POSITIVE INFLUENCES OF GOVERNANCE, LEGAL, EDUCATIONAL AND MARKET FACTORS ON AUDIT ENVIRONMENTS

Pran Boolaky*, Conor O'Leary**

Abstract

As companies trade beyond their national borders, corporate boards need to evaluate the effectiveness of audit regulatory environments in foreign countries. A model with which to assess the strength of financial audit and reporting standards of individual countries would be beneficial. This study develops and tests such a model. Many factors are identified which impact upon financial assurance environments. These include corporate governance, legal, educational and market factors. A thirteen variable model was devised to predict the strength of a country's financial assurance environment. An actual score for this was obtained from a World Economic Forum report. Using the geographical area of sub-Saharan Africa, as this contains a range of economies from mature to developing, the model was tested on 28 countries. Eight of the thirteen variables were significant, proving that governance, legal, educational and market factors all impact positively on a country's audit regulatory environment. Variations in individual countries' scores are discussed. The implications are that a model can be developed and used by corporate boards to compare countries' audit environments before deciding where to trade.

Keywords: Governance, Legal Factors, Educational Factors, Market Factors, Audit Standards, Reporting Standards, Sub-Saharan Africa

**Department of Accounting Finance and Economics, Griffith Business School, Nathan Campus, Griffith University, Australia*
***Corresponding Author, Department of Accounting Finance and Economics, Griffith Business School, Building 1 (N50), Room 2.36, Nathan Campus, Griffith University, 170 Kessels Road, Nathan QLD 4111, Australia*
Tel.: +61 7 3735 7225
Fax: +61 7 3735 3719
Email: c.oleary@griffith.edu.au

Introduction

The business environment is continually evolving into a global rather than national phenomenon. As a result, the responsibilities of corporate boards have become more critical. Directors need to evaluate the stability of financial markets not only of their own country, but also of any foreign countries their companies may be expanding into. With the establishment of trade partnerships such as the European Union (EU), South East Asia Alliance (ASEAN) and the Association of African Trade Partners Organisation (AATPO), assistance is available for those seeking information about new markets. Similarly these organisations attempt to standardise procedures, to assist in the smoother running of international business.

Accounting and auditing play a critical role in assisting the development of international business. Here also there is evidence of moves towards standardisation of practices. International financial reporting standards (IFRSs) and international auditing standards (ISAs) continue to be implemented worldwide. The pace of adoption varies from country to country. Despite these international pronouncements, and other attempts at global harmonisation, the financial reporting and auditing jurisdictions of all countries are not homogeneous. Many factors such as governance, legal, educational and market issues all impact on the overall effectiveness of the financial reporting environment.

Referring specifically to the audit function, little attempt has been made in the extant literature to gauge how effective individual audit reporting environments are in various countries, relevant to each other. Similarly, issues such as whether or not the adoption of the same (or similar) auditing standards results in a uniformly strong financial assurance environment appear worth addressing. The purposes of this paper are therefore twofold.

First, the study attempts to devise a suitable model with which to measure the strength of financial auditing and reporting environments, in individual countries. This is important because, as discussed above, many countries are keen to trade abroad, as barriers to international trade become fewer. But when trading abroad, it becomes critical for corporate boards to be informed about the reporting environments in the countries of their foreign trading partners. Second, many countries in the world are classified as emerging economies and therefore potential markets for investment. Any ranking system which helps to evaluate a country's financial assurance environment, relative to other countries in the region, would be beneficial to the boards of international companies interested in foreign investment. In summary, research on the strength of financial assurance environments and its determinants in individual jurisdictions, is sparse. This paper is intended to fill some of these gaps.

The second purpose of the study is then to use this model, to compare the relative strength of the financial assurance environments of twenty eight sub-Saharan African countries, the sample geographical area chosen to test the model. This comparison will also assist in determining whether or not countries at the same or similar stages of ISA adoption, demonstrate similar strength in the level of their SARS environments. The Global Competitiveness Report (2009) of the World Economic Forum (WEF, 2010) provides a comparative qualitative picture of the economic and business environments of individual countries. One of the variables assessed is referred to as the strength of *financial auditing and reporting standards* (referred to hereon as FARS*)*. It would appear critical to attempt to evaluate the factors that influenced the FARS assessments. This study therefore utilises other variables from the WEF report, those relevant to evaluating the financial auditing environment, to devise a model for measuring FARS. The variables are grouped into four main categories, namely: corporate governance, legal framework, education levels and market influences.

This paper contributes to corporate board literature in three ways. First, potential investors can use FARS evaluations to assist investment decisions, as it is assumed prudent investors will wish to invest in countries with strong audit and reporting environments. Second, researchers can use the model in future studies of regional or even country comparatives. Third, the paper contributes to the literature on the strength of financial auditing and reporting standards in sub-Saharan Africa, a region that has not been well researched.

The remainder of this study is organised as follows. The next section contains a literature review of studies on audit regulatory quality. From that review a conceptual framework with which to evaluate the strength of financial auditing and reporting standards is developed and specific hypotheses are derived. The following section discusses data collection and testing methodology. Empirical results are then presented and analysed. The concluding section summarises the study, discusses limitations and offers areas for future research.

Literature Review and Hypotheses Development

Audit Quality

Auditing is fundamental for the effective functioning of capital markets because auditing helps to reduce agency risks (Watts and Zimmerman , 1986). But measuring the strength of audit quality is problematic. Many studies on audit quality focus on the so called "big four" auditors in the profession and relate the quality of audit with the type of audit firm (Durnev et al., 2005; Fan and Wong, 2005; Choi and Wong, 2007; Lennox, 1999; Francis and Wang, 2004). Other factors however also impact on the effectiveness of auditing and reporting environments. The literature on auditing is very rich in the areas of ethics, theoretical applications, audit procedural practices, audit fees, audit rotation, training and education, etc. (see Watts and Zimmerman, 1986; Peecher and Solomon, 2001; Asare and Wright, 2001; Cobbin, 2002; Nikkinen and Sahalstrom, 2004; Frazer and Lin, 2004; Bewley et al., 2008). All these factors impact on effectiveness to some extent.

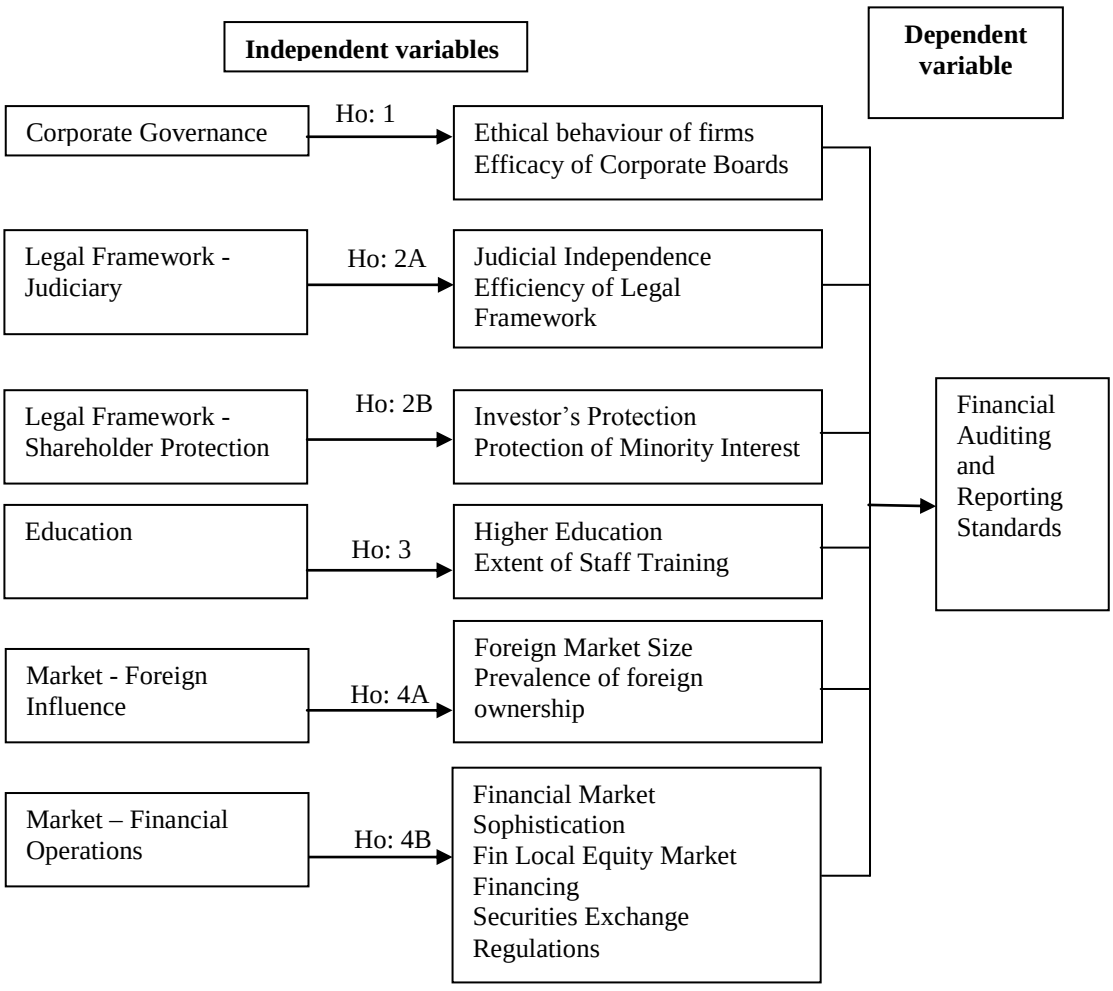
Accounting literature suggests there are many factors which impact upon a country's accounting systems and practices, including auditing. These include the rules of law, regulation, financial market characteristics and enforcement (see for example, Briston, 1978; Hove, 1986; Nobes, 2010; and Hatfield, 1911). These arguments support the concept that a country must have a good FARS environment to be able to ensure effective functioning of the capital market, a point highlighted by Lennox (1999) and Carson (2009). The extant literature demonstrates a significant volume of work concerning audit quality in general. However, specific research aimed at identifying groups of factors, that is, a predictive model with which to evaluate the strength of audit regulatory environments, appears very limited.

Conceptual Framework and Hypotheses Development

From the above review, four main determinants of the strength of financial auditing and reporting standards are derived. These are: corporate governance factors, legal framework (further sub-divided into judiciary and shareholder protection factors), education factors and market factors (further sub-divided into foreign influences and market operations factors). The two sub-divisions are made to clarify the extraction of these factors from the extant literature below.

Each determinant is taken in turn and the literature is further reviewed to extract specific variables which can be utilised to evaluate them. The majority of these have previously been used in the literature but we supplement these with some new variables. These have been derived from the WEF (2010) report and are included as they could be predictors of *country level* audit quality standards and reporting. We then assess whether an overall FARS score for individual countries can be accurately predicted from the model. The full FARS process is conceptualised in the figure below.

Figure 1. Conceptual Framework and Hypotheses



Corporate Governance Hypotheses

Cohen et al., (2004) suggest that the quality of auditing and reporting depends on factors such as the effectiveness of audit committees and independence of their members (see also De Zoort et al., 2003). In a similar vein, Francis et al., (2003) contend that the quality of corporate governance positively affects the quality of reporting in countries where corporate governance focuses on stronger investor protection. Given that accounting literature suggests a positive relationship between effectiveness of audit committee and quality of reporting, this paper therefore hypothesises corporate governance variables should impact on SARS. However, the literature is silent as regards one particular element of corporate governance, the impact of the ethical behaviour of firms. This is deemed significant enough to be evaluated by the WEF in their reports and so is added here to one existing element. Hence the first two hypotheses are therefore stated as follows:

Ho 1.1: There is a positive relationship between the ethical behaviour of firms in a country and assessment of its FARS .
Ho 1.2: There is a positive relationship between the efficacy of corporate boards in a country and assessment of its FARS.

Legal Framework (Judiciary) Hypotheses

The legal tradition of a country is the basis for defining its legal system. Many studies, such as La Porta et al. (1998) note how a country's legal framework impacts upon the quality of reporting of that country. Similarly, Barniv et al., (2005) use two factors at country level, to determine impact on FARS on individual analysts, namely judicial independence and the efficiency of the legal framework. Both were found to be significant. It would therefore appear valid to assume these variables, measures of a country's legal environment, can be utilised to predict the strength/weakness of the audit reporting environment of that country. Hence, the next two hypotheses are:

Ho 2A.1: There is a positive relationship between the level of judicial independence in a country and assessment of its FARS.
Ho 2A.2: There is a positive relationship between the efficiency of the legal framework of a country and assessment of its FARS.

Legal Framework (Shareholder Protection) Hypotheses

David and Brierly (1985) classify legal traditions into two types, common law and civil law. Using this differentiation, La Porta et al., (1998) suggest that common law tradition provides more investor protection (including minority interest protection) than civil law tradition. Many studies have used La Porta et al.'s (1998) proposition to measure legal impact on the quality of reporting in a country. The authors consolidate their work in a subsequent study (2006). They theorise that a country with a strong investor protection environment will offer better audit quality. The next two hypotheses are therefore stated as follows:

Ho 2B.1: There is a positive relationship between the level of investor protection in a country and assessment of its FARS.
Ho 2B.2: There is a positive relationship between the level of protection of minority interest in a country and assessment of its FARS.

Education Hypotheses

Accounting literature supports the theory that a country's level of education impacts on the strength of its auditing and reporting (Nobes, 1983; Gray, 1988). In this study two education variables are proposed as determinants of the strength of FARS of a country. They are: average higher education index, often used in the literature, and extent of staff training, never used at country level in the literature. This may be an important country level determinant of the standard of auditing and reporting, as Reynolds and Francis (2001) identified it as significant at individual firm level. It is argued that the strength of FARS in a country depends upon how auditing practice is delegated to professionals, hence the education and deployment of those professionals should impact on regulatory effectiveness. The following hypotheses are therefore tested:

Ho 3.1: There is a positive relationship between the level of higher education in a country and assessment of its FARS.
Ho 3.2: There is a positive relationship between the extent of staff training in a country and assessment of its FARS

Market (Foreign Influence) Hypotheses

The size of the foreign market of a country and prevalence of foreign ownership are also considered, in WEF reports, as significant factors which may impact on the strength of reporting regimes. Furthermore, some countries have key foreign trading partners which exert pressure on them to meet their reporting requirements. Hence, the size of a country's foreign market and the prevalence of foreign ownership may also be important determinants of the FARS assessment in a country. Levich (2001) contends that emerging countries are considered as investment opportunities and therefore the standard of reporting should be of high quality. The next two hypotheses are therefore stated as follows:

Ho 4A.1: There is a positive relationship between the size of the foreign market of a country and assessment of its FARS.
Ho 5.2: There is a positive relationship between the prevalence of foreign ownership in a country and assessment of its FARS.

Market (Financial Operations) Hypotheses

Nobes (1998) suggests that the strength of a country's equity market influences its financial reporting framework. He further argues that the standard of reporting in a country with a strong equity market should be higher than that of a country with a weak equity market. Apart from the strength of a country's equity markets, there are other factors in the financial market environment which may also affect the FARS assessment of a country. These are: the sophistication of the equity market, the strength of securities exchange rules, and the level of financing through local equity markets, A more sophisticated financial market (in terms of stage of development) will require stronger auditing and reporting standards and some countries do not necessarily have a sophisticated financial market compared to others (Ong and Lorgova, 2008). Concurring with Nobes (1998), it is evident that when market capitalisation per capita is high, it implies that investors are investing more and that demonstrates confidence in financial information, thus a strong reporting environment. This would tend to suggest securities exchange regulations are considered reliable and local equity markets are considered a safe environment for investment.

However, the assessment of FARS may not only be determined by the variables proposed by Nobes (1998). As mentioned above, sophistication rather than mere size may be a better explanatory variable. The final three hypotheses are therefore stated as follows:

Ho 4B.1: There is a positive relationship between the level of sophistication of the financial market of a country and assessment of its FARS.
Ho 4B.2: There is a positive relationship between the ease of financing through local equity markets in a country and assessment of its FARS.
Ho 4B.3: There is a positive relationship between the strength of the securities exchange regulations of a country and assessment of its FARS.

Data and Methodology

Data for this study is drawn from the World Economic Forum's (WEF) 2010 report entitled: *Global Competitiveness Report 2009-2010*. The report was constructed from a combination of two distinct sources, an Executive Opinion Survey and international hard data sources. The survey provides a valid source from which to assess the competitiveness of the economies of individual countries surveyed. It addresses 12 pillars of the Global Competitiveness Index. These are:

1st pillar: Institutions; 2nd pillar: Infrastructure; 3rd pillar: Macroeconomic stability; 4th pillar: Health and primary education; 5th pillar: Higher education and training; 6th pillar: Goods market efficiency; 7th pillar: Labor market efficiency; 8th pillar: Financial market sophistication; 9th pillar: Technological readiness; 10th pillar: Market size; 11th pillar: Business sophistication; 12th pillar: Innovation.

The 12 pillars are then sub-divided into 110 variables[18] used to evaluate the pillars. The survey questions are assessed on a 7-point Likert scale, where 1 is the lowest possible score and 7 the highest possible score. The hard data are basically quantitative data collected from a variety of sources. For this study, fourteen variables from the 110 variables in total assessed by the study were selected.

The **dependent variable** is the assessment of the strength of *financial auditing and reporting standards* (**FARS**). This refers to the strength of financial auditing and reporting standards in a given country, as compared to other countries in the sample. It was measured by the CEOs of 137 countries who took part in the executive opinion survey. They ranked it on a scale from 1 (extremely weak) to 7 (extremely strong).

Thirteen other variables (described below) from the study were then used to see if they were adequate predictors of the FARS score. These variables have been included in the conceptual framework devised earlier, under the four major category – and two sub-divisions - headings.

EBOF: Ethical behaviour of firms compares corporate ethics (ethical behaviour in interactions with public officials, politicians, and other enterprises) of firms in one country with firms of other countries in the world. (pillar 1).

EOCB: Efficacy of corporate boards refers to characteristics of corporate governance based on corporate governance factors pertaining to boards of directors in a country. (pillar 1).

JUDI: Judicial independence measures the extent to which judiciary in a country is independent from influences of members of government, citizens and the public. (pillar 1).

EOLFW: Efficiency of legal framework in challenging regulations refers to how efficient the legal framework for private business is in challenging the legality of government actions and/or regulations. (pillar 1).

INVPRO: Strength of investor protection is a combination of the Extent of disclosure index (transparency of transactions), the Extent of director liability index (liability for self-dealing), and the Ease of shareholder suit index (shareholders' ability to sue officers and directors for misconduct). (pillar 8). (Hard data).

PROMIN: Protection of interest of minority shareholders measures the extent to which minority shareholders' interests are protected by the legal system. (Appendix 1, pillar 1).

HET: Higher education and tertiary enrolment refers to the gross tertiary education enrolment rate in a country. (pillar 5). (Hard data).

EXTSTRA: refers to the extent companies in a country invest in training and development of their staff. (pillar 5).

FOREMS: The size of the foreign market is estimated as the natural log of the total value of exports of goods and services, normalized on a 1–7 scale. (pillar 10). (Hard data).

POFO: Prevalence of foreign ownership refers to the proportion of companies in a country owned by overseas companies. (pillar 6).

FMS: Financial market sophistication refers to how sophisticated the financial market is in a country, relative to other countries. (pillar 8).

LEMF: Financing through local equity market refers to the ease with which money is raised by issuing shares on the stock market in a country. (pillar 8).

SER: Securities exchange regulations refers to the assessment of the strength of regulation of securities exchange of a country. (pillar 8).

[18] Refer to *WEF* (2010) report for a breakdown of the 110 individual variables

It was decided to test the models predictive powers on sub-Saharan African countries, as this geographical area has received scant attention in the audit literature as regards strength of reporting and regulatory frameworks. Further it was considered this subset would contain a good mix of developing and developed economies with which to compare the models accuracy. The 2009-2010 WEF report covered 139 countries worldwide. 45 of these countries were in sub-Saharan Africa. Of these 45, complete data for all variables was only available for 28 countries. So the final sample is 28 countries, listed alphabetically at Table 1.

Empirical Results and Analysis

Review of Raw Data

The analysis commences by reporting the FARS score of each country, in alphabetical order, at Table 1. On a seven point scale the range was significant, from a high of 5.8 for Senegal to a low of 2.8 for Chad, Djibouti and Togo. The FARS score – derived from the *WEF* report - is then compared to another world report on the adaptation of auditing standards globally, namely the International Federation of Accountants' (IFAC) *Compliance Program Report* (2009). This report classifies countries on the basis of ISA adoption using four groupings:

(i) ISA required by law or regulation;
(ii) ISAs are adopted by the national standard setter to be used in the country;
(iii) National Standards are ISA, but any modifications(s) to meet local requirements are stated to be in line with the spirit of the IAASB; and
(iv) Other (i.e. country for which no data is available, or have declared convergence with ISAs but are far away from achieving this objective).

For the purposes of this study, scores from 4 to 1 have been assigned to categories (i) to (iv) respectively. The reason for allocating a higher score to category (i) and reducing the score accordingly as we move down the other categories, is based upon the assumption that mandatory ISAs should result in a more reliable governance environment than the other alternatives. Using the first set of scores (Table 1, column 2) let us now evaluate the predictive powers of the FARS model.

Table 1. Countries Used for FARS Evaluation and Comparisons with IFAC ISAs Classifications

Countries	FARS Scores from WEF Report	IFAC ISAs Classification	
1.Benin	3.9	n/a	
2.Botswana	3.9	3	
3. Burkina Faso	4.2	n/a	
4. Burundi	3.3	n/a	
5. Cameroon	3.1	1	
6. Chad	2.8	n/a	
7. Ivory Coast	4.1	n/a	
8. Djibouti	2.8	n/a	
9. Ethiopia	3.8	n/a	
10. Gambia The	5.1	n/a	
11. Ghana	4.7	1	
12.Kenya	4.6	3	
13.Lesotho	3.8	3	
14. Madagascar	3.5	1	
15. Malawi	5.1	3	
16. Mauritania	3.1	n/a	
17. Mauritius	5.1	4	
18. Mozambique	3.1	n/a	
19. Namibia	5.6	3	
20. Nigeria	4.0	2	
21. Senegal	5.8	1	
22. Sierra Leone	3.1	1	
23.South Africa	3.9	3	
24. Tanzania	4.2	3	
25. Togo	2.8	n/a	
26. Uganda	3.9	3	
27.Zambia	4.7	3	
28. Zimbabwe	5.0	3	

Sources: IFAC (2009), WEF Report (2010).

Predictive power of FARS model

Because the number of observations is limited to 28 countries and the independent variables are thirteen in total, running a total regression model with this data structure would over-express the model. The study therefore runs six separate models (Models 1-4B, Tables 2 to 7)) using different variables in each. The variables are split as per the hypotheses, to evaluate the four main categories and the two sub-divisions. The ranks of FARS are regressed on the ranks of the various independent variables, by category, on a country-by-country basis. Tables 2 to 7 report the findings.

Considering each category in turn, let us begin with the two corporate governance variables and their influence on FARS. Model 1 (Table 2) which demonstrates the regression, noted both to be statistically significant. The adjusted R^2 of the model is 81.4%. EBOF is statistically significant at the .01 level and ECOB is significant at the .001 level. This result empirically supports both hypotheses 1.1 and 1.2.

Table 2. Multiple Regression Result (Model 1: Corporate Governance Determinants)

Variable	Coefficient	tvalue	pvalue
Constant		0.131	0.896
EBOF	0.408	3.469	**.002*** **
ECOB	0.574	4.881	**.000**** **
Adjusted R Square = 0.814		F = 59.945.	**p <.001**

=significant @.01, *=significant @.001. n = 28 for all tables.

Referring to the impact of legal determinants on FARS, these were sub-divided into two categories. Firstly consider the judicial factors. Model 2A, at Table 3 reveals the adjusted R^2 to be 54.3%. One of the variables is statistically significant at conventional levels (*JUDI* at the .10 level). This supports hypothesis 2A.1 which states that the level of judicial independence in a country influences its strength of auditing and reporting standards. The other judicial legal framework variable, EOLWF is not significant.

Table 3. Multiple Regression Result (Model 2A: Legal Framework – Judiciary)

Variable	Coefficient	tvalue	pvalue
Constant	-	1.434	0.164
JUDI	0.466	1.995	**.057***
EOLFW	0.327	1.396	0.175
Adjusted R Square = 0.543		F = 17.070	**p <.001**

*= significant @.10

Model 2B (Table 4) tests the impact of the second set of legal factors - shareholders' interests variables - as determinants of the strength of FARS. The adjusted R^2 of the model is 77.0% and both variables were deemed significant. PROMIN is statistically significant at the .001 level. This supports hypothesis 2B.2 which suggests that the strength of auditing and reporting in a country is associated with the level of protection of minority interests. INPRO is statistically significant at the weaker level of .10, thus supporting hypothesis 2B.1 which suggests the strength of investor protection (assessed by hard data) impacts positively on the strength of auditing and reporting.

Table 4. Multiple Regression Result (Model 2B: Legal Framework - Shareholder Protection)

Variable	Coefficient	tvalue	p.value
Constant		1.660	0.109
INPRO	0.213	1.987	**0.058***
PROMIN	0.759	7.078	**0.000**** **
Adjusted R Square = .770		F = 46.180	**p <.001**

****=significant @.001, *= significant @.10

Model 3 (Table 5) tests the education variables as determinants of effectiveness of FARS. The adjusted R^2 of the model is 61.6%. EXSTATRA is statistically significant at the .001 level. This supports

hypothesis 3.2 which suggests that the strength of auditing and reporting in a country is associated with the training of staff. The other education factor HET was not found significant.

Table 5. Multiple Regression Result (Model 3: Education Determinants)

Variable	Coefficient	tvalue	pvalue
Constant		.246	0807
HET	0.002	0.013	0.990
EXSTATRA	0.801	4.884	**0.000******
Adjusted R Square = 0.616		F = 22.667	**p <.001**

****=significant @.001

Model 4A (Table 6) deals with the first subset of financial market variables, namely foreign influence. The adjusted R^2 of the model is 26.9%. POFO is statistically significant at the .05 level. This supports hypothesis 4A.2 which suggests that the strength of auditing and reporting in a country is associated with the prevalence of foreign ownership of entities. The other foreign influence factor FOREMS was not found significant.

Table 6. Multiple Regression Result (Model 4A: Market - Foreign Influences)

Variable	Coefficient	tvalue	pvalue
Constant		0.702	0.489
FOREMS	0.214	1.256	0.221
POFO	0.472	2.764	**0.011****
Adjusted R Square = 0.269		F = 5.970	**p <.001**

**=significant @.05

Finally, Model 4B (Table 7) tests the other subset of financial market variables, namely financial operations, as determinants of FARS effectiveness. The adjusted R^2 of the model is 81.7%. One of the three independent variables put into the regression is statistically significant. FMS is significant at the .01 level. This result empirically supports hypothesis 4B.1 which suggests the sophistication of the financial market is associated with the strength of auditing and reporting standards. In like manner, the finding in this Model supports the theory that the Securities Exchange Regulations impact on the strength of auditing in this region. The other two variables in this category LEMF and SER were not significant.

Table 7. Multiple Regression Result (Model 4B: Market - Financial Operations)

Variable	Coefficient	tvalue	pvalue
Constant	-	1.326	0.197
FMS	0.669	3.611	**0.001*****
LEMF	.041	.271	0.789
SER	0.232	1.006	0.324
Adjusted R Square = 0.817		F = 16.046	**p <.001**

***=significant @.01

The main findings of this study, as regards the predictive powers of the FARS model (objective 1) are summarised at Table 8. Overall, strong support (significant at <.01) is found for hypotheses H1.1, H1.2, H2B.2, H3.2, and H4B.1. Modest support (significant at <.10) is found for hypotheses H2A.1, H2B.1 and H4A.2. Eight of the thirteen variables were therefore found to be significant predictors of the effectiveness of FARS in a country. Only five of the thirteen variables, H2A.2, H3.1, H4A.1, H4B.2, and H4B.3 are rejected (i.e. this study provides no empirical support for these hypotheses at a country level).

Table 8. Summary of Empirical results

Model Variables	1: Corporate Govern'ce	2A: Legal - Judiciary	2B: Legal - S'holder protection	3: Educ'n	4A: Market - Foreign Influence	4B: Market Finan'l Operats
H1.1	**Accepted @ <.01**					
H1.2	**Accepted @ <.001**					
H2A.1		**Accepted @ < .1**				
H2A.2		Rejected				
H2B.1			**Accepted @ < .1**			
H2B.2			**Accepted @ .001**			
H3.1				Rejected		
H3.2				**Accepted @ <.001**		
H4A.1					Rejected	
H4A.2					**Accepted @ <.05**	
H4B.1						**Accepted @ <.01**
H4B.2						Rejected
H4B.3						Rejected

Referring to the conceptual framework diagram of the FARS model (Chart 1) all four variable categories, including the two sub-divisions, derived from the extant literature on quality of reporting were deemed to have significant predictive powers in evaluating the rank given to the FARS evaluation of a country. Tables 2 to 7 all demonstrate a *p* score of < .001 for each overall category. However each category may have been dominated by one individual variable in arriving at that overall score, as the breakdown into individual variables only reveals 8 of the 13 to be significant. These results would tend to suggest a model can be developed to predict effectiveness of FARS of a country; some variables may just need to be re-assessed. The five non-significant variables are discussed below.

Three variables which were not found to be good predictors of the FARS score, had been derived from the literature on audit quality. Efficiency of legal frameworks, securities exchange regulations and higher education levels did not impact significantly. The other two variables which were found to be non-significant (local equity market financing and foreign market size) were extracted from the WEF report. Considering these variables, as our geographical sample comes from a predominantly less well developed area of the globe, in terms of legal, financial governance and higher education frameworks, this may explain the results. It would be interesting to evaluate the results in more mature legal, financial regulatory and higher education environments and this has been noted as an area for future research below.

It is interesting to note the significance of the two corporate governance variables, namely ethical behaviour of firms and efficacy of corporate boards, on the overall SARS score. The corporate governance category and the legal category (as regards shareholder protection) were the only two of the six categories in which all assigned individual variables were found to be significant. Past literature has noted investor's protection legislation as a good determinant of strong audit reporting frameworks, but this study notes the importance of governance issues as well. Possibly they are needed as a support for the former category, to ensure it works well.

Analysis of the Strength of Auditing and Reporting Standards in sub-Saharan Africa

Let us now return to the second stated objective of the paper, whether there is any level of consistency across jurisdictions that are at the same stage of ISA adoption. Table 1 reports that of the 28 countries in this study only one has made ISA mandatory, Mauritius with a classification (as explained at the empirical results section above) of 4. Ten countries received a classification of 3, i.e. they use their own national auditing standards, but those that they have, do comply with ISAs. Despite being at the same stage of ISA adoption these ten countries demonstrated a wide variation in SARS scores, from 5.6 to 3.8. Ironically, a country with the weakest IFAC classification of 1 (indicating ISAs have not been adopted and the country is far from achieving this objective) received the highest SARS score, Senegal at 5.8. Hence, there does not appear to be any correlation between adoption of ISAs and SARS for the countries in this geographical area. Standardisation of auditing standards will not guarantee standardisation of the quality of the reporting environment.

Summary and Conclusions

As global trade expands, it would appear a valid pursuit to attempt to evaluate the strength of financial audit and reporting standards in individual countries. This study attempts to devise a model with which to predict the strength of financial auditing and reporting standards (FARS) in a jurisdiction. A conceptual framework highlighting four categories of variables which impact upon FARS, is derived from the extant literature. Thirteen individual variables were then selected to form the predicting instrument. The model is found to have strong predictive powers. Corporate governance factors (ethical behaviour of firms and efficacy of corporate boards) and legal factors, as regards shareholder protection (strength of investor protection and protection of minority interests) were found to be significant grouping variables. Individual variables from the other grouping categories were also significant. Hence it would appear a model can be derived with which to predict FARS of individual countries.

The model was then used to evaluate the strength of financial assurance environments in 28 sub-Saharan African countries and to compare them to each other. Individual country's FARS scores were found to vary significantly. Furthermore, when compared to IFAC classifications, very little evidence of consistency was noted between classification categories or within classification categories. Countries with supposedly strong reporting regimes (as evidenced by compliance with International Standards of Auditing) were outperformed – in terms of a FARS score - by countries with supposedly poorer reporting regimes (still considering ISA adoption). Also, counties at the same stage of ISA adoption did not reveal similar SARS scores. This would tend to question whether global standardisation of auditing standards across regimes will result in globally standardised audit reporting and regulatory environments. The results of this study would tend to suggest the influence of other factors, such as corporate governance, legal, educational and market issues, will still influence the auditing standards and reporting environments.

This study paves the way for significant future research, First, the model could be tested in other geographical areas to see if it provides similar predictive powers. Second the model could be tested on countries who are categorised as to their level of economic development (fully developed, developing etc.) to evaluate if the model provides consistent results based upon this categorisation of jurisdictions. Finally other variables, not addressed in this study, may be accurate FARS predictors. It would be beneficial to test for these and so possibly enhance the model.

This study has some limitations. First, the model derived here was only tested on one geographical area. As mentioned, sub-Saharan Africa was selected because it has a spread of developed, emerging and developing countries. The model should be tested on other jurisdictions to see if it is still robust. Second, due to the small sample size, 28 countries, the regression analysis was restricted to testing of variables in six separate models as opposed to running one total regression. These limitations however, offer avenues for future research, as mentioned above.

References

1. Asare, S.K. and Wright A (2001), 'Design Consideration on Analytical procedures', *International Journal of Auditing*, Vol. 5 No. 1. pp. 205-214.

2. Barniv, R., Myring, M. and Thomas, W. (2005), The association between the legal and financial reporting environments and forecast performance of individual analysts, *Contemporary Accounting Research,* Vol. 22 No, 4, pp. 727-258.
3. Bewley, K, Chung, J and McCraken, s. (2008), 'An examination of auditor choice using evidence from Andersen's Demise', *International Journal of Auditing,* Vol 12, pp. 89-110.
4. Briston, R.J. (1978), The Evolution of Accounting in Developing Countries, *International Journal of Accounting,* Vol 14. No. 1, pp. 105-120.
5. Carson, E, (2009), 'Industry Specialisation by Global Audit Firm Netwroks', *The Accounting Review,* Vol. 84. No. 2, pp.355-382.
6. Choi, J. H. And Wong, T.J. (2007), 'Auditors Governance Functions and legal Environments: An International Investigations' *Contemporary Accounting Research,* Vol. 24, No. 1 pp.13-46.
7. Cohen, J., Krishnamurthy, G and Wright, A. (2004), 'Corporate Governance Mosaic and Financial Reporting Quality*', Journal of Accounting Literature,* Vol. 19 No. 4 pp. 87-152.
8. Daniel, P., Suranova, Z. And De beedle, I, (2001), 'The Development of Accounting in Slovakia'. *European Accounting Review,* Vol 10. No. 2. Pp.
9. De Angelo, L. (1981), 'Auditor Size and Audit Quality', *Journal of Accounting and Economics,* Vol. 3 No. 2 pp. 183-199.
10. Francis, J.R. (2004), 'What do we know about audit quality', *The British Accounting Review,* Vol. 36, No. 4 pp. 36-72.
11. De Zoort, F.s, Hermanson, D.L and Houston, R.d. (2003), 'Audit Committe Support for proposedaudit adjustments: A source credibility Perspective', *Auditing: A Journal of Practice and Theory,* (Sept) pp. 189-205.
12. Durnev, A. and Kim, E. (2005), 'To steal or not to steal: Firm attributes, legal environment, and valuation', *Journal of Finance,* Vol. 60, No.3 . pp.1461-1493.
13. Fan, J.P.H. and Wong T.J (2005), 'Do external auditors perform a corporate governance role in emerging markets: Evidence from East Asia', *Journal of Accounting Research,* Vol. 43 No. 1, pp.35-72.
14. Gray, S.J. (1988), 'Towards a Theory of Cultural Influence on the Development of Accounting Systems Internationally' *ABACUS,* Vol. 26, March.
15. Hegarty, J.F. and Barros, A. (2004), 'Implementation of International Accounting and Auditing Standards: Lessons from the World Bank's Accounting and Auditing ROSC Program. World Bank Publication.
16. Hove, M.R. (1986), 'Accounting practices in developing countries: colonisation's legacy of inappropriate technologies', *International Journal of Accounting,* Vol. 22 No. 1, pp. 81-100.
17. IFAC (2009), *Basis of ISA Adoption by Jurisdiction,* IFAC Publications. New York.
18. Khurana I.K and Perera, R. (2003), 'The Role of Accounting and Auditing in Corporate Governance and the Development of Financial Markets around the World', *Asia-Pacific Journal of Accounting and Economics,* Vol.10, No. 1 pp.1-30.
19. La Porta, R. Lopez-de Silanes, A, Shleifer, A. and Vishny, R. (1997), 'Legal determinants of external finance', *Journal of Finance,* Vol II, No.6, pp.1113-1155.
20. Lennox, C. (1999), 'Are large auditors more accurate than small auditors', *Accounting and Business Research,* Vo. 29, No.3 pp.217-227.
21. Leuz, c.d. Wyscoki, P.D (2003), 'Earnings management and investor protection: an international comparison', *Journal of Financial Economics,* Vol. 69. No.3, pp.505-527.
22. Levich, R. (2001), 'The importance of Emerging Capital Markets'. *Brookings-Wharton papers on Financial Services: pp.1-45.*
23. Nikkinene, J. and Sahalstrom, T. (2004), 'Does Auditing Theory provide a General framework for Audit Practice', *International Journal of Auditing,* Vol. 8 pp. 253-262.
24. Nobes, C.H (1983), 'A judgemental international classification of financial reporting practices', *Journal of Business Finance and Accounting,* Vol. 10 No. 1, pp. 1-19.
25. Nobes, C.H (2010), 'On Researching into the Use of IFRS by Private Entities in Europe', *Accounting in Europe,* Vol. 7, No. 2, pp.213-226.
26. Ojo, M. (2010), 'The role of IASB and auditing standards in the aftermath of 2008/2009 financial crisis' *European Law Journal,* Vol, 16 No, 5, pp. 604-623.
27. Peecher, M.E and Solomon, J (2001), 'Theory and Experiment in Studies of Audit Judgements and Decisions', *International Journal of Auditing,* Vol. 5. pp. 192-203.
28. Reynolds, J.K and Francis, R. (2001), 'Does Size Matter? The influence of Large Clients on Office-level Auditor Reporting Decisions', *Journal of Accounting and Economics,* Vol. 30 No. 3 pp.376-400.
29. Teo S.H. Wong, T.J (1993), 'Perceived Audit Quality and the Earnings Response Coefficient'. *The Accounting Review,* Vol. 68, No. 2, pp.346-366.
30. Watts R. And Zimmerman, L. (1986), *Positive Accounting Theory,* Prentice Hall, Upper Saddle River, NJ.
31. World Economic Forum (2010). *Global Competitiveness Report 2009-2010*. www.weforum.org.