VNU Journal of Science: Economics and Business, Vol. 32, No. 2 (2016) 14-23

Using the M-score Model in Detecting Earnings Management: Evidence from Non-Financial Vietnamese Listed Companies

Nguyen Huu Anh*, Nguyen Ha Linh

School of Accounting and Auditing, National Economics University, Hanoi, Vietnam,
207 Giai phong, Hai Ba Trung, Hanoi, Vietnam

Abstract

Earnings management is considered to be one of the most important issues related to financial statements, which has been well-documented in accounting theory and practice for a long time. Earnings management has become a critical topic in accounting, but few researchers have addressed this issue in the Vietnamese context. This paper examines earnings management detection among Vietnamese companies listed on the Hochiminh Stock Exchange (HOSE) by using the Beneish M-score model for a sample of 229 non-financial Vietnamese companies listed on the HOSE during 2013-2014. The results showed that 48.4% non-financial Vietnamese companies listed on the HOSE were involved in earnings management and the sample observations fit the Beneish M-score model. In conclusion, this study suggests that the M-score model is one of the useful techniques in detecting earnings manipulation behaviors of the companies and it could be applied for an improvement in financial reporting quality and a better protection for investors.

Received 15 July 2015, revised 9 June 2016, accepted 28 June 2016
Keywords: Earnings management, detecting, M-score model, non-financial Vietnamese listed companies.

1. Introduction

Earnings management (EM) is a hot topic that it has attracted the interest of academics, regulators and practitioners worldwide. There are various definitions from different viewpoints. According to Healy and Whalen (1998), "Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers" [1]. Schipper (1989) defines earnings management as "the purposeful intervention in the external financial reporting process with the intent of private gains" [2]. Along with many serious financial crises (Enron, Worldcom, Xerox…), users' reliance on financial information published on stock markets is declining. Since then, earnings management and how to detect it are big concerns of academics, regulators and practitioners.

As we know, there are interrelations between Balance Sheets, Income Statements and Statement of Cash Flow so that fraud can always show up through certain numbers. Based on ratio analysis, the M-score was built and many researchers believe that the M-score is a suitable tool to detect accounting fraud or to

* Corresponding author. Tel.: 84-906163535
E-mail: anhnh@neu.edu.vn

support auditors [3, 4]. In the process of developing tools for detecting EM, the Beneish M-score model has been applied to different listed companies worldwide in order to detect the existence of income manipulation. Examples are: in the US [5], Italy [6], and in India [7]. Extensive researche has led to the convincing conclusion that the Beneish model is reliable in calculating the probability of accounting fraud [6].

In Vietnam, in the very young and growing stock market, the existence of financial scandals such as Bông Bạch Tuyết, or the huge differences between before-audited and after-audited profit in the financial statements of companies such as Thép Việt Ý, Vinaconex... have raised the hot topic about accounting information quality and earnings management, and it has become a big concern for investors and other information users. However, there are few researchers who have focused on EM in the Vietnamese context. Even though EM is a hot topic there are only some simple essays introducing the topic, or some empirical researches with limitations in methodology and sample size [8, 9]. In addition, Vietnamese listed companies have some differences in financial structures as well as accounting rules compared with other countries, therefore, the study aim to apply M-score model for detecting earnings managements in Vietnam and examining whether this model can create a reliable template for Vietnamese listed companies. The M-score Model is also selected due to its simplicity, reliability and popularity in the EM field.

2. Literature review

Earnings are a key indicator of the performance of a company. The positive image of a company depends on some indexes published in financial statements so that managers have incentives to manage earnings.

Accounting rules require managers and accountants to follow some generally accepted principles, but those rules also leave room for them to select accounting methods and make estimations which best reflect the financial position of the company. However, managers are able to choose methods or estimation that do not reflect the true economic position of the company, thus misleading stakeholders or other information users [1].

Investigations of the existence of earning management have been discussed for many years, with a variety of models developed such as the aggregated accruals Jones model [10], the Modified Jones model [11], the earnings distribution model [12, 13, 14], specific - accrual Models [15] or the M-score Model [3, 5].

Among these, the M-score Model is a popular model which is used and has proved to be a powerful manipulation detection tool. Table 1 shows some important prior studies and their findings related to the usefulness of the M-score in the accounting field. Beneish (1999) is the pioneer who has realized the importance of financial ratios in forensic accounting [5]. Beneish studied a sample of 74 US companies during 10 years (1982-1992) and designed a mathematical model that can distinguish manipulated from nonmanipulated reporting. The M-score model was firstly applied and it could identify about half of the companies involved in earnings manipulation. Since then, accounting researchers all over the world have also found the power of the M-score. Some authors applied the original M-score for earnings testing [6, 7], [16] while some have extended the model by adding some more variables [17, 18]. Other researchers applied the M-score to a sample of thousands of companies while some chose specific high profile cases like Enron in the US [19] or MMHB in Malaysia [20]. The comparison between the M-score and other models (Modified Jones, Altman's Z-score, etc.) has also become a topic of interest in many researches [7, 19]. In addition, the literature in Table 1 also provides the results and the evidence of the M-score's reliability in detecting earnings manipulators. In Italy, a sample of 1809 firm-year observations between 2005-2012 helped Paolone and Magazzino (2014) conclude that half of the analysed companies had a low probability of

income manipulation [6]. Kaur, Sharma and Khanna (2014) [7] with a sample of 332 Indian companies' data from 2011-2013, proved that the use of the M-score should be better than the Modified Jones (1995) [11] in detecting earnings manipulation. In the US, Mahama (2015) filed data from 1996 - 2000 from the case of Enron and indicated that financial information users could have detected the warning signs sooner (from early 1997) by using the M-score [19]. In the high profile case of MMHB in Malaysia, the sign of financial turmoil would have been detected earlier with the M-score retrieving financial data from 2005 to 2007. The M-score is also a good base for developing a stronger tool with some additional variables such as audit fee to assets, tax rate… [17, 18].

In Vietnam, Nguyễn Công Phương (2009) introduced some basic definitions about EM and some techniques that have been commonly used for EM implementation [8]. Nguyễn Công Phương and Nguyễn Trần Nguyên Trân (2014) went one step further: The M-score model was used in that study for detecting EM with a sample of 30 companies, and they found that the M-score can predict materiality errors in financial statements at the rate of more than 50% [21]. Other researches, such as that of Nguyễn Thị Phương Thảo (2011) [9], also mentioned EM and introduced some testing models other than the M-score, such as Jones model [10], and the Modified Jones model [11]... Taking those limitations into consideration, it is necessary to use the M-score with a bigger sample for better investor protection and contribution to the EM literature in the context of Vietnam.

Based on the rich literature reviews, this study selected the Beneish M-score Model as a detection tool. There are interrelations between the Balance Sheet, Income Statement and Statement of Cash Flow, so that fraud can always pop up when certain numbers do not make sense [22]. Based on ratio analysis, many researchers and users believe that the M-score is a suitable tool for detecting accounting fraud or to support auditors [23, 24].

3. Methodology: The Beneish model

M-score model is a mathematical model that was created by Professor Messod Beneish. Using 8 variables related to financial ratios, Beneish (1999) developed a powerful tool in distinguishing earnings manipulators and non-earnings manipulators [5]. Since the introduction of the original M-score, the model has been widely used in many financial statement academic researches, articles directed at auditors, certified fraud examiners and investment professionals [3].

The M-score model and its 8 indicators are listed below:

● DSRI - Days' sales in receivable index

The DSRI measures the ratio of receivables to sales rate in year t compared to year (t – 1). If the DSRI is greater than 1, the percentage of receivables to sales in year t is higher than in year (t – 1). An abnormal large increase in a day's sales in receivables can be the result of revenue inflation. Index expectation: a large increase in the DSRI would be associated with a higher likelihood that revenues/profits are over stated [5].

● GMI - Gross margin index

The GMI measures the ratio of the gross margin in year (t – 1) to the gross margin in year t. If the GMI is greater than 1, it means the gross margin has deteriorated and it would be a negative signal about the company's prospects. Index expectation: there is a positive relationship between the GMI and earnings management [5].

● AQI - Asset quality index

The AQI measures the ratio of asset quality in year t compared to year (t – 1). If the AQI is greater than 1, it means the company has potentially increased its cost deferral or increased its tangible assets, and created earnings manipulation. Index expectation: there is a positive relationship between the AQI and earnings management [5].

Table 1: Summary of important prior researches

Authors	Country	Object	Conclusion	Sample
Beneish (1999)	US	Designing a model that can detect earnings manipulation (earnings management).	The model identifies about half of the companies involved in earnings manipulation prior to public discovery.	1982-1992, 74 firms.
Paolone and Magazzino (2014)	Italy	Examine the risk of earnings manipulation among some main industrial sectors.	Half of the analyzed companies had a low probability of manipulating income.	1.809 firms- year observations between2005-2012.
Kaur, Sharma and Khama (2014)	India	Attempt to understand EM in different sectors of the economy by using both M-score and Modified Jones.	The number of companies engaged in EM when detected by Beneish M-score were more than those detected by the Modified Jones Model.	332 companies with data from 2011-2013.
Mahama (2015)	Enron (US)	Altman's Z-score and Beneish M-score were used to determine how early investors, regulators and other stakeholders could have detected the financial distress of the company.	Both models have indicated that Enron was in financial turmoil as early as 1997 and for that matter was engaged in earnings manipulation.	Enron case 2001, Reports of Enron from 1996 to 2000 filed with the US SEC.
Omar et al. (2014)	Malaysia	Discuss a local case and analyse how the fraud was committed and the detection technique involved.	The company involved in manipulating their financial statements.	MMHB case (Malaysian Company), 2005-2006-2007.
Dechow el al. (2011)	US	Based on M-score model, built Z-score model (considered not only financial variables but also non-financial variables and market-based measures).	The Z-Score offers researchers a complementary and supplementary measure to discretionary accruals for identifying "low quality" earnings firms.	2,190 SEC Accounting and Auditing Enforcement Releases (AAERs) issued between 1982 and 2005.
Marinakis (2011)	UK	Based on M-score model, proposed a model for detecting earnings manipulation (additional variables: audit fee to total asset index…, effective tax rate, Directors Remuneration to sales).	These results suggest the improved model identifies potential manipulators, with smaller error rates than the 8-variable Beneish (1999) Model. The 11-variable model's detection rate for manipulators is 10% higher than the rate of the 8-variable model.	185 companies between 1994-2006 from Company Reporting (p.210).

Aris et al. (2013)	Malaysia	Analysing the usage, process and application of Benford's Law and Beneish Model in detecting accounting fraud.	Both techniques appear to have its own benefit in detecting and preventing fraud.	Comparison between M-score model and Benford's Law.
Nwoye el al. (2013)	Nigeria	Focus on the extent to which the Beneish Model could further strengthen auditors' likelihood to detect manipulations in the Financial Statements.	The model will effectively boost and improve auditors' ability in detecting fraud.	First five most capitalized manufacturing companies in Nigeria for the years (2002-2006: confirmatory test purposes) and (2006-2010).
Franceschetti and Koschtial (2013)	Italy	Using Beneish's approach to detect earnings manipulations between bankrupt and non-bankrupt small and medium-sized enterprises.	The bankrupt sample reported 1.6 times more red flags than the non-bankrupt one.	30 bankrupt and 30 non-bankrupt small and medium-sized enterprises (2009-2011).

● SGI - Sales growth index

The SGI measures the ratio of the sales in year t compared to the sales in year (t – 1). If the GMI is greater than 1, it represents a positive growth. Growth can put pressure on managers in maintaining a company's position and achieving earnings targets…, so that they may have greater incentives to manipulate earnings [5].

● DEPI - Depreciation index

The DEPI measures the ratio of the Depreciation rate in year (t – 1) compared to the Depreciation rate in year t. If the DEPI is greater than 1, it represents a declining depreciation rate, and there is a possibility that the company has adjusted the useful life of PPE upwards or has used a new method for income increase [5].

● SGAI - Sales, general and administrative expenses index

The SGAI measures the ratio of the SGA expenses to sales in year t compared to the SGA expenses rate in year (t – 1). If the SGAI is greater than 1, it represents an increase in the percentage of SGA to sales in year t compared to year (t – 1) and it can be an indicator of earnings manipulation. Index expectation: there is a positive relationship between the SGAI and earnings management [5].

● LVGI - Leverage index

The LVGI measures the leverage in year t compared to the LVGI in year (t – 1). If the LVGI is greater than 1, it represents an increase in leverage and it shows the incentives in debt covenants which lead to manipulation of earnings. Index expectation: there is a positive relationship between the LVGI and earnings management [5].

● TATA - Total accruals to total assets

The TATA measures the ratio of total accruals to total assets. It measures the extent to which managers alter earnings by making discretionary accounting choices. The total accruals is computed as changes in working capital (except cash) less depreciation for year t, less changes in income tax payable and current portion of long-term debt. Index expectation: higher positive accruals are positively associated with the likelihood of earnings management [5].

The Beneish model [5] is presented mathematically as follows:

$$M = -4.84 + 0.920*DSRI + 0.528*GMI + 0.404*AQI + 0.892*SGI + 0.115*DEPI - 0.172*SGAI + 4.679*TATA - 0.327*LVGI$$

The eight indicators of every single non-financial listed company are put in to the Beneish regression model. The results will show the Manipulation Score. If the M-score is greater than (-2.22) benchmark, the company should be flagged as earnings manipulators.

Table 2: Variables descriptions

Variables	Formulas	Descriptions
DSRI	$\left[\frac{\text{Receivables}_t}{\text{Sales}_t}\right] \Big/ \left[\frac{\text{Receivables}_{t-1}}{\text{Sales}_{t-1}}\right]$	The index shows that an abnormal large increase in day's sales in receivables can be a result of revenue inflation.
GMI	$\text{Gross margin}_{t-1} \Big/ \text{Gross margin}_t$ *Gross margin = (Sales - Cost of goods sold) / Sales*	If GMI > 1, the deterioration of gross margin shows a negative sign about a company's prospect and managers tend to manipulate its revenue.
AQI	$\left[1 - \frac{\text{PPE}_t + \text{CA}_t}{\text{Total Assets}_t}\right] \Big/ \left[1 - \frac{\text{PPE}_{t-1} + \text{CA}_{t-1}}{\text{Total Assets}_{t-1}}\right]$ PPE: Plant, Property and Equipment/ CA: Current asset	If AQI >1, it may represent the tendency of avoiding expenses by capitalizing and deferring costs to preserve profitability.
SGI	$\left[\frac{\text{Sales}_t}{\text{Sales}_{t-1}}\right]$	If the SGI > 1, it represents a positive growth. Growth can put pressure on managers in maintaining a company's positions, achieving earnings targets…
DEPI	$\left[\frac{\text{Depreciation rate}_{t-1}}{\text{Depreciation rate}_t}\right]$ *Dep' rate = Depreciation / (Depreciation + PPE)*	If the DEPI > 1, it represents a declining depreciation rate; slower depreciation rate can increase earnings. There is a possibility of income - increasing manipulation.
SGAI	$\left[\frac{\text{SGA}_t}{\text{Sales}_t}\right] \Big/ \left[\frac{\text{SGA}_{t-1}}{\text{Sales}_{t-1}}\right]$ SGA: Sales, general, and administrative expense	If the SGAI > 1, it represents a disproportionate increase in sales compared to SGA and it can be an indicator of earnings manipulation.

TATA	$\frac{\Delta \text{ Current Asset} - \Delta \text{ Cash} - (\Delta \text{ Current Liabilities} - \Delta \text{ Current maturities of LTD} - \Delta \text{ Income Tax payable}) - \text{Depreciation \& Amortisation}_t}{\text{Total Assets}_t}$	The TATA measures the ratio of total accruals to total assets. It measures the extent to which managers alter earnings by making discretionary accounting choices. The total accruals is computed as a change in working capital (except cash) less depreciation for year t, less changes in income tax payable and current portion of long-term debt.
LVGI	$\left[\frac{\text{Leverage}_t}{\text{Leverage}_{t-1}}\right]$ Leverage = Debts / Assets	If the LVGI > 1, it represents an increase in leverage and it shows the incentives in debt covenant which lead to manipulation of earnings.

Source: Beneish (1999) [5]

4. Data collecting, sampling and model testing

Table 3: Sector classification and M-score results

Sector	**Total companies**	**M-score > -2.22**	**Percentage (%)**
Agriculture	4	0	0
Mining	34	17	50
Manufacture	33	16	49
Commerce	25	17	68
Construction	21	10	45
Real estate	34	17	50
Foods and beverage	28	10	36
Services	15	9	60
Transport	20	6	30
Telecommunication	9	6	67

Source: Authors' analyzed results

In this study, the financial statements for the 2013-2014 period were provided by the professional data-providing company, Vietstock. Data was collected from HOSE-Vietnam for the sample of 292 companies. Since the data of 69 companies were not available, the test could only be implemented for 223 companies.

By setting up some complicated calculations in Excel, the huge amount of data was inserted and we could get the required outputs.

The findings show that, using a benchmark of -2.22, there are 48.4 per cent of listed companies in HOSE with a high probability of earnings manipulation while 51.6 per cent did not have a probability. The details about the M-score differences are given in Table 3.

Agriculture sector: In the sample, there were only 4 companies. These companies had M-scores less than -2.22 so that the study could make a conclusion that there was no sign of earnings manipulation.

Mining sector: Half of the companies had M-scores greater than -2.22 and the other half had scores lower than -2.22. This means that 50 per cent of the companies had a high probability of EM while the remaining 50 per cent did not.

Manufacturing sector: Compared to the M-score threshold, 16 out of 33 companies- accounting for 49 per cent - had M-scores greater than -2.22. In conclusion, 49 per cent of the companies had a high probability of earnings manipulation and the rest, 51 per cent - did not.

Commerce sector: Based on the M-score results, 68 per cent of the 17 companies proved to be involved in earnings management through M-score model testing. The remaining 32 per cent (8 companies) had no signs.

Constructions sector: With 21 companies, 45 per cent (10 companies) showed the warning sign of earnings manipulation and the other 55 per cent showed no such evidence.

Real estate sector: Among 21 companies, there were 10 companies (45 per cent) that had an M-score more than -2.22 which showed evidence of a high probability of earnings manipulation, while the remaining 55 per cent did not.

Food-Beverages sector: with 28 companies in the sample, there were 10 companies (accounting for 36 per cent) that had the sign of earning manipulation when their M-scores were greater than the benchmark. On the other hand, the remaining 64 per cent did not.

Service sector: 9 out of 15 companies were committed to adjusting earnings when the M-score calculations showed that 60 per cent of the companies' M-scores were higher than the threshold. The rest, 40 per cent, were not.

Transport sector: 14 companies in the sample of 20 (70 per cent) had M-scores less than -2.22. This proved that 70 per cent of the companies had a low probability and 30 per cent had a high probability of earnings manipulation.

Telecommunication sector: 6 out of 9 companies accounting for 67 per cent had M-score greater than -2.22 so that the study concluded 67 per cent of the companies had a high probability of earnings manipulation, while the remaining 33 per cent did not.

5. Discussion and conclusion

The study results show that Beneish M-score model can be used for supporting information users in discriminating between high or low probability of earnings management while making decisions in the HOSE market. Based on the M-score regression, the findings in Table 3 show that the Commerce sector is in the highest probability of earnings management practice with a percentage of 68 per cent compared to the lowest percentage of 0% in the Agriculture sector. The Mining sector and Real estate sector are at the same percentage of 50 per cent in having a high probability of being earnings manipulators. The other sectors of Service and Telecommunications have more than a 50 per cent possibility of having a high probability for committing frauds.

The remaining sectors of Transport, Food and beverages, Construction, and Manufacturing have a less than 50 per cent probability of being highly engaged in earnings manipulation. The findings showed that all sectors (except agriculture, which has a limitation in the number of companies in the sample) were engaged in earnings management. This raises questions on the effectiveness of corporate governance and the protection for investors. However, the analysed results are consistent with many other researches in developed countries, as well as some

developing ones, with the percentages of detected manipulators being around 50% [5], [6], [19], [20], [21]. The results also prove that the M-score model could be considered to fit with sample observations in Vietnam, because the findings of this study are also consistent with auditing disclosure reports in 2014. Therefore, using the M-score could be a good means for detecting EM, not only in developed countries, but it also works in developing countries like Vietnam.

The results of this study have broadened our understanding about earning management in Vietnam. The M-score model has also proved its strong power in detecting EM in the country, and it provides a reliable tool for investors in making decisions and verifying the reliability of the accounting information in financial reports. It also helps banks or other financial institutions in protecting themselves from fraud or uncollectible lending cases.

However, there still remain some limitations and those should be suggestions for future researches such as enlarging the sample size, providing more details and explanations or making a cross-country analysis instead of a nationwide one.

References

[1] Healy, P. M., & Wahlen, J. M., "A review of the earnings management literature and its implications for standard setting", Accounting Horizons, 13 (1999), 365-383

[2] Schipper, K., "Commentary on earnings management", Accounting Horizons, 3 (1989), 91-102.

[3] Beneish, M. D., Lee, M. C. C. & Nichols, D. C., "Earnings manipulation and expected returns", Financial Analyst Journal, 69 (2013) 2, 57-82.

[4] Warshavsky, M., "Analyzing earnings quality as a financial forensic tool", Financial Valuation and Litigation Expert Journal, 39 (2012), 16-20.

[5] Beneish, M. D., "The detection of Earnings Manipulation", Financial Analyst Journal, 55 (1999) 5, 24-36.

[6] Paolone, F. & Magazzino, C., "Earnings manipulation among the main industrial sectors: Evidence form Italy", Economia Aziendale, 5 (2014), 253-261.

[7] Kaur, R., Sharma, K. & Khanna, A., "Detecting earnings management in India: A sector - wise study", European Journal of Business and Management, 6 (2014) 11.

[8] Nguyễn Công Phương, "Cash - basis Accounting and Earnings Management", Accounting Journal, 77 (2009).

[9] Nguyễn Thị Phương Thảo, "The impact of income tax rate change on earnings management: Cases of listed companies in Hochiminh stock market", Master dissertation, Đà Nẵng University, 2011.

[10] Jones J., "Earnings Management during Import Relief Investigations", Journal of Accounting Research, 29 (1991), 193-228.

[11] Dechow, P. M., Sloan, R. & Sweeney, A., "Detecting earnings management", The Accounting Review, 70 (1995) 2, 193-225.

[12] Burgstahler, D., & Dichev, I., "Earnings management to avoid earnings decreases and losses", Journal of Accounting and Economics, 24 (1997), 99-126.

[13] Degeorge, F., Patel, J., & Zeckhauser R., "Earnings management to exceed thresholds, Journal of Business", Working Paper, 1999, Boston University.

[14] Chen, S., Lin, B., Wang, Y., & Wu, L., "The frequency and magnitude of earnings management: Timeseries and multi-threshold comparisons", International Review of Economics and Finance, Working Paper, 2010, University of Rhode Island.

[15] McNichols, M., & G. P. Wilson, "Evidence of Earnings Management from the Provision for Bad Debts", Journal of Accounting Research 26 (1988) 3, 1-31.

[16] Franceschetti B. M. & Koschtial C., "Do bankrupt companies manipulate earnings more than the non-bankrupt ones?", Journal of Finance and Accountancy, 12 (2013), 1-22.

[17] Marinakis, P., An investigation of earnings management and earnings manipulation in the UK, Doctoral dissertation, Nottingham University, UK, 2011.

[18] Dechow, P. M, Ge, W., Larson, C. R. & Sloan, R., "Predicting material accounting misstatements", Contemporary Accounting Research, 28 (2011) 1, 17-82.

[19] Mahama, M., "Detecting corporate fraud and financial distress using the Atman and Beneish models", International Journal of

Economics, Commerce and Management, 3 (2015) 1, 1-18.

[20] Omar, N., Koya, R. K., Sanusi, Z. M. & Shafie, N. A., Financial statement fraud: A case examination using Beneish Model and ratio analysis, International Journal of Trade, Economics and Finance, 5 (2014) 2, 184-186.

[21] Nguyễn Công Phương & Nguyễn Trần Nguyên Trân, "Beneish Model in Predicting Materiality Errors in Financial Statements", Economics and Development Journal, 206 (2014), 54-60.

[22] Joseph, T. W., The Numbers Raise a Red Flag, Texas: ACFE, 2001.

[23] Aris, N. A., Othman, R., Arif, S. M. M., Malek, M. A. A & Omar, N., "Fraud detection: Benford's Law vs Beneish Model", IEEE Symposium on Humanities, Science and Engineering Research, (2013) 726-731.

[24] Nwoye, U. J., Okoye, E. I & Oraka, A. O, "Beneish Model as effective complement to the application of SAS No. 99 in the conduct of audit in Nigeria", Management and Administrative Sciences Review, 2 (2013) 6.