

CREATIVE ACCOUNTING AND THE ACCOUNTING NUMBERS: AN ANALYSIS OF CORPORATE REPORTING NUMBERS IN JAKARTA STOCK EXCHANGE (JSX)

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ABSTRACT

*In the past few decades there has been a tremendous discussion concerning information disclosed in financial statement prepared in developing countries. However there are only few research explore the likelihood **reliability** of the accounting numbers of such financial statement,*

*and the possibility of **creative accounting** on disclosure information of the corporate reporting practices in Indonesia.*

By analyzing time series of the accounting numbers, before and after the economic crash in 1997, I argue that up to the year of 2000, data that was provided by some companies in the Jakarta Stock Exchange (JSX) were still less reliable. Some listed companies were practicing creative accounting on disclosure information.

With regard to the existing ethical standard of accountants and the statutory requirements of corporate reporting practices in the stock exchange, this study suggest there is a need to regulate more to internal auditing function of the firms and to do law enforcement to the accountants.

INTRODUCTION

I still remember when I was taking my course works at the Wollongong University in 1993, the subject was insolvency, and the lecture gave me 24 company's financial statements to be analyzed. After a while, he asked the students about the likelihood of those companies, whether the companies are going bankrupt or under financial distress. No one answered the questions, but me. Out of 24 company's balance sheets and profit loss statements only one was wrong answered. Some of my collages asked me: how do I have the right answered?. I just implemented some ratio analysis that I learned and I assumed that the data were **reliable and valid**, I replied!

In addition, after I completed my course works, I was attracted by the unanswered conclusion of the previous research studies concerning **reliability and financial disclosure information** on financial data in developing countries (Cerf R. (1961); Bradish D. (1965); Mahon J. (1965); Seidler (1967); Copeland M. (1968); Desai B. (1971); Jaggi (1973,1975); Ngurah A. (1991). In order to answer such unanswered

conclusion I did a field research in the Jakarta Stock Exchange (JSX). By combining two research methods, *quantitative and qualitative*, I found that the financial data that were provided by corporate reporting practices in Jakarta Stock Exchange (JSX) were *less reliable* (Nguhah A, 1993).

In order to get more understanding on the progress of corporate reporting practices in JSX, last year a time series of the accounting numbers on financial statements of the listed companies in the Jakarta stock exchange (JSX) are examined. Based on this examination, hypotheses as to reliability of financial data and the possible existence of creative accounting on financial disclosure information of corporate reporting practices are developed.

THE ECONOMIC CRISIS

It is surprisingly, that since Thailand experienced economic crisis in 1996 and following other countries in Asia, crisis in Indonesia can not be resolved compared to the other countries. From the New Order under Mr. Suharto and followed by Order Reform by Mr. Wahid (Gus Dur) and Mrs. Megawati Soekarnoputri lately, there is no significant improvement in economic activities in this country.

Table 1 indicated that there are long crisis in Indonesia, and some significant differences among some economic indicators during 1994-2000 in Indonesia. As to rupiah was devalued from 1US\$ equal to Rp 2,205 in 1994 until 1US\$ equal to Rp 9,385 in 2000, the income per capita in US\$ decreased from \$ 884.72 in 1994 to \$ 629.20 in 2000. Based on BPS (1999) the poverty line increased from 34.5 million in 1996 to 48.4 million people in 1999. In general can be concluded that there are significant differences on economic conditions, before and after the crash. And there is also no significant improvement on the economic indicators up to 2000.

Table 1
An Analysis Some Economic Indicators from 1994 -2000

Variables/ Indicators	1994	1995	1996	1997	1998	1999	2000
Income per Capita ('000' Rp)	1.951	2.277	2.634	3.112	4.543	5.147	5.905
Income per Capita (US \$)	884.72	987.80	1104.20	545.94	560.91	718.75	629.20
Inflation rate	9.24	8.64	6.47	11.05	77.63	2.01	9.35
Exchange rate	2.205	2.305	2.385	5.700	8.100	7.161	9.385
Population ('000)	190.676	193.750	196.807	195.809	198.499	200.327	203.456

Source: BPS, Statistical yearbook of Indonesia (1994 - 2000)

Some people argued that the crisis will not so badly, only if and if the economic crisis not too long and the Government was not liquidated some banks on 1997. This is mismanagement in handling the crisis! Whatever the argument, but no one can prove and the fact the crisis still occurred in Indonesia.

RESEARCH METHOD

Most people argue that recently, Indonesia is suffering from a *multi dimensional* crisis, but only few researchers in accounting and finance explore why the multi dimensional crisis occurred? Is there any contribution from the accounting profession to that crisis? Those some questions are not being studied.

Since, the government of Indonesia announced that some banks are being collapse in November 1997, I have been driven to do a preliminary study on the annual reports of those banks that listed in the JSX. By doing a simple test, an ex post analysis, on the annual report of those Banks, I found that auditor's opinions are unqualified. They stated that the financial statements were presented fairly in conformity with generally accepted accounting principles applied on consistent basis. See Table 2.

Due to there is no exception on auditor's opinion or no any notes on the financial statements of bankruptcy's banks, some observers doubted that accountants or auditors are not get involve in such crisis. From these statements I attracted to see another side of auditor's problems, that is about creative accounting rather than to discuss how the auditors get involve in creative accounting.

Table 2.
An Analysis of 15 Annual Report of Bankruptcy's Bank
in the JSX for the year 1997

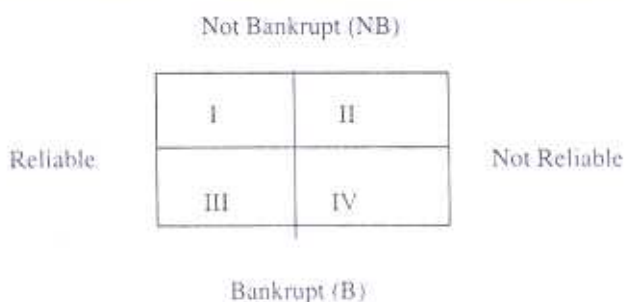
Public Accounting Firms	Number of Comp.	Auditor's Opinion	Notes on Fin. Statement.	Affiliate Int. Acc. Firms
Sidharta and Sidharta	1	Unqualified	None	Coopers Lybrand Int.
Prasetyo Utomo	12	Unqualified	None	Arthur Andersen
Hans Tuanakota Mustafa	1	Unqualified	None	Deloit Touche Tohmatsu
Hanadi Sudjendro	1	Unqualified	None	KPMG
	15			

Table 2, indicate that one-year before the crash, the banks were stated healthy enough. There is no any information provided by the public accountant that such banks have had financial difficulties either in their audit opinion or on any notes of the financial statement. But suddenly, in 1997, the government of Indonesia announced those banks were going bankrupt, due to financial problems. From this condition it can be concluded that there must be creative accounting on disclosure information provided by the listed companies.

1). Method and Methodology on this study

A couple years later, in order to get more understanding concerning creative accounting and reliability of the data, two models of research methods, quantitative and qualitative research methods, are implemented. A quantitative method asked for utilizing the series of accounting numbers on the annual reports. Ex post analysis and ex ante analysis of the series of reported financial ratios of the companies, after and before the crash in 1997, are examined. The ex post analysis are implemented in order to understand what happened and the purpose of ex ante analysis on the series of accounting numbers are to forecast what will happened after the crash.

Figure #1
A Research Design for Bankrupt and Not Bankrupt Companies



A further step of the research on this study is to develop a research design. See Figure #1. In this figure, companies are grouped into some industries and status, either bankrupt or not bankrupt company. In addition, companies are divided into companies that provide a reliable and not reliable financial data based on analysis of the series of accounting numbers. The dichotomy data, reliable and not reliable data are needed as to simplify the problems.

Column II and I indicated that the possibility status of not bankrupt companies. The not bankrupt companies could exercise reliable or not reliable data on their corporate reporting practices. A not bankrupt company that provided reliable data were assumed that those companies that still active in JSX up to 2000. But the not bankrupt companies that provide not reliable data are those that still listed on JSX but not active in trading activities and trend of share prices decline or relative stable.

In the other side, column III and IV, indicated bankrupt companies that exercise either reliable or not reliable data. The bankrupt companies are those companies that not listed anymore after the crash. They bankrupt either because of mismanagement or the unscrupulous management intentionally exercising creative accounting.

Matthew and Parera (1991) argue that creative accounting can be viewed from two sides either positive or negative. In this study, the companies that provide not reliable data are associated with exercising negative creative accounting. These creative accounting could be exist in not bankruptcy or bankruptcy companies.

One measurement used to understand creative accounting in this study is examining the differences on the financial ratios after and before the crash with the financial ratios in the period of the crash. Possibility of creative accounting on financial disclosure also was examined on this study, by

using narrative records concerning history of the companies. This is a part of qualitative research method that implemented in this study. Summary of the likelihood of the companies is addressed in table 7. From those quantitative and qualitative research methods an optimal result study can be gained.

2). Sample Selection

In association with the quantitative research method, annual reports of 89 listed companies, from 1991 to 1999, were selected, by using stratified random sample. From those companies only about 82 companies provide completed data from 1994 to 1999, and 7 of them were in completed. Data from those annual reports were classified into companies going bankrupt and not going bankrupt. The periods of study were divided into three periods of the study i.e. the periods before 1997, the year 1997 and after 1997.

2.1). Companies bankrupt and not bankrupt.

As mentioned in the earlier paragraph, 89 companies were collected from the listed companies in JSX. Then from 82 companies were classified into bankrupt and not bankrupt companies. In this study, there were 60 companies not going bankrupt until 1999 and 22 companies bankrupt.

In addition to this study, the company's history was collected from interview and discussion with some officials from JSX, Stock Exchange Commission (BAPEPAM) and also with some official from Indonesian Bank Restructuring Agency-IBRA (BPPN). Some companies were not bankrupt or going bankrupt were classified as follows :

Table 3.
Company's classification

2.2). Before, After and the Year Economic Crash in 1997

Companies	Bankrupt	Not bankrupt	Total
Cable	-	3	3
Adhesive	-	2	2
Appareal & Other Textile	1	3	4
Automotive & Allied Product	-	3	3
Lumber & Wood	-	3	3
Banking	17	4	21
Plastic & Glass Product	1	4	5
Whole Sale & Retail	-	4	4
Hotel, Travel & Service	-	4	4
Animal Feed & Husbandry	2	4	6
Chemical Allied Product	-	3	3
Constructions	-	2	2
Electric & Electronic	-	3	3
Machinery	-	2	2
Metal & Allied Product	-	5	5
Mining	1	5	6
Pharmaceutical	-	4	4
Transportation	-	2	2
Total	22	60	82

One problem on this study is to decide the period of the crash. This study argue that the year 1997 is the year of economic crash, where the government of Indonesia announced that 14 banks were going bankrupt and following panic respond among the people. At this period, rupiah was under valued into Rp 5,700. the income per capita in 1997 was the lowest before and after the crash. The year 1997 can be accepted as the black November of the Banking systems in Indonesia.

2.3). Selected Items of Information Disclosure

Most research studies in accounting and finance examined earning numbers in association with creative accounting (Dascher, PE. And Malcom (1970); Kamin J.Y. and Ronen, J. (1978) Rangan (1998); Teoh et al (1998) Healy and Wahlen (1999) Ericson and Wang (1999) and many others. In this research, another approach, besides earning, are claimed as to examine creative accounting on disclosure information of the corporate reporting practices. Those are liquidity ratios in order to measure the degree of the financial liquidity of the firms and leverage ratios and debt to equity ratio, in order to measure ability of the firm to pay if they are going bankrupt.

HYPOTHESIS AND ANALYSIS OF DATA

In order to answer the research question concerning creative accounting and reliability of data some hypotheses are designed and data from a series of financial ratio are examined and are associated with the history of the company. Those hypotheses are:

- H1: There are significant differences on perceive importance of financial ratios among management of bankrupt and not bankrupt companies.
- H2: Management of Bankrupt companies tend to manipulate the data and smoothing their financial ratios than management of not bankrupt companies.
- H3: The companies that experiencing bankrupt mostly are the companies that provide unreliable data and experiencing creative accounting on their corporate reporting practices.

D.1. The Financial Ratios

As mentioned in the previous paragraphs, this study attempts to explore another component of financial statements, besides earning, in order to measure sort of reliability of financial data and creative accounting on the disclosure information. There are three kinds of ratios that implemented in this study. Those are current ratios (CR), leverage ratio (LR) and debt to equity ratios (DR). Current ratios indicate the liquidity of the company and leverage ratios and debt to equity ratios indicate the ability of the company to pay all of debt, if they are stated insolvent.

D.2. An Analysis of Financial Ratios

In order to understand problems of creative accounting, a series of ratios are needed. In this case, 6 (six) years of financial ratios, from 1994 to 1999 are examined. By utilizing computation statistical package (SPSS), two model statistical analysis, Paired "t" test and multivariate tests are implemented

In order to test the first and the second hypothesis, two tail test with 95% confidence interval are used and a summary of narrative records are used together in testing the third hypothesis. Tests for the

first and second hypothesis are design as follow:

1). A pair t test for the not bankrupt companies

Table 3

2). A pair "t" test for the bankrupt companies'

Paired Samples Test

		Paired Differences				t	df	Sig (2-tailed)	
		Mean	Std Deviation	Std Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	CR_97 - CR_PRA	-.6014	.9423	.1160	-.8331	-.3698	-5.165	65	.000
Pair 2	CR_97 - CR_AFT	-1.6084	6.1427	.7865	-3.3816	-.2351	-2.299	60	.025
Pair 3	CR_PRA - CR_AFT	-1.2403	6.2948	.8127	-2.8664	.3858	-1.526	59	.132
Pair 4	DE_97 - DE_PRA	1.5990	2.6458	.3503	.8894	2.2896	4.538	65	.000
Pair 5	DE_97 - DE_AFT	-2.2773	11.8416	1.52	-5.3101	.7555	-1.502	60	.138
Pair 6	DE_PRA - DE_AFT	-3.9741	11.6704	1.51	-6.9889	-.9593	-2.638	59	.011
Pair 7	LR_97 - LR_PRA	1.4948	10.4818	1.29	-1.0819	4.0716	1.159	65	.251
Pair 8	LR_97 - LR_AFT	-.2380	1.0092	1288	-.4956	1.974E+02	-1.847	60	.070
Pair 9	LR_PRA - LR_AFT	-.4565	.9398	1213	-.6993	-.2137	-3.763	59	.000

Table 4

Paired Samples Test

		Paired Differences				t	df	Sig (2-tailed)	
		Mean	Std Deviation	Std Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	CR_97 - CR_PRA	5.3968E-02	.3370	354E-02	-.2074	9.944E-02	-.734	20	.472
Pair 4	DE_97 - DE_PRA	3.4011	10.1420	2.2132	-1.2155	8.0177	1.537	20	.140
Pair 7	LR_97 - LR_PRA	.2852	.4281	342E-02	3.036E-02	.4801	3.053	20	.006

The table 3, 4 and 5 show that there are significant differences of perceive importance among management of bankrupt and not bankrupt companies onto financial ratios. Those tables also indicate the likelihood of companies to manipulate the financial ratios.

Table 5
Perceive importance of Financial Ratios
among Management of Bankrupt and Not Bankrupt Companies

Companies	Current Ratio	Debt to Equity Ratio	Leverage Ratio
Not bankrupt	Significant	Significant	Not significant
Bankrupt	Not significant	Not significant	Significant

In order to understand whether each financial ratios are effected before and after the crash, a multivariate analysis with general linear model –repeated measurements- are designed as follow :

Table 6
Companies classification

Status	Value Label	N (number of sample)
Status 0	Bankrupt	22
Status 1	Not Bankrupt	60

In order to test those kinds of relationship a test on each of the ratios are designed as follows:

1). Multivariate tests on Current Ratios of companies

Table 7

Multivariate Tests^b

Effect		Value	F	Hypothesis df	Error df	Sig.
CR	Pillai's Trace	.126	2.197 ^a	5.000	76.000	.063
	Wilks' Lambda	.874	2.197 ^a	5.000	76.000	.063
	Hotelling's Trace	.145	2.197 ^a	5.000	76.000	.063
	Roy's Largest Root	.145	2.197 ^a	5.000	76.000	.063
CR * STATUS	Pillai's Trace	.108	1.850 ^a	5.000	76.000	.113
	Wilks' Lambda	.892	1.850 ^a	5.000	76.000	.113
	Hotelling's Trace	.122	1.850 ^a	5.000	76.000	.113
	Roy's Largest Root	.122	1.850 ^a	5.000	76.000	.113

a. Exact statistic.

b.

Design: Intercept+STATUS
 Within Subjects Design: CR

Table 7, indicated that there is no significant effect on current ratios of the companies before and after the crash

2). Multivariate tests on Debt to Equity Ratios of companies

Table 8

Multivariate Test^a

Effect		Value	F	Hypothesis df	Error df	Sig.
DE	Pillai's Trace	.166	3.016 ^a	5.000	76.000	.015
	Wilks' Lambda	.834	3.016 ^a	5.000	76.000	.015
	Hotelling's Trace	.198	3.016 ^a	5.000	76.000	.015
	Roy's Largest Root	.198	3.016 ^a	5.000	76.000	.015
DE * STATUS	Pillai's Trace	.108	1.837 ^a	5.000	76.000	.116
	Wilks' Lambda	.892	1.837 ^a	5.000	76.000	.116
	Hotelling's Trace	.121	1.837 ^a	5.000	76.000	.116
	Roy's Largest Root	.121	1.837 ^a	5.000	76.000	.116

a. Exact statistic

b.

Design: Intercept+STATUS
Within Subjects Design: DE

Those tests indicated that there are significant effects on debt to equity ratios of the companies before and after the crash.

3). Multivariate tests on Leverage Ratios of companies

Table 9

Multivariate Test^a

Effect		Value	F	Hypothesis df	Error df	Sig.
LR	Pillai's Trace	.323	7.264 ^a	5.000	76.000	.000
	Wilks' Lambda	.677	7.264 ^a	5.000	76.000	.000
	Hotelling's Trace	.478	7.264 ^a	5.000	76.000	.000
	Roy's Largest Root	.478	7.264 ^a	5.000	76.000	.000
LR * STATUS	Pillai's Trace	.335	7.649 ^a	5.000	76.000	.000
	Wilks' Lambda	.665	7.649 ^a	5.000	76.000	.000
	Hotelling's Trace	.503	7.649 ^a	5.000	76.000	.000
	Roy's Largest Root	.503	7.649 ^a	5.000	76.000	.000

a. Exact statistic

b.

Design: Intercept+STATUS
Within Subjects Design: LR

This tests indicated that there is significant effect on leverage ratios of the companies before and after the crash. In total, can be concluded that the result varies among the financial ratios. There is not significant effect on current ratios of those companies before and after the crash, but on leverage ratios and debt to equity ratios the results indicated that those ratios affected significant before and after the crash.

D.3. Historical Analysis

Based on the results studies on narrative records of the bankrupt companies, indicated that the bankrupt companies are those companies that delisted in JSX and under IBRA. Those companies under IBRA are a group of banks that suspended from operation in 1998 and 1999. And the others are a group of banks whose operational supervision was transferred to IBRA from the central bank (BI). Those banks are mostly due to circumvent the Central Bank rule that related to legal lending limit i.e. provide loans over the limit to the group or affiliate companies. When the banks were struck again the crisis those group can not return the loans. Those companies bankrupts are as follow:

Table 10
The list of Companies bankrupts at JSX

Company	Status	Remarks
PT. Super Mitory utama	Bankrupt	Delisted
Bank Surya	Bankrupt	Delisted (FB)
Bank Umum Nasional Indo.	Bankrupt	Delisted (FB)
BDNI	Bankrupt	Delisted (FB)
Bank Modern	Bankrupt	Delisted (FB)
Bank Papan Sejahtera	Bankrupt	Delisted (FB)
Bank Bira	Bankrupt	Delisted (TOB)
Bank Umum Servitia	Bankrupt	Delisted (FB)
Bank Mashul Utama	Bankrupt	Delisted (FB)
Bank Arya Pandhuarta	Bankrupt	Delisted (FB)
Bank Bahari	Bankrupt	Delisted (FB)
Bank Ficorinvest	Bankrupt	Delisted (FB)
Bank Indovest Tbk	Bankrupt	Delisted (FB)
Bank PDFCI	Bankrupt	Delisted (TOB)
Bank Duta	Bankrupt	Delisted (TOB)
Bank Rama	Bankrupt	Delisted (TOB)
Bank Tiara	Bankrupt	Delisted (TOB)
Bank Tamara	Bankrupt	Delisted (TOB)
Aster Dharma Industri	Bankrupt	Delisted
Dharma Agrifood	Bankrupt	Delisted
Anwar Seirad	Bankrupt	Delisted
Dharmindo Adhiduta	Bankrupt	Delisted

Notes: FB : Frozen Bank
TOB : Taken Over Bank

Those circumvents are not provided on the annual reports until the central bank stated that those bank provide loans over the credit limits as stated on the central bank regulations. This is an evidence that unscrupulous management exercising creative accounting in theirs reports by provide not reliable data in the annual reports.

IMPLICATION AND DISCUSSION ON THE STUDY

One of the likely implication of creative accounting is the greater tension on auditors as to provide independent auditors report to the company. Not reliable data is likely a manifestation of creative accounting. It is realized that accounting numbers of financial statement in developing countries are less reliable than in developed countries.

The results study indicated that, the bankrupt companies are the result of creative accounting. The more intents creative accounting by management of the companies, the more not reliable the financial data that provided by the corporate reporting. The not reliable data will be considered by the stake holders especially the investors and creditors as a sign the intrinsic value of the company is under the market.

By law enforcement and increase the professional ethics and qualifications of Auditors and Management Accountants, it could be lesser intents corporate management to manipulate accounting numbers for the purpose of their self. The role of internal auditors as a unit that supervised and control the operation of companies and the role of management accountants as a part of management in providing the data will increase the performance of the companies. One would expect less drastic shift in estimating the value of the companies under any situations.

In developing country, Indonesia the accounting number are likely still not reliable due to creative accounting on financial statements of the companies. This study found that there is significant differences on perceive of importance of financial ratios. The ratio of bankrupt companies indicated companies are experiencing creative accounting by manipulating the accounting numbers. A smoothing current ratios and debt to equity ratios are deem necessary by the unscrupulous management of the bankrupt companies.

This study also provide insight that from the beginning up to the year 1999 financial data in JSX still less reliable. For the future research this study suggest there is a need to study accountants qualifications, ethics and attitude towards creative accounting.

SUMMARY AND CONCLUSIONS

This study demonstrates statistical test in modeling the creative accounting and reliability of accounting numbers that provided by corporate reporting in Indonesia. The results of this study showed that there is an indication of creative accounting on bankrupt companies. The result provide evidences that bankrupt companies are companies that provide not reliable data. Creative accounting are exercised by smoothing not only income but also current ratio and debt to equity ratio of the financial ratios companies by unscrupulous management.

It has been demonstrated empirically that the perceive importance of management of the bankrupt companies and not bankrupts companies onto the financial ratios are significant. Although this study not statistically examined the symptom of the bankruptcy companies, by referring to the companies histories it can be concluded that there is significant association between creative accounting, not reliable data and bankrupt companies.