the new standards offered flexibility in reporting of assets (such as accounts receivable, long term assets, and others) at fair value that reduced the value of reported information to investors. This explanation only works if the previously utilized standards were superior in the requirements for reporting assets. More likely, the financial crisis is behind the changes in value relevance. In the years after IFRS adoption, during the financial crisis, the fair value of assets, especially level 2 and level 3 assets varied widely depending on assumptions. These assumptions were necessary given the lack of liquidity of many securities during this period.

The case for the decrease in the value relevance of liabilities is more challenging. After the adoption of IFRS, the value relevance of liabilities increased significantly. This may be a mechanical byproduct of the fact that assets decreased in value relevance over the same period. It may also be the case that liabilities, potentially previously valued at historical cost, began to be valued at fair value. Taken together, conjecturially speaking, the most likely combination is that the use of fair value estimates is an improvement, generally speaking, though exceptions exist, as in the case of assets during the financial crisis.

Among income statement components, neither depreciation and amortization nor interest and taxes increased their value relevance significantly (p-values > .2 & .9, respectively). This may be due to the differences between IFRS standards in accounting for income statement items (which in many instances is similar to IASs and GAAP) and IFRS standards in accounting for balance sheet items generally involves fair value accounting to a greater degree than other accounting methods, which emphasis historical cost in accounting for assets and liabilities. In summary, these results suggest that the value relevance of IFRS is a mixed bag—after adoption some balance sheet items became more or less relevant to investors while the income statement, or at least the income statement items captured in my model remained at the same level in terms of value relevance to investors after IFRS adoption.

Table 4: Test of H2: Regression with Price$_{t+1}$ as the Dependent Variable

$$Price_{I,t+1} = \beta_0 + \beta_1 TA_{I,t} + \beta_2 LT_{I,t} + \beta_3 POST_{I,t} + \beta_4 TA*POST_{I,t} + \beta_5 LT*POST_{I,t}$$
$$+ \beta_6 DA_{I,t} + \beta_7 DA_{I,t} + \beta_8 IT_{I,t} + \beta_9 DA*POST_{I,t} + \beta_{10} IT*POST_{I,t} + E_{It}$$

Parameter	Estimate	Standard Error	t Value	Pr > |t|
Intercept	25.15134210	1.34846769	18.65	<.0001
AT	0.00074937	0.00035862	2.09	0.0369
LT	-0.00206394	0.00070252	-2.94	0.0034
post	-16.05508680	1.59550603	-10.06	<.0001
AT*post	-0.00101560	0.00036234	-2.80	0.0052
LT*post	0.00206545	0.00072739	2.84	0.0046
DA	0.00308252	0.00493323	0.62	0.5322
IT	0.00001694	0.00000933	1.82	0.0697
post*DA	0.00654564	0.00521158	1.26	0.2094
post*IT	0.00004749	0.00050706	0.09	0.9254
R-Square	Coeff Var	Root MSE	PRC Mean	
0.314534	67.74322	14.44920	21.32937	

p<0.01, p<0.05; n=941

source: Ames (2013)

5. Conclusion

South Africa's relatively early adoption of IFRS standards is unique among its peers. This paper studies the impact of IFRS adoption on accounting quality, measured in two broad ways—earnings quality and value relevance. Contrary to my initial hypothesis, I find that earnings quality is not significantly improved among firms in my sample post IFRS adoption. I also find that specific components of the balance sheet changed in value relevance post IFRS adoption. These results are consistent with the notion that IFRS standards improved the quality of some, but not all, financial reporting components in South Africa.

These results contribute to the discussion about the potential impact of IFRS adoption on the accounting quality of firms in other countries waiting to adopt, most notably the United States.   Future research might incorporate the impact of legal tradition on reported accounting quality in a pre and post IFRS adoption setting. Furthermore, researchers might study the incidence of earnings management and value relevance of reported values pre and post IFRS adoption in a setting in which the previous standards were consistent with GAAP as opposed to IAS.

The limitations of this study are common to archival methods of research. For example, because the data is not collected in a carefully controlled environment, it is nearly impossible to effectively control for all effects influencing the data. Macroeconomic effects are of particular concern. Another limitation, specific to this study, is the quality of the data available for South Africa, which may not be as high as the quality of more commonly studied nations, such as the United States. However, in spite of these limitations, there are some significant implications, especially when considered in the context of related studies. These results are likely to be of special interest to regulators and potential investors considering or currently involved in South Africa.

Observing generally, these results, which are mixed at best and fairly consistent with those found in other countries, are cause for concern about international standard convergence. While George (2008) found a decrease in earnings management in the United

Kingdom post IFRS adoption, Zhou et al. (2009) found a decrease in earnings management in Chinese firms and Morais and Curto (2008) found a decrease in earnings management in Portuguese firms, though Elbannan did not find the same thing in Egyptian firms. He attributes his findings to the lack of enforcement by regulators and a lack of training for those preparing and auditing the financial statements.   The same issues may be at play in this fellow African country. Given the positive impact of IFRS adoption on other economies, these results suggest that more careful implementation and enforcement of IFRS standards may be required in South Africa, and perhaps other countries with similar enforcement characteristics.

References

Ball, R.; Brown, P. 1968. An empirical evaluation of accounting income numbers. *Journal of Accounting Research* 6:2, 159-178.

International financial reporting standards (IFRS): pros and cons for investors.2006. Accounting and Business Research, *International Accounting Policy Forum* 5-27

Barth, M.; Landsman, W.; Lang, M. 2005.International accounting standards and accounting quality. *Working Paper*, Stanford University.

Barth, M. et al. 2008 Market reaction to the adoption of IFRS in Europe. *Working Paper*.

Burgstahler, D.; Dichev, I. 1997. Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics* 24, 99-126.

Chan, K. et al. 2004. Earnings quality and stock returns. *Working Paper*, University of Illinois at Urbana-Champaign.

Cohen, D. 2003. Quality of financial reporting choice: determinants and economic consequences. *Working Paper*, New York University.

World Databank. 2010. Development Data.
Retrieved from: http://databank.worldbank.org/ddp/home.do?Step=12&id=4&CNO=2

Elbannan, M. 2011. Accounting and stock market effects of international accounting standards adoption in an emerging economy. *Review of Quantitative Finance and Accounting* 36:2, 207-245.

Iatridis, G. 2008. Implementation of International Financial Reporting Standards and the Quality of Financial Statement Information; An Investigation of Earnings Management and Value Relevance. *University of Thessaly*.

IFRS. 2011. Africa Embraces IFRS.
Retrieved from http://www.ifrs.org/Features/Pages/Africa-embraces-IFRSs.aspx

Leuz, C., Nanda, D., Wysocki, P. 2003. Earnings management and investor protection: an international comparison. *Journal of Financial Economics* 69:3. 505–527.

Morais, A.I., Curto, J.D. 2008. Accounting quality and the adoption of IASB standards: portuguese evidence. *Revista Contabilidade and Finanças* 19:48,103-111.

Penman, S. 2002. The quality of financial statements: perspectives from the recent stock market bubble. *Working Paper*, Columbia University.

Zhang, X. 2002. Accounting conservatism, the quality of earnings and stock returns. *The Accounting Review* 77, 237-264.

PWC. 2011. IFRS and CPCs – The new Brazilian accounting environment.
Retrieved from: http://www.pwc.com.br/pt/ifrs-brasil/assets/booklet-ibri-11-ingles.pdf

Schipper, K.; Vicent, L. 2003. Earnings quality. *Accounting Horizons* 97-110.

Selassie, A. 2011. What Ails South Africa. *Finance and Development* 48:4.

L Street, D., Gray, S. J., Bryant, S. M. 1999. Acceptance and observance of international accounting standards: an empirical study of companies claiming to comply with IASs. *The International Journal of Accounting 34*:1, 11-48.

White, G., Sondhi, A., Fried, D. 2003. *The analysis and use of financial statements*. 3. ed., John and Wiley and Sons.

Yee, K. 2006. Earnings quality and the equity risk Premium: a benchmark model. *Contemporary Accounting Research* 23:3.

Zhou, H., Xiong, Y., Ganguli, G. 2009. Does The Adoption Of International Financial Reporting Standards Restrain Earnings Management? Evidence from An Emerging Market. *Academy of Accounting and Financial Studies Journal* 13, 43-56.