

EMERGING ROLES OF BEING A PROFESSIONAL ACCOUNTANT IN CONTEMPORARY NIGERIAN ECONOMY

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Abstract

Accountants are expected to be business partners, technology experts, and strategy allies. This research work, therefore, focused on emerging roles of being professional accountants in contemporary Nigeria economy. Out of the population of 200 professional accountants, a sample size of 122 respondents was selected using Taro Yamene's formula. In order to generate the necessary data for the study, a questionnaire designed using a 3-point Likert-scale was administered to the professional accountants of the selected States. Other sources of information were textbooks, journals, interviews and personal observation. The Analysis of Variance (ANOVA) statistical tool was used to test the hypotheses formulated at the beginning of this work. After the analysis of the responses, it was found among others: that the professional accountants play a role in the different stages of the new emerging roles of accounting system lifecycle. The researchers thereafter made useful recommendations and suggested that the accountancy professional bodies should increase their effort in providing functional and cutting edge education to their members and develop curriculum that would incorporate forensic accounting with a view to making them globally competitive.

Keywords: Emerging Roles, Professional Accountant, Contemporary Economy

INTRODUCTION

The role of the accountant in a business environment has been evolving over the years (Scapens, 2001). Besides traditional accounting knowledge, accountants need to possess other skills that are vital to their survival in an effective organization. Among those skills are knowledge sharing, the understanding of information systems design, systems development, and applications (Newman, 2003; Scapens, 1996). The accountants who possess those skills are in a better position to help management in the daily challenges that they face in the business world, which is becoming more and more complex and technology-oriented. Peccarelli (2004) views the success of accountants based on how they use their time; how fast and easy they access data from multiple sources; and how well they understand integrated systems and virtual office capabilities through the use of the web.

Besides finance, accountants are expected to be business partners, technology experts, and strategy allies (Chapman & Chua, 2000; Scapens, 1998). The numerous changes in technology and business bring many challenges to all professionals. Those challenges also rest on accountants' shoulders. They present tremendous areas of opportunity where accountants can grow. They must find a way to alleviate the burdens by learning how to use technological tools and how to apply them.

Though, it is acknowledged that in emerging economies, the role of accounting and accountants is undervalued. For example, during the communism the role of accountants was limited to bookkeeping, and this role assigned to accounting was difficult to be changed after the fall of communism. Accounting should evolve in these countries from bookkeeping to fulfilling the users' needs, both internal and external (Anderson and Lanen, 1999).

The accountant's role can traditionally be classified into three areas: the financial accountant, the management accountant and the auditor. In terms of social and environmental accounting, the financial accountant could be said to be primarily interested in social and environmental aspects of assets and liabilities and to report on them in some standard way. The management accountant is concerned with costs and benefits associated with these issues, and the auditor in providing verification or assurance of the social account produced (Medley, 1997; Igalens, 2006).

To many, accounting is an art, a method, a measurement methodology of communication system and an information system designed to produce selected quantitative data in monetary terms about an entity engaged in economic activity. **However, several developments within the profession coupled with the ever- changing environment in which the accountant operates has brought to light that, there is more to it than that.** This is because there are lots of refinements and sophistication which the accountant has to contend with in the daily performance of his duties. Out of all the known professionals, the Accountant seems the most mobile as he is unavoidable in almost all the facets of human endeavours. While most of the other professionals are restricted to their areas of operations such that, the medical doctor is found in the hospital, the lawyer in the Chamber or Court, and the engineer in the factory or workshop. In the case of the accountant, he is everywhere and hence we have, hospital Accountant, factory/workshop accountant, accountant in government service, industry, academia and of course consultancy and professional services. It is no gainsaying that, what blood is to the body is what money is to business and by inference what the accountant (the custodian of money) is to his organisation and indeed, the Nation.

For the enhancement of the performance of his duties according to Edet (2001), accountant has to undertake the followings: record keeping (book keeping); cost accumulation for decision making (performance evaluation, control, predictions and crises management); auditing and investigation: tax management and other management advisory services such as: liquidation, acquisition and mergers, privatization and commercialization. In conducting or performing those duties, the profession is governed by rules of conduct which include: independence; prudence; consistency and objectivity.

An accountant by the nature of the job he does, can be classified into different categories which for the purpose of this paper, is discussed under only five headings - analysing the implications on the accountant's roles and competencies in improving corporate governance; Information Technology (IT), the tool for checkmating corruption in the Nigerian public sector; the roles of a professional accountant in accounting for carbon; the role of forensic accountant in fraud detection and national security in Nigeria and the role of the accounting professions in accountability of economic, social and environmental issues.

Despite the applauded crusade against corruption via the formation of anti-graft agencies like the Economic and Financial Crimes Commission (EFCC), the Independent Corrupt Practices and

Commission (ICPC), etc and the recent emergence of e-governance system by the Nigerian government, the place of Nigeria in the world's corruption ranking has continued to be unacceptable in the light of the global ethical standards. This therefore calls for holistic overhaul in the structure of operations of the Nigerian public sector which is the agent that drives the government programmes and policies, if the nation's bid of becoming one of the 20 top economies of the world by the year 2020 would not be a mirage. In view of the above, this study is aimed to achieve the following objectives:

- i. To analyze the changes in the accountants' roles and competencies as a result of the reforms in corporate governance model of an emerging economy
- ii. To investigate the accounting profession's role in accountability of economic, social, and environmental issues, that is, accounting for carbon (climate change) in financial accounts, and the activities of financial accounting professional bodies and standard-setters in relation to climate change.

Considering these objectives, it is hypothesized that:

Ho₁: The emerging reforms as a results of changes in the accountants' roles and competencies do not significantly contribute to the reforms in corporate governance model in the Nigerian economy

Ho₂: The adoption of emerging roles of professional accountants does not significantly promote the corporate social and environmental responsibility in the Nigeria economy

REVIEW OF RELATED LITERATURE

Theoretical Framework

There is a range of relevant literatures to draw upon which offer useful insights into how and why accountants might be framing themselves as good and 'rightful' managers of carbon accounting. Here, we briefly consider two concepts judged to be most relevant. The first body of work - broadly termed 'society and accountancy' - examines issues of governance, power and knowledge (political economy approaches); the history of accountancy; and also ethnography or anthropology of the practices and culture of accountancy (Hopwood and Miller 1994; MacKenzie 2006). Second, the policy network concept of 'epistemic community' is used to examine the nature of accounting expertise and its application to policy change.

Society and Accountancy Theory

It would view carbon/climate change accountancy as having the capacity to shape society itself. As Miller (1994 emphasis added) explains: ".....accounting is, above all, an attempt to intervene, to act upon individuals, entities and processes to transform them and to achieve specific ends. From such a perspective, *accounting is no longer to be regarded as a neutral device* that merely documents and reports 'the facts' of economic activity. Accounting can now be seen as a set of practices that affects the type of world we live in, the type of social reality we inhabit, the way in which we understand choices..."

Accountancy is meant in theory (according to professional codes of conduct) only to reflect 'economic reality' and societal preferences and practices, but can in practice end up influencing them (Miller 1994; Miller and O'Leary 1994; Power 1994). The accounting and society theory is valuable therefore as a correction to the implicit assumption within the non-accountancy academic concept on climate change policy, politics and markets that accountancy is rule-based.

Accountancy and society perspectives might usefully highlight too the history of carbon accountancy, building on previous scholarship illustrating the path dependency and inertia in how accounting decisions are made, that is, once certain accounting practices are established they tend to remain

constant over time (see for example Miller and O'Leary 1994) on the rise of standard cost accounting in the 1930s; Thompson 1994 on the emergence of double-entry accounting).

With carbon accountancy still in its formative stages – with many critical decisions to be made – close attention to current governance processes and decision making is likely to have significant theoretical and policy impact. Further, scholars have drawn attention to the often subtle ways that power is expressed in decisions about detailed, technical accountancy rules (Miller 1994; Miller and O'Leary 1994; Thompson 1994). Accountancy can be a way of making things appear 'anti-political' (after Barry 2005) and seemingly uncontroversial, but the technical debates about accountancy rules and standards sometimes involve intense power struggles. Because carbon accountancy rules (once decided) will potentially have a huge influence on company profits, liabilities etc., it is no surprise that it has been a site of conflict, a point returned to in conclusion.

We therefore now turn to review briefly two further bodies of concept or theory that draw together these ideas about accounting practices more strongly and directly with the politics of policy change, including attention to issues of international politics, discourse, and the role of expertise.

Epistemic Communities Theory

The notion of an epistemic community was first elaborated upon by Haas (1992) and refers to a knowledge-based international community of experts, specifically a "... network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue area," (Haas 1992). The term was first used by John Gerald Ruggie in 1975, who coined it from Foucault's notion of an *episteme*, defined as "a dominant way of looking at social reality, a set of shared symbols and references, mutual expectations and a mutual predictability of interests". (Ruggie, 1975, quoted in Verdun 1999). It was Haas who fully developed the concept, based on his observations of scientists working on the ozone hole and involved in developing the Montreal Protocol. According to Haas (1992) four defining features of epistemic communities are: a shared set of normative and principled beliefs; shared causal beliefs; shared notions of validity; and a common policy enterprise. What can be usefully applied to the case of carbon accountancy is the idea of shared beliefs and values uniting a group of experts on a particular policy issue, which Haas and others (Gough and Shackley 2001; Litfin 1994) have argued, stem from their professional culture and expertise. So an epistemic community perspective directs our attention to the professional culture and training of accountants, and the links between this culture and expertise and their beliefs about how to mitigate climate change, in turn reflect in detail policy proposals.

EMPIRICAL STUDIES

There have already been a number of extensive reviews of the Social and Environmental Accounting (SEA) literature (see Thomson, 2007 for a recent and novel approach), notably (Gray, R., Kouhy, R., and Lavers, S. (1995a) and (Mathews 1997). Mathews (1997) reviewed 25 years of academic works in the area from the early 1970s, classifying it into empirical, normative, philosophical, and various other forms of research.

Mathews (1997) provided an excellent history of the early work undertaken on Social Environmental Accounting (SEA), noting that in these early stages, SEA research predominantly reported 'fairly unsophisticated empirical studies, which attempted to measure the amount of new information being produced and published by a limited number of enterprises' (Mathews, 1997). Gray et al. (1995a) show that over the period 1979–1991 social and environmental reporting steadily increased, both in terms of the number of companies choosing to report, and the amount they reported. However, they pointed out that the level of social reporting was still relatively low compared with other forms of discretionary

disclosure, concluding that ‘social and environmental performance is still a relatively low priority for companies’ (Gray et al., 1995).

This work would not revisit this early research as it has been well reviewed in other papers, but rather will focus on more recent developments. However, one important element of the earlier work was its explication of the concept of SEA, leading to the definitions still used today.

Gray, R., Owen, D., and Maunders, K. (1987), provide the most useful and commonly used definition of what we mean by SEA. They describe it as: Communicating the social and environmental effects of organizations’ economic actions to particular interest groups within society and to society at large. As such it involves extending the accountability of organizations (particularly companies), beyond the traditional role of providing a financial account to the owners of capital, in particular, shareholders.

O’Dwyer (2006) describes social accounting scholars as a group of individuals with ‘commitment to stakeholder accountability and democracy’. The work of these scholars views accounting as ‘a mechanism aimed at enhancing corporate accountability and transparency to a wide range of external stakeholders, addressing the social, environmental and ethical concerns and values of individuals upon whom a business has a non-economic impact’ (O’Dwyer, 2006), hence social accounting is a major element of corporate social responsibility, linking it with emerging roles of professional accountant and corporate social responsiveness. More recent analysis of the type and extent of social accounting indicates the variety of reporting mechanisms, including assurance statements, environmental, social and economic performance reports (also called Triple P (people, planet, profit) or Triple Bottom Line reports) and reporting within annual reports and financial statements. Also noted is the variety in the extent and nature of the reporting, particularly across industry sectors and between countries (Labelle et al., 2006). These differences have been shown, however, to be unrelated to profitability, but associated with entity size and the regulatory environment (Stanwick and Stanwick, 2006).

As social accounting in its various forms increases, the frameworks and guidelines device also increase to assist firms in producing social and environmental information. The Accountability 1,000 framework, created in 1999, is a set of standards that focus on performance indicators, targets and reporting systems. It also has stakeholder engagement as a fundamental principle (Stanwick and Stanwick, 2006).

The Global Reporting Initiative (GRI) was established to provide global guidelines for the reporting of social, carbon (climate change), accounting information system, forensic accounting, environmental information, etc all these gear towards improvement of reporting standards of professional accountant and to ensure consistency. For instance, in Australia, a guide to triple bottom line reporting to complement the GRI was developed in 2003 by Environment Australia (Adams and Frost, 2007).

METHODOLOGY

The population of this study consisted of a pilot survey of two hundred (200) professional accountants selected through purposive sampling in Anambra and Enugu States of Nigeria. Out of the population 122 sampling size was selected using Taro Yamene’s formula. In order to generate the necessary data for the study, a questionnaire designed using a 3-point Likert-scale was administered to the professional accountants of the selected States. In testing the hypotheses in this study, the Analysis of Variance (ANOVA) was used. The choice of this statistical tool stems from the fact that the breaking down of the total observe variance in a sample into independent sources or variations such that the contribution due to each source or cause can be tested for significance. The Analysis of Variance (ANOVA) was computed with the following formula:

$$F = \frac{V_b}{V_w} \quad \text{between groups variance} = \frac{S^2_B}{S^2_w}$$

$$V_w \quad \text{within groups variance} \quad S^2_w$$

Decision Rule: Reject F-ratio if greater than F-tab.

ANALYSIS OF DATA

To verify the first hypothesis, which states that the emerging reforms as a results of changes in the accountants' roles and competencies do not significantly contribute to the reforms in corporate governance model in the Nigeria economy, the researchers dichotomized emerging reforms as a results of changes in the accountants roles and competencies does not contribute to the reforms in corporate governance model into agreed, disagreed and indifferent to be able to apply the chosen statistical technique.

In testing this hypothesis, the respondents were asked to indicate whether agreed, disagreed and indifferently leads to material misstatement and the data generated are presented and computed in the table below.

Table 1: Analysis of Data on whether emerging reforms changes accountants' roles and competencies to the reforms in corporate governance model in the Nigeria economy,

S/N	Questions	Agreed	Disagreed	Indifferent	Total
1	2	100	18	4	122
2	3	85	20	17	122
3	5	104	16	2	122
Total		289	54	23	366

Source: Field Survey, 2016

To test the hypothesis using ANOVA at 5% significance level

Let X1 = Subtotal for the emerging reforms as a results of changes in the accountants' roles and competencies cannot significantly contribute to the reforms in corporate governance model in the Nigeria economy.

$$\text{Then } X1 = 289; X2 = 54; X3 = 23$$

$$X1 + X2 + X3 = 366$$

$$n1 = 1; n2 = 2; n3 = 3$$

$$K = \text{number of sample} = 3$$

$$\text{Correction factor} = \frac{X^2}{Kn} = \frac{(366)^2}{9 \times 9} = \frac{133956}{81} = 14,884$$

$$\text{Crude sum of square(s)} = (100)^2 + (85)^2 + (104)^2 + (18)^2 + (20)^2 + (16)^2 + (4)^2 + (17)^2 + (2)^2 = 10,000 + 7225 + 10816 + 324 + 400 + 256 + 16 + 289 + 4 = 29069$$

$$\text{Corrected total sum of square (SST)} = S - CF$$

$$= 29,069 - 14,884 = 14,185$$

$$\begin{aligned} \text{CF} \quad \text{SSB} &= \text{Between K sample size of square} = \frac{(289)^2 + (54)^2 + (23)^2}{3} \\ &= \frac{83521 + 2916 + 529}{3} = \frac{28987}{3} - 14884 = 14,802 \end{aligned}$$

$$\text{SSE} = \text{Error sum of squares} = \text{SST} - \text{SSB} = 14185 - 14884 = 699$$

Table 2 ANOVA Table for Testing Hypothesis One

Source of Variance	Df	Sum of Squares (SS)	Mean Square (MS)	F-Ratio
Between sample (treatment)	K - 1 3 - 1 = 2	SSB = 14802	7402	MSB/MSE
Within Sample	N - K 9 - 3 = 6	SSE = 699	116.5	63.53
Total		15583		

With the 2 and 6 degree of freedom at 0.05, the critical ratio is 4.26

Decision: Since the F-ratio of 63.53 is greater than the value of 4.26, the test is significant and the H_0 is rejected at the level and the study uphold that the emerging reforms as a results of changes in the accountants' roles and competencies can significantly contribute to the reforms in corporate governance model in the Nigeria economy.

In testing the second hypothesis, the respondents were asked to indicate whether the adoption of the emerging roles of professional accountant does not significantly promote the corporate social and environmental responsibility in Nigeria economy. The result obtained is presented in the table below:

Table 3: Analysis of Data on whether emerging roles of professional accountant promote the corporate social and environmental responsibility in Nigeria economy,

S/N	Questions	Agreed	Disagreed	Indifferent	Total
1	8	90	28	4	122
2	9	98	09	15	122
3	10	97	20	5	122
Total		285	58	24	366

Source: Field Survey, 2016

To test the hypothesis using ANOVA at 5% significance level

Let X_1 = Subtotal for the adoption of the emerging roles of professional accountant cannot significantly promote the corporate social and environmental responsibility in Nigeria economy

Then $X_1 = 285$; $X_2 = 58$; $X_3 = 24$

$X_1 + X_2 + X_3 = 366$

$n_1 = 1$; $n_2 = 2$; $n_3 = 3$

K = number of sample = 3

$$\text{Correction factor} = \frac{X^2}{Kn} = \frac{(366)^2}{9} = \frac{133956}{9} = 14,884$$

Crude sum of square(s) = $(90)^2 + (98)^2 + (97)^2 + (28)^2 + (9)^2 + (20)^2 + (4)^2 + (15)^2 + (5)^2 = 8100 + 9604 + 9409 + 784 + 81 + 400 + 16 + 225 + 25 = 28644$

Corrected total sum of square (SST) = $S - CF$

$$= 28644 - 14,884 = 13760$$

$$SSB = \text{Between } K \text{ sample size of square} = \frac{(285)^2 + (58)^2 + (24)^2}{3} - CF$$

$$= \frac{81225 + 3364 + 576}{3} - 14884 = 15,504$$

3

3

SSE = Error sum of squares = $SST - SSB = 13760 - 14884 = 1124$

Table 4 ANOVA Table for Testing Hypothesis Two

Source of Variance	Df	Sum of Squares (SS)	Mean Square (MS)	F-Ratio
Between sample (treatment)	$K - 1$ $3 - 1 = 2$	SSB = 15,504	7752	MSB/MSE
Within Sample	$N - K$ $9 - 3 = 6$	SSE = 1124	187	41.45
Total		16008		

With the 2 and 6 degree of freedom at 0.05, the critical ratio is 4.26

Decision: Since the F-ratio of 41.45 is greater than the value of 4.26, the test is significant and the H_0 is rejected at the level and the study upholds that the adoption of the emerging roles of professional accountant has significantly promoted the corporate social and environmental responsibility in Nigerian economy.

DISCUSSION OF FINDINGS

From the results of the data analyzed and test of hypotheses, several developments within the profession coupled with the ever- changing environment in which the accountant operates has brought to light that, there is more to it than that. This is because there are lots of refinements and sophistication which the accountant has to contend with in the daily performance of his duties. Based on the hypotheses tested, the following results were found. In hypothesis one the study upholds that the emerging reforms as a result of changes in the accountants' roles and competencies has significantly contributed to the reforms in corporate governance model in the Nigerian economy. This is because besides finance, accountants are expected to be business partners, technology experts and strategy allies. (Chapman & Chua, 2000; Scapens, 1998). The numerous changes in technology and business bring many challenges to all professional and those challenges rest on accountants shoulders. More so, we observed in this study that the adoption of emerging roles of professional accountants have also promoted the corporate social and environmental responsibility in Nigerian economy. There are a lot of refinements and sophistication which the professional accountant has to contend with in the daily performance of his duties. In terms of social and environmental accounting, the professional accountant could be said to be primarily interested in social and environmental aspects of assets and liabilities and to report on them in some standard way.

CONCLUSION AND RECOMMENDATIONS

The development of several emerging roles of accounting packages has affected the professional accountants' needs in organisations, recognizing the fact that the benefit of a newly emerged tool is sometimes over-emphasized while after practical application its drawbacks appear more clearly. No doubt, companies are now using these advanced tools more than they would ever do in the past years. The greater application of accounting packages would inevitably further enhance the importance of professional accountants' roles in firms in the years to come.

Based on the findings and conclusion drawn therefrom, the following recommendations were made: i) Professional accountants' should be exposed to the ideals of electronic accounting system in the structure of the nation's public sector. ii) Professional Accountants faced various limitations hindering their participation; such limitations include a lack of skill and knowledge related to the information technology, therefore in this age of ICT, the accountancy professional bodies should increase their effort in providing functional and cutting edge education to their members and develop curriculum that would incorporate forensic accounting with a view to making them globally competitive. iii) International Financial Reporting Standards (IFRS) revealed that, to date, no generally accepted international environmental, social and economic standards have been developed or approved for use in financial reporting. There are also presently no requirements or Generally Accepted Accounting Standards (GAAP) for sustainability that prove a framework for preparing corporate sustainability reports, hence it is very important that this matter should be treated as a very urgent issue. iv) Professional Accountants should strive to have an effect on organizations' decision aimed at incorporating sustainable consideration into strategies and plans, business cases, capital expenditure decisions, and performance management and costing system.

REFERENCES

Adams, C.A., & Frost, G.R. (2007), "Managing Social and Environmental Performance: Do Companies Have Adequate Information?" *Australian Accounting Review*, 17, No. (3), 2–11.

Anderson, S.W. & Lanen, W.N., (1999) .“Economic transition, strategy and the evolution of management accounting practices: the case of India”, *Accounting, Organizations and Society*, 24, 379-412.

Alder E & Haas P M (1992). Conclusion: Epistemic Communities, World Order, and the Creation of a Reflective Research Program. *International Organization* 46 (1): 367-90

Barry A (2005). *The Anti-Political Economy*. In A Barry and D Slater (ed) *The Technological Economy* (pp 84-100). London and New York: Routledge

Cadez, S. & C. Guilding. (2008). An Exploratory Investigation of an Integrated Contingency Model of Strategic Management Accounting. *Accounting, Organizations and Society*, 33(7-8): 836-863.

Chariri, A. (2009)*The Relevance of Forensic Accounting in Detecting Financial Frauds*. Published by Centre for Accountability, Shariah & Forensic Accounting Studies

Dean M (1999) *Governmentality: Power and Rule in Modern Society*. London: Sage Publications Ltd

Foucault, M (1991) *Governmentality*. In G Burchell, C Gordon and P Miller (ed) *The Foucault Effect: Studies in Governmentality* (pp 87-104). London: Harvester Wheatsheaf

Foucault M. (2007) *Security, Territory, Population*. Basingstoke, Hampshire: Palgrave Macmillian

Gough C & Shackley, S (2001) The Respectable Politics of Climate Change: The Epistemic Communities and Ngos. *International Affairs* 77 (2): 329-346

Gray, R., Kouhy, R., & Lavers, S. (1995a). Corporate Social and Environmental Reporting: A Review of the Literature and a Longitudinal Study of UK Disclosure, *Accounting, Auditing and Accountability*, Vol. 8, No. 2, pp. 47–77.

Gray, R., Owen, D., & Maunders, K. (1987)., *Corporate Social Reporting – Accounting & Accountability*, Prentice-Hall, UK.

Haas P (1992). Banning Chlorofluorocarbons: Epistemic Community Efforts to Protect Stratospheric Ozone. *International Organization* 46 (1): 187-224

Haas P (1992). Introduction: Epistemic Communities and International Policy Co-Ordination. *International Organisation* 46 (1): 1-35

Hopwood, & P Miller (1987). (ed) *Accounting as Social and Institutional Practice* (pp 1-39). Cambridge: Cambridge University Press

IPCC (2007). *Climate Change 2007: The Physical Science Basis - Summary for Policymakers*. Paris: Intergovernmental Panel on Climate Change (IPCC)

Kingdon, J. W. (2003). *Agendas, Alternatives and Public Policies*. New York: Harper Collins College Publishers

Litfin, K. T. (1994). *Ozone Discourses: Science and Politics in Global Environmental Cooperation*. New York: Columbia University Press

Lord, B.L. (1996). Strategic Management Accounting: The Emperor's New Clothes? *Management Accounting Research*, 7(3): 347-366.

McSweeney, B. (2002). Hofstede's Model of National Cultural Differences and Their Consequences - A Triumph of Faith, A Failure of Analysis. *Human Relations*, 55(1): 89-118.

MacKenzie, D. (2006). *Producing Accounts: Finitism, Technology and Rule Following*. www.sps.ed.ac.uk/_data/assests/pdf_file/0010/3421/ProducingAccounts8Nov06.pdf (last accessed 13th September 2009)

Medley, P. (1997). Environmental Accounting – What Does It Mean to Professional Accountants? *Accounting, Auditing and Accountability*, 10 (4), 594–600.

Miller, P. and O'Leary, T. (1994). *Governing the Calculable Person*. In A G Hopwood and P

Miller P. (1994). *Accounting as Social and Institutional Practice* (pp 98-115). Cambridge: Cambridge University Press

Murray Li T (2007). *The Will to Improve: Governmentality, Development, and the Practice of Politics*. Durham and London: Duke University Press

O'Dwyer, B. (2006). Theoretical and Practical Contributions of Social Accounting to Corporate Social Responsibility, In Allouche, J. (Ed.), *Corporate Social Responsibility Volume 1: Concepts, Accountability and Reporting*, Palgrave Macmillan, New York

Power M. (1994). *The Audit Society*. In A G Hopwood and P Miller (ed) *Accounting as Social and Institutional Practice* (pp 299-316). Cambridge: Cambridge University Press

Taro, Yamane (1964). *Statistics: An introductory analysis, 3rd Ed.* New York: Harper and Row Publishers

Thompson, G. (1994). *Early Double-Entry Bookkeeping and the Rhetoric of Accounting Calculation*. In A G Hopwood and P Miller (ed) *Accounting as Social and Institutional Practice* (pp 40-66). Cambridge: Cambridge University Press

Verdun, A. (1999). The Role of the Delors Committee in the Creation of the Emu: An Epistemic Community. *Journal of European Public Policy* 6 (2): 308-28