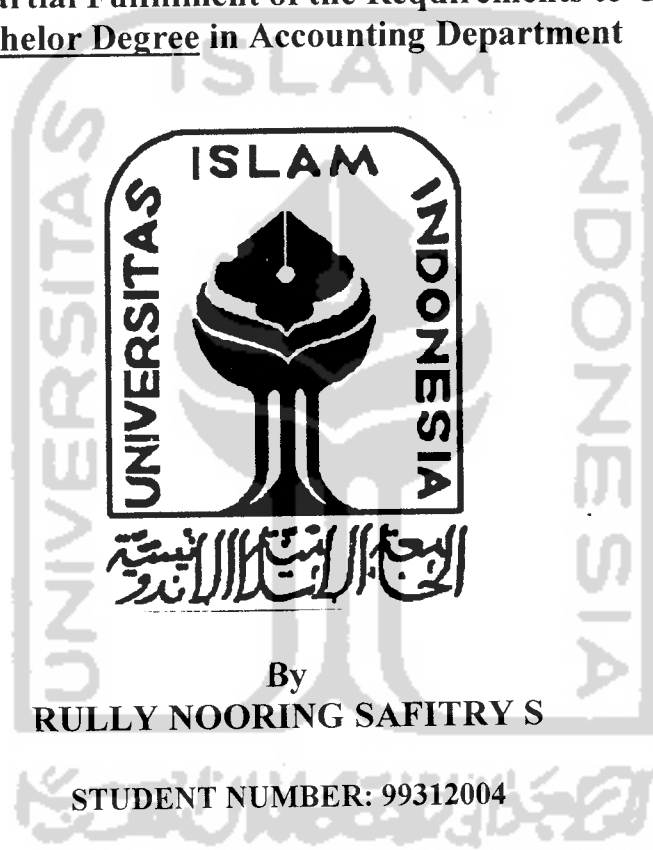


**THE EFFECT OF INCOME SMOOTHING TOWARDS
ABNORMAL RETURN:
THE CASE OF LISTED NON-MANUFACTURING COMPANY IN
JAKARTA STOCK EXCHANGE**

A THESIS

**Presented as Partial Fulfillment of the Requirements to Obtain the
Bachelor Degree in Accounting Department**



By
RULLY NOORING SAFITRY S

STUDENT NUMBER: 99312004

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Defended before the Board of Examiners
on May 29, 2004
and declared Acceptable

Board of examiners

Examiner 1

Ahmad Sobirin, Drs., MBA., PhD



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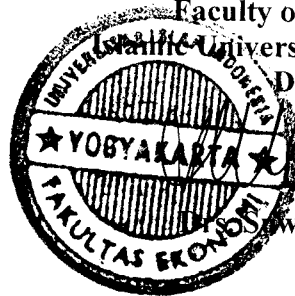
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Yogyakarta, April 28, 2004

Rully Nooring Safitry Suratman

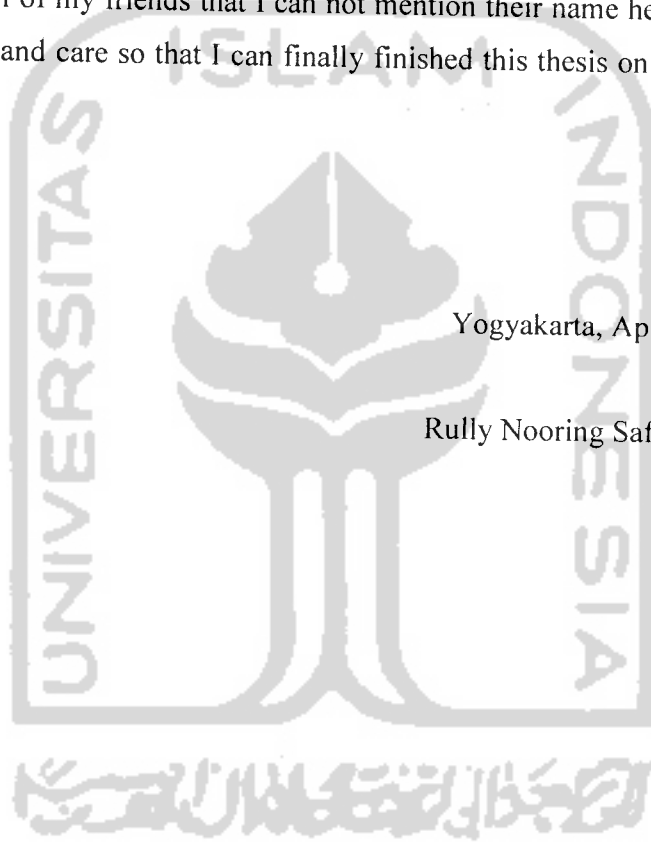


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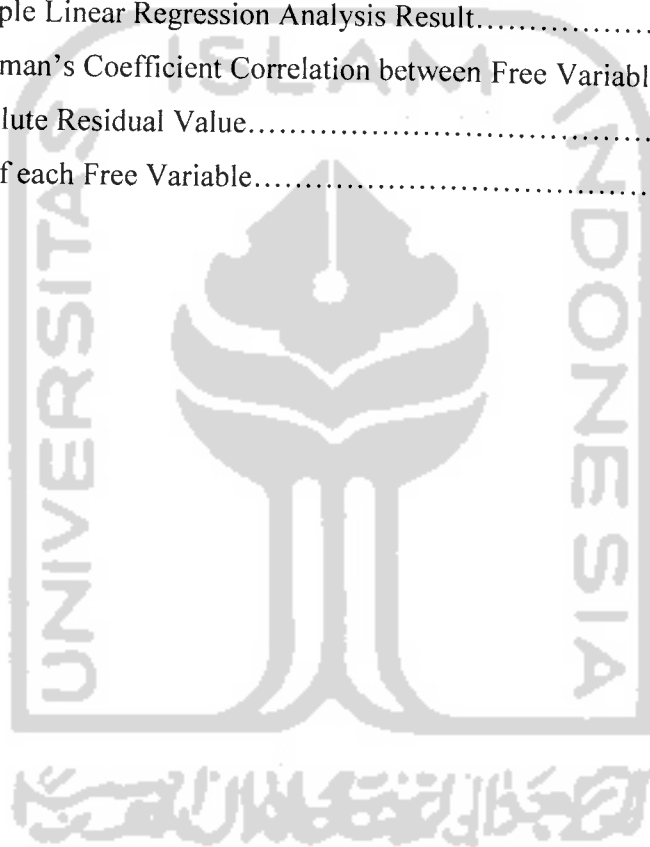
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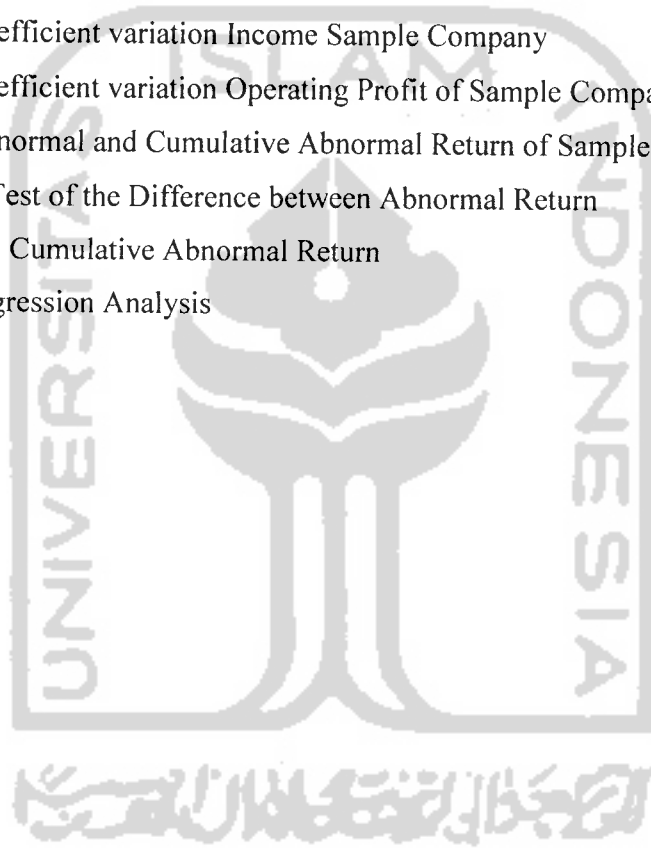
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ABSTRACT

Suratman. Rully Nooring Safitry (2004). *The Effect of Income Smoothing towards Abnormal Return: The Case of Listed Non-Manufacturing Company in Jakarta Stock Exchange*. Yogyakarta, Accounting Department, Faculty of Economics, Islamic University of Indonesia.

This research is aimed at determining the existence of the difference in average abnormal return cumulative between companies which conducted income smoothing and those of non-smoothing company and also determining the effect of income smoothing and company size toward cumulative average abnormal return. The research method used was Event Study using purposive sampling technique over population of non-manufacturing company listed in JSX. The data was gathered using documentary technique from Capital Market publication in Indonesia through several media, which was then, analyzed using statistic tests.

From 144 companies analyzed from sample company, the result was, among in 39 companies identified conducting income smoothing and the other 105 are included as non smoothing companies. At trustworthy level of 95% smoothing company gave bigger average abnormal return than non smoothing company. Meanwhile, empirically it was found that income smoothing and company size have significant effect toward cumulative abnormal return in 10 days after the announcement of financial statement publication.

Based on the phenomenon above, the advantage for prospective investor is that by purchasing stock of the company which conducts income smoothing is profitable than those of non smoothing company. Besides, also by purchasing stock of the big size company, the expectation of profit will be higher.

Key words: Income smoothing, Company size, Cumulative abnormal return, Stock, Investor.

ABSTRAK

Suratman, Rully Nooring Safitry (2004). *Pengaruh Perataan Laba Terhadap Abnormal Return: Kasus Pada Perusahaan Non Manufaktur yang Terdaftar di Bursa Efek Jakarta*. Yogyakarta. Jurusan Akuntansi. Fakultas Ekonomi. Universitas Islam Indonesia.

Penelitian ini bertujuan untuk mengetahui ada-tidaknya perbedaan rata-rata abnormal returns kumulatif antara perusahaan yang melakukan perataan laba dengan yang tidak, serta untuk mengetahui pengaruh perataan laba terhadap rata-rata abnormal return kumulatif. Metode penelitian yang digunakan adalah Event Study dengan teknik pengambilan sampel secara purposive sampling atas populasi perusahaan non manufaktur yang terdaftar di BEJ. Data dikumpulkan dengan teknik documenter dari publikasi Pasar Modal di Indonesia melalui berbagai media, kemudian dianalisis menggunakan uji statistic.

Dari 144 sampel perusahaan yang diteliti, ternyata sebanyak 39 perusahaan melakukan perataan laba dan yang 105 perusahaan tidak melakukan. Pada tingkat kepercayaan 95%, perusahaan perata laba memberikan abnormal return kumulatif yang lebih besar dibandingkan dengan perusahaan bukan perata laba, dan secara empiris ternyata perataan laba serta ukuran perusahaan mempunyai pengaruh nyata yang tidak dapat diabaikan terhadap abnormal return kumulatif selama 10 hari setelah pengumuman publikasi laporan keuangan.

Berdasarkan fenomena diatas, manfaatnya bagi calon investor bahwa membeli saham perusahaan yang melakukan perataan laba akan lebih menguntungkan dari pada yang tidak melakukan perataan laba, dan membeli saham perusahaan yang lebih besar maka harapan memperoleh keuntungannya akan lebih besar pula.

Kata kunci: Perataan laba. Ukuran perusahaan. Abnormal return kumulatif. Saham. Investor.

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Income smoothing is an action that is mostly conducted by the managers in a certain purpose. Smoothing of reported earnings or income smoothing may be defined as the intentional dampening of fluctuation about some level of earnings that is currently considered to be normal for a company (Beidelman, 1973). There are several proposition proposed by Gordon about factors which stimulate managers to smoothing their income: (1) the criterion a corporate management uses in selecting accounting principles is the maximization of its utility or welfare, (2) the utility of a management increases with: its job security, the level and rate of growth in the management's income and the level and rate of growth in the corporation's size, (3) the achievement of the management goal stated in proposition (2) is dependent in part on the satisfaction of shareholders with the corporation's performance, (4) shareholders' satisfaction with a corporation increases with the average rate of growth in the corporation's income (or the average rate of return on its capital) and the stability of its income. Based on that proposition proposed by Gordon, there is a given theorem (Belkoui and Jones; 1996; 49): given that the above propositions are accepted or found to be true, it follows that a management would, within the limits of its power, that is, the latitude allowed by accounting rules (1) smooth reported income (2) smooth the rate of growth in income. Whereas according to Belkoui and Jones (1996; 50) one of income smoothing purposes

usually used by event study researchers. If an event is giving an effect toward abnormal return significantly, the event will have information content.

1.2 Problem Identification

This study is a modification of another study that had been conducted by Michelson *et al* (2000). There are several considerations from the writer to conduct this study: (1) all the studies about income smoothing that had been conducted in Indonesia are mostly focused on the factors affecting income smoothing, (2) research about income smoothing affect towards stock return is an interesting study to be conducted, because through this study someone will be able to determine whether accounting information (specially earning information) is able to influence market, (3) the previous research which had been done by Asih and Gudono (2000), Jin and Machfoedz (1998), and Jatiningrum (2000) was conducted to manufacturing company, whereas there have never been any research on income smoothing toward non-manufacturing or service companies.

1.3 Problem Formulation

Based on the study background explained above, this study is attempted to obtain possible answer for the following questions:

may be viewed as the deliberate normalization of income in order to reach a desired trend or level.

For many years, studies of the smoothing of reported income by companies have suggested that one of its purposes is to increase the level of market returns. The rational thought that stimulating management action to smooth their income is management purposes to increase the company's value through the increasing of stock price. Hence, the increasing of company's earnings is expected to be followed with the increasing of stock price in sock exchange. As stated by Hendrikson (1982, 343) stock price stays flow in the same direction as accounting earnings.

Michelson *et al* (2000) had conducted an empirical study that is expected to determine the market response about income smoothing which had been conducted by the management. In that study, there are several phenomenon examined: (1) the differences of cumulative average abnormal return occurrence between company that smooth their income and those that do not, (2) the differences cumulative average abnormal return occurrence in inter-industry and inter-company that smoothing their income and those that do not, (3) the occurrence effect from income smoothing, industry and company size to the cumulative average abnormal returns. Those of Michelson study was conducted in several industries such as: mining, construction, manufacturing, transportation, communication, wholesale trade, retail, finance insurance, real estate and services. The using of abnormal return both in the form of average or accumulation is used to determine the effect of information content which is

usually used by event study researchers. If an event is giving an effect toward abnormal return significantly, the event will have information content.

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1.3 Problem Formulation

Based on the study background explained above, this study is attempted to obtain possible answer for the following questions:

1.5 Research Objective

There are several expected objectives from this research:

1. To determine the existence differences of cumulative average abnormal return between companies that conducted income smoothing and those that do not.
2. To determine the existence effect of income smoothing and company size toward cumulative average abnormal return.

1.6 Research Contribution

Hopefully, this research will be able to:

1. give contribution to science in the form of empirical research result about income smoothing effect towards stock return.
2. broaden writer's knowledge in accounting theory subject especially that is related with income smoothing matters.
3. beside, the results from this research that is income smoothing information are expected to give inputs in investments' decision making.

1.7 Definition of Terms

Variables used in this study are income smoothing, company size, and cumulative abnormal return.

1) Income Smoothing

Income smoothing variable is an indicator counted as ratio between profit coefficient variation and sales coefficient variation. If the ratio's value is greater than 1, so the company is categorized as non-smoothing company, but if the ratio is valued as 1 or less then the company categorized as smoothing company. Income smoothing variable is a dummy variable, which valued as 0 for non-smoothing company and it would valued as 1 for smoothing company.

2) Cumulative abnormal return

Cumulative abnormal return is total summation from abnormal return in a certain window period. Whereas, abnormal return is the difference between actual return and expected return.

3) Company size

Company size is the extent of company's market value of equity; is total outstanding stock multiplied by stock price

CHAPTER II REVIEW OF RELATED LITERATURE

2.1 Theoretical Review

2.1.1 Earning Management

a. Earning Management Definition

Income smoothing which is conducted by the management is basically a part of earning management. Earning management occurs when managers use their judgment both in the financial reporting and in the structured transaction project in order to change the financial statement which could astray the stakeholders about the base of company's economical performance or to influence gain according to the contract that based on reported accounting numbers.

Earning management represents an intentional process in the boarder of *Generally Accepted Accounting Principles* (GAAP), to reporting expected periodic earnings. It could be influenced by some factors: (a) Opportunistic manager behavior, which maximizing satisfaction in relation with compensation, debt contract and political costs, (b) manager's conviction that earning management could affect stock market price.

From ethical point of view, earning management definition could be defined as "any action on the management which provide no true economic advantage to the organization and may in fact, in the long-term be detrimental" (Merchant and Rockness in Gumanti, 2000).

According to Schipper (1989:92) earning management is an intentional intervention with certain purposes toward external financial reporting process in order to get some personal interest. While according to Paul M Healy and James M Wahley (1999), that earning management occurs when managers use their judgment in the financial reporting that could be astray stakeholders about the base of organization's economical performance or to influence gain according to the contract that based on the reported accounting numbers. Earning management is a selection of accounting tact in order to reach certain purposes (Scott 2000:351). There are several aspects from these definitions that decent to discuss. **First**, there are many ways that managers can practice to justify financial reporting. For example justify is needed to estimating numerous economical events in the future such as the expected value of remaining long-term assets, obligation for pension advantage and other advantage of human resource, deferred tax, and loss from bad debt and assets depreciation. The managers should also choose the methods of LIFO, FIFO or weighted average as their inventory valuation. In addition, the managers should practice to justifying the working capital management, which affected cost allocation and net income. Managers should also choose either to make or to defer spending, such as research and development, advertisement, or maintenance. **Second**, that those definitions framed earning management target as an astray circumstances to the shareholders about the base of certain economics performance. This circumstances can be occur if the manager believe that several stakeholders do not canceling the earning

management. Those could also be happen if the managers have access to the information which not available outside the stakeholders which then it possible to anticipate certain number of earning management.

In the end, to emphasize the starting point, the uses of management consideration in the financial reporting both have cost and benefit. Cost is misplaced of potential resources which build from the earning management. Benefit including the increasing of potential in communication of trustworthy management personal information to the external stakeholders, improving resource allocation decision.

b. Type of Earning Management

The types of earning management are: Taking a Bath, Income Minimization, Income Maximization, and Income Smoothing (Scott, 1997:365).

1) Taking a Bath

Taking a bath occur in stress period or reorganization including new CEO appointment. If company should reporting high level of earning, managers are forced to report high level of earning, and as the consequence managers will erase assets in expectation that the incoming earning will increase. This form admits the existence of cost in the next period and loss in the running period, while having an unprofitable condition, which unavoidable in those period. So that, management should erased several assets and expend

incoming cost account also “clear the desk”, so that the reported earning in the next period will increase.

2) Income Minimization

This type is quite similar with “taking a bath”, but it more moderate, that is conducted as political reason in high earning period which accelerating fixed assets write-off and intangible assets and admitting expenses as cost. When company had its profitability high in purpose to avoid political attention the tact taken can be in the form of capital good write-off and intangible assets, advertisement and research and development expense, accounting result to finance oil exploration, gas and etc.

3) Income Maximization

The income maximization action has purpose to report the high level of net income in order to get a high level of bonuses. A company that has a delinquent debt contract will probably maximize its income. So income maximization is conducted when the company has its income decreasing.

4) Income Smoothing

Income smoothing represents earning normalization conducted in purpose to reach trend or certain level (Belkaoui). According to Beidelman, 1973, that intentional action to smoothing or fluctuating earning level in order to be consider as normal for a company. In this matter, income smoothing shows the action of company’s management to decreasing permitted boarder in accounting practice and normal management principle. Income smoothing

regulated, so the researchers have to estimate earning before earning management effect. The general approach is done by identifying conditions whether the design from unexpected post accrual (or many accounting choices) is consistent to this incentive. There are two issues of critical research design that occur as a consequence of this study. **First**, they have to identify managers reporting incentive. **Second**, they have to estimate the effect from using accounting managers' consideration in various choices of accounting method or unexpected post accrual. In designing the first research issue, the researcher had been incentively testing many different people for earning management, including (1) the expectation of stock market and estimation (2) written contract in terms of accounting numbers and (3) against industrial monopoly or other government regulations.

a. Stock Market Motivation

The uses of accounting information which has been spread widely by investors and financial analyst is to help the stock value in order to create incentive to managers in manipulating earnings that try to stimulate stock price in short term. We will review this evidence in four parts. **First**, we discuss evidence of whether earning management seems to be used in stock exchange consideration. **Second**, we test specific accrual post which seems as those which used for earning management. **Third**, we review the evidence based on the size and frequencies of motivated stock exchange earning management. **The last**, we review whether earning management for stock exchange purposes effecting resources allocation.

The other study from earning management is for stock exchange reason, which showed that earning management had been arranged to find the management or financial analyst expectancies (which is authorized by general earning prediction) as the example. Burgstahler and Earnes (1998) found that company had arranged their earning to find earning prediction. In their specialties, Burgstahler and Earnes (1998) found that the managers begin their action to arrange increasing earning to avoid lower earning report from those of the analyst prediction. Abarbanell and Lehavy (1998) used financial analysis stock recommendation (for example: buy or sell) to predict the earning management direction. They disprove and found that those companies accept "buying" recommendation, so that it will be possible to arranged income to get expectation analyses from earning. Whereas, companies which accepted "sells" recommendation has more possibility to show the negative side of unexpected accrual post. Kaznik (1999) found consistent evidence which can be definite in the weaknesses of an earning management prediction which uses unexpected post accrual to arrange the increasing earning.

Finally, there was evidence in the earning management to influencing expectation from the specific type of investor. Bushee (1998) reported that companies with high percentage of institutional possessor which specifically do not cut R &D expenses to avoid deterioration in the reported earning. Companies seem to arrange an interesting earning through

the cut of R & D expenses, however, if they have high percentage of institutional possessor with movement capacity of trade strategy and high portfolio turnover.

Teoh, Wang and Rao (1998) tested the depreciation estimation and appointment of the first general offering bad debt. They found that in relation with matched event, in example: non-IPO Company tested the company, so that it can be more possible to have income-increasing depreciation tact and bad debt in IPO in the running year and for the years after.

Banking industry and insurance also had prepared prospective field for the research in specific accrual post that is usually used to the earning arrangement. The reserved bank loan losses and insurers claim losses directly related with their most crucial obligations and assets, are the type of broaden relation in the net income and book value of property right, and that is really dependent in management consideration. The study of bank loan losses includes Beaver et al (1998), Moyer (1999), and Schole et al (1997). This overall studies found that the forced earning management evidence inter bank, which probably stands for the stock exchange purpose. From this study, however, stated that market "looking through" assuming that earning management which discussing more in insurance claim. Including Patroni (1992), Anthony and Petroni (1992), Beaver and Menicholis (1998), Penalva (1998) and Petroni et al (1999), also found evidence of earning management

inter insurers. It is unclear, however, whether this was motivated by stock exchange stimulator or by attention regulator.

Another new earning management tested that the uses of specific post accrual had tested deferred tax valuation loan. According to FAS No. 109, that the manager with deferred tax assets is needed to predict tax benefit which is not expected to be idle. There is a critic for this standard that this standard allows too many considerations in the report. Visvanasthan (1998), Miller & Skinner (1998) and Ayers (1998) tested this hypothesis and they concluded that there was evidence that manager made mistake in using justification report in relation with reserve to arrange earning.

b. Contract Motivation

The result of study shows whether the company is closed to the loan contract and whether the earning has been arranged. As the example, Healy & Palepu (1990) and De Angelo et al (1994) tested whether the company that is closed to dividend boarder changed accounting method, accounting assumption or accrual post to avoid reducing dividend. Holthausen (1981) tested whether the companies that close to dividend boarder are those which switched to straight-line depreciation. They conclude that there was earning management evidence inter company at their approved dividend. Devond, Jiambalvo and Sweeny (1994) tested a sample company which truly offence the loan contract. Devond and Jiambalvo

(1994) found company which was accelerating annual income before offence the contract. They interpreted this as earning management evidence which close to them due to loan contract. Sweeney (1994) also found contract offences at income increasing of accounting changes, but this specifically held after the offence. Sweeny also reported evidence of frequencies and effect of earning management capacity to lend the contract contemplated by Guidry et al (1998) found that managers which are in touch with those division for a big multinational company probably is to defer income when employee get salary from target bonuses. Healy (1985) and Houthausen et al (1995) showed that company with bonus award has more possibility to report accrual post with deferring income gained. Another study shows that the test result was whether compensation contract has effect to earning management motivation. De Angelo (1998) reported, that, during a period when managers try to justify accounting to increase reported income, Dechow and Sloan (1991) showed that CEO in the end of the year lowering the R & D costs.

c. Regulation Motivation

There are two reasonable evidences to be bank consideration that related with the need of minimum capital which emphasizing loss loan regulation, decreasing the write-off loan and recognizing realization of abnormal cash obligation (Moyer 1950; Scoles et al 1990; Beatty et al 1995;

Collins et al 1995). Several studies proved that the frequency of a company involved in earning management is for regulation purposes. As the example, Collins et al (1995) found that almost half of banks managing capital regulation. Adiel (1996) also prepared evidence of frequencies of the management regulator behavior in earning management. Several documents had been tested whether the research with accurate regulator will increase earning management probability. Cahn (1992) showed that the company was under anti trust investigation, made offence in reporting income.

2.1.3 Standard Setting Implication toward Earning Management

The purpose of financial reporting is to give uniformity and proper understanding of financial statement. Financial statement served could be determined as wrong if it is not supported by regulation about the forming of financial statement which is financial reporting standard. The assumption used in forming financial statement is separation between management with the owner, continuity effort and accrual base. Magnan and Cormier (1997) stated that there are three possible targets of manager in the relation to interest management practice:

1. political cost minimization
2. manager wealth maximization
3. minimization of financial cost

The agency emphasize that accounting nominal plays the important part in emphasizing conflict between company's owner and its manager (De Angelo, 1986).

The other study from earning management is for stock exchange reason, which showed that earning management had been arranged to find the management or financial analyst expectancies (which is authorized by general earning prediction) as the example. Burgstahler and Earnes (1998) found that company had arranged their earning to find earning prediction. In their specialties, Burgstahler and Earnes (1998) found that the managers begin their action to arrange increasing earning to avoid lower earning report from those of the analyst prediction. Abarbanell and Lehavy (1998) used financial analysis stock recommendation (for example: buy or sell) to predict the earning management direction. They disprove and found that those companies accept "buying" recommendation, so that it will be possible to arranged income to get expectation analyses from earning. Whereas, companies which accepted "sells" recommendation has more possibility to show the negative side of unexpected accrual post. Kaznik (1999) found consistent evidence which can be definite in the weaknesses of an earning management prediction which uses unexpected post accrual to arrange the increasing earning.

Finally, there was evidence in the earning management to influencing expectation from the specific type of investor. Bushee (1998) reported that companies with high percentage of institutional possessor which specifically do not cut R &D expenses to avoid deterioration in the reported earning. Companies seem to arrange an interesting earning through

party tried to get and preserve certain level of welfare they expected. In the relation with the agencies, managers have information toward company's external parties, such as creditor and investor. Asymmetry information occurs when managers have more internal company information and get it faster than those of external parties. In this condition, manager was able to use information they get to manipulating financial statement in effort to maximizing their welfare.

In line with earning management concept, the discussion of income smoothing concept also uses agency theory framework, that income smoothing occur when there is conflict of interest between management and owner. Inequality of information between the two parties leads to the occurrence of income smoothing (Fudenberg and Tirole, 1995). Business manager may choose estimation regulation and reporting which resulting the average of periodic net income (Copeand and Licastro, 1968).

Each parties in relation with agencies are stimulated by different motivation according to the interest. From management point of view, Hepworth (1953) explained that (1) managers who are motivated to conduct income smoothing basically wants to get self confidences as a manager, (2) those manager because of the stable income supported the stable dividend tact, (3) increasing relation between manager and employees because the highly increasing of income give possibility to the occurrence of increasing strive in wage and salary, and (4) increasing cycle and decreasing income could be compared, and optimism wave and pessimism could be soften.

In the other side, according to Dye (1988) owner is a supporting income smoothing, because there was internal and external motivation. Internal motivation

shows owner's purposes to minimalist manager contract cost by persuading manager to conducting earning management practice. External motivation showed by owner's effort currently to change prospective/potential investor perception toward company's value.

Smith (1976) explained that company's manager tends to conduct income smoothing. This conclusion is supported by Trueman et al (1988) founding that rationally manager want to smooth the reported income in a reason to minimalist strive from company's owner.

Income smoothing could affect several factors that stimulate manager to conducting income smoothing. There are some previous empirical research which had been tested those factors and empirical founding which can show disapproval conclusion, because for some factors are still concluded as effecting and uneffecting to the income smoothing. The table below shows previous empirical researches which researching factors that effecting and uneffecting income smoothing.

TABLE I

Factors effecting income smoothing

| No | Factors Effecting | Research (year) |
|----|------------------------------|--|
| 1. | Company size Total assets | Moses (1987); Ilmainir (1993); Ashari and friends (1994); Zuhroh (1996); Jin and Machfoedz (1998). |
| 2. | Profitability | Archibald (1967), White (1970); Ashari and friends (1994); Carison and Chenchuramalah (1997). |
| 3. | Type of industry | Belkaoui and Picur (1984); Albrecht and Richardson (1990); Ashari and friends |

| | | |
|-----|--|---|
| | | (1994); Jin and Machfoedz (1998), Assih (1998). |
| 4. | Nationalism | Ashari and friends (1994). |
| 5. | Stock Price | Ilmainir (1993). |
| 6. | Difference between actual earning and normal earning | Ilmainir (1993). |
| 7. | Accounting tact in the relation with earning | Ilmainir (1993). |
| 8. | Operation leverage | Zuhroh (1996), Jin and Machfoedz(1998). |
| 9. | Sales | Saudagaran and Sepe (1996). |
| 10. | Stock market value | Assih (1998) |
| 11. | Probability | Zuhroh (1996); Jin and Machfoedz (1998). |
| 12. | Bonus plan | Ilmainir (1993). |
| 13. | Owner proportion | Assih (1998) |
| 14. | Institutional status | Assih (1998) |

2.2.2 The Study of Income Smoothing

Earning management is defined as intentional process in the boarder of General Accepted Accounting Principles, which lead to a certain level of reported income. Income smoothing include as a part of earning management, while income smoothing can be viewed as activity in lowering earning variability at certain period or even only one period, which lead to a certain level of reported income. Beidelman (1973) believed that management conducted income smoothing to create a stable earning flow and to decreasing conversance of market return. Borneo et al (1976) stated that manager conducted income smoothing in order to decreasing fluctuation in earning reported and to increasing investor ability to predict cash flow in the future.

CHAPTER III

RESEARCH METHOD

3.1 Research Method

This study is an event study. Event study is a study that examines market reaction towards an event, which its information publicized as an announcement (Jogiyanto, 2000: 329). Event study is mostly used to identify stock price reaction, and based on that stock price researcher could conclude whether the event studying is giving profit or loss to the company's shareholders (Mc William, 2002; 1). The event noticed in this study is financial statement publication.

3.2 Research Subject

3.2.1 Population and Sample

Population in this study is all of non-manufacturing company listed in Jakarta Stock Exchange until year 2002. Whereas, the sample taken for this study is a part from member company population which are conducting income smoothing at the year 2002. Because of that, sampling used in this study is purposive sampling. Purposive sampling is a method that choosing certain target/individual that can give needed information easily (Sekaran, 1992: 235). This sampling is not conducted randomly but with consideration or certain purposes, in this case those consideration or purposes are through choosing companies that conducted income smoothing.

Identification towards adopted income-smoothing conducted by a company is done by using an index developed by Albrecht and Richardson (Michelson, 2000: 144). A company would not conduct income smoothing where income variation is greater than sales variation.

$$CV_{\Delta I} \geq CV_{\Delta S} \quad (1)$$

Where,

ΔI = one period change in income

ΔS = one period change in sales

CV = coefficient of variation, is comparison between standard deviation with expected value

3.2.2 Data Source and Data Gathering Technique

Data sources in this study are publications from JSX both in the form of file or printing, which contain information about the data needed in the study. The sources are Indonesian capital Market Directory, and stock exchange data (could be accessed from BEJ Corner MM UII). Data gathering technique used in this study is documentation technique.

3.3 Research Setting

This research was done in the environment of Faculty Economic, Islamic University of Indonesia, Yogyakarta.

1. Doing the statistical test of the data.
2. Testing the regression of the statistical test whether it can be used or not to test the hypothesis.
3. Analyzing and interpreting data.
4. Deriving conclusion and other findings.

3.6 Technique of Data Analysis

1) Stock Return

Stock return is calculated using the following formula (Michelson, 2000: 145):

$$R_{jt} = \frac{P_{jt} + d_{jt}}{P_{jt+1}} - 1 \quad (2)$$

Where:

- R_{jt} = the daily stock market return, by company j during t period
- P_{jt} = the last stock price for company j during t period
- P_{jt+1} = the last stock price for company j during t+1 period
- d_{jt} = the stock dividend for company j during t period

2) Abnormal Return

Abnormal return is calculated using the following formula (Michelson, 2000: 145):

$$AR_{jt} = R_{jt} - (\bar{\alpha}_j + \bar{\beta}_j R_{mt}) \quad (3)$$

Where,

- R_{jt} = the return of company j during t period
- R_{mt} = the return of a market index on t period

$\bar{\beta}_j$ = estimation value from β_j
 $\bar{\alpha}_j$ = estimation value from α_j

As the study conducted by Michelson (2000), in this study market return is assumed to follow single factor market model. Based on the model, the extent of expected return is calculated using the following formula (Michelson, 2000: 145):

$$R_{jt} = \alpha_j + \beta_j R_{mt} + \varepsilon_{jt} \quad (4)$$

Where ε_{jt} is a random variable which expected to have 0 value.

3) Cumulative Abnormal Return

Cumulative abnormal return is calculated using the following formula (Michelson, 2000: 145):

$$CAAR_{T1-T2} = \frac{1}{N} \sum_{j=1}^N \sum_{t=T1}^{T2} AR_{jt} \quad (5)$$

Where,

$CAAR_{T1-T2}$ = cumulative average abnormal return
 A_{jt} = stock abnormal return for company j during t period
 N = the number of company sampled

4) Multiple Linear Regression Analysis

The test toward study hypothesis is conducted using the following multiple linear regression analysis:

$$CAAR_j = \beta_0 + \beta_1 SMOOTH_j + \beta_2 SIZE_j + \epsilon_j \quad (6)$$

Where in those regression model, $SMOOTH_j$ is an income smoothing variable for sample j , $SIZE_j$ stand for sample j company size variable, and $CAAR$ is cumulative average abnormal return of sample company j .

The test towards study hypothesis is conducted using t-test. Before doing hypothetical testing, classic assumption test is conducted which included the tests of heteroskedasticity, autocorrelation test, and multicollinearity test.

5) Classical Assumption Test

Classical linear regression model is principally based on three assumptions, which are: (1) assumption of non occurrence of autocorrelation in disturbance error, (2) assumption of non occurrence of multicollinearity between free variables, (3) assumption of non occurrence of heteroscedasticity. If the resulted regression model which is based on the data analysis can not fulfill one or all of those basic assumption, so that model validity used in the decision making is doubtful. Because of that reason, before the resulted regression model is used, previously it has to be tested whether the model is fit with the basic assumption or not.

a. Autocorrelation Test

Autocorrelation is the condition when time series observation was in correlation. In regression analysis context, autocorrelation can be defined as the occurrence between disturbance errors in time series. In classical regression, that autocorrelation condition is not permitted. Test of the existence of autocorrelation symptom is conducted with using the rule of thumb suggested by Gujarati (1995; 423) that, if Durbin-Watson statistic, d close to 2 so that there would not be any occurrence of autocorrelation symptom. The formula used in calculating Durbin-Watson d statistic is as follows:

$$d = \frac{\sum_{t=2}^{t=n} (\hat{u}_t - \hat{u}_{t-1})^2}{\sum_{t=2}^{t=n} \hat{u}_t^2} \quad (7)$$

Where:

- d : Durbin-Watson statistic
- \hat{u}_t : disturbance error at t period
- \hat{u}_{t-1} : disturbance error at $t-1$ period
- n : number of sample

b. Heteroscedasticity Test

Heteroscedasticity (different variance) is the phenomenon where at a certain independent variable value, each mistake (e_i) has different size of

variant value (σ^2). This heteroscedasticity makes inefficiency of resulted coefficient regression.

Test toward heteroscedasticity phenomenon is conducted by using Spearman's Rank Correlation Test. Testing of this heteroscedasticity existence will be based on the following hypothesis:

Hypothesis:

Ho : $r_s = 0$ non-occurrence of heteroscedasticity

Ha : $r_s > 0$ occurrence of heteroscedasticity

Testing criterion: if $r_s < r_{table}$ so that Ho is accepted and Ha is rejected, which means that there is no heteroscedasticity phenomenon.

The amount of Spearman correlation value can be calculated using the following formula (Gujarati, 1995; 372):

$$r_s = 1 - 6 \left[\frac{\sum d_i^2}{n(n^2 - 1)} \right] \quad (8)$$

Where:

r_s = Spearman's correlation

d_i = rank difference

n = number of sample

c. Test of Multicollinearity

Multicollinearity is the phenomenon of perfect correlation between a free variable with another free variable. Practical consequences, which appear as the result of multicollinearity existence, are the bigger mistake of

regression coefficient. Test toward the existence of multicollinearity conducted with using Condition Index method (CI).

According to Gujarati (1995; 338) the amount of CI can be calculated using the following formula:

$$CI = \sqrt{\frac{\text{Maximum Eigenvalue}}{\text{Minimum Eigenvalue}}} \quad (9)$$

Testing criterion:

If CI value between 10 to 30, so the multicollinearity occur is categorized as middle to strong, and if CI is bigger than 30 so it will be categorized as weak multicollinearity.

Or with using VIF, where if VIF which stands for a free variable is bigger than 10 so multicollinearity happen.

CHAPTER IV

RESEARCH FINDINGS, DISCUSSION, AND IMPLICATION

4.1 Research Description

In this chapter the data analysis is gained during the research time. This data analysis conducted basically has the purpose of testing research hypothesis.

The number of sample company used in this study was 144 companies which are included in non manufacturing industry. That company was chosen because they have complete data since 1997 until 2002. After that, the chosen companies were identified whether they had conducted income smoothing or not by using Eckel index.

Identification result toward income smoothing was conducted using operating profit as smoothing variable. Based on Eckel index, each of 144 companies from sample company resulted in 39 companies identified conducting income smoothing and the other 105 are included as non smoothing companies.

4.2 Research Findings and Its Implications

4.2.1 Test of First Hypothesis

The first hypothesis in this research presumed that there is a difference in abnormal return gained for smoothing company with the average abnormal

return of non-smoothing company. Formulations for that hypothesis are as follows:

Ho: $\overline{AR}_{IS} = \overline{AR}_{NIS}$ average abnormal return of smoothing company is not different with average abnormal return of non-smoothing company.

Ha: $\overline{AR}_{IS} \neq \overline{AR}_{NIS}$ average abnormal return of smoothing company is not different with average abnormal return of non-smoothing company.

Where, \overline{AR}_{IS} is the average abnormal return of smoothing company during window period, which 1 day after until 10 days after financial statement publication. \overline{AR}_{NIS} is the average abnormal return of non-smoothing company during window period, which 1 day after until 10 days after financial statement publication.

Test toward that hypothesis was conducted using t-test impair data, with the following testing criterion:

If the value of $t_{\text{calculated}} > t_{\text{table}}$ OR $-t_{\text{calculated}} < -t_{\text{table}}$ so null hypothesis

(Ho) is rejected and the alternative hypothesis (Ha) is accepted.

The result of $t_{\text{calculated}}$ was gained by using SPSS 11.5 program which used for testing the first hypothesis served in the following Table 4.1:

Table 4.1
T-Test of Average Abnormal Return Analysis Result

| Sample Company | Number of Sample | Average Abnormal Return \overline{AR} | Standard Deviation Abnormal Return $s(\overline{AR})$ |
|---|------------------|--|--|
| Smoothing Company | 39 | 0.054695 | 0.0568869 |
| Non-smoothing Company | 105 | -0.009515 | 0.0232760 |
| T _{calculated} = 9.636 df = 142 | | | |

Source: appendix 6

Based on data analysis in table 4.1 above, it is shown that the average of abnormal return of smoothing company is 0.054695; whereas average abnormal return of non-smoothing company is -0.009515. The amount of $t_{calculated}$ is 9.636 with the degree of freedom for 142.

From t distribution table, for significance 5% of two tailed test and the degree of freedom of 142, resulted t_{table} of 1.98. If $t_{calculated}$ is compared with t_{table} , found that $t_{calculated} (9.636) > t_{table} (1.98)$, so the null hypothesis (H_0) is rejected and alternative hypothesis (H_a) is accepted.

Test of this hypothesis have implication that, at trustworthy level of 95% smoothing company give bigger average abnormal return than non-smoothing company.

Beside testing toward average abnormal return, as complementary conducted test toward the difference of cumulative abnormal return (CAR) in a window period. Hypothesis used in testing the difference of cumulative abnormal return (CAR) are as follows:

Ho: $\overline{CAR}_{IS} = \overline{CAR}_{NIS}$ Cumulative abnormal return of smoothing company is not different from cumulative abnormal return of non-smoothing company.

Ha: $\overline{CAR}_{IS} \neq \overline{CAR}_{NIS}$ Cumulative abnormal return of smoothing company is different from cumulative abnormal return of non-smoothing company.

where, \overline{CAR}_{IS} is cumulative abnormal return of smoothing company during window period, that 1 day after until 10 days after financial statement publication. \overline{CAR}_{NIS} is cumulative abnormal return of non-smoothing company during window period, that 1 day after until 10 days after financial statement publication.

Test toward that hypothesis was conducted using t-test impair data, with testing criterion as follow:

If the value of $t_{calculated} > t_{table}$ OR $-t_{calculated} < -t_{table}$ so null hypothesis

(Ho) is rejected and the alternative hypothesis (Ha) is accepted.

Table 4.2
T-Test of Cumulative Abnormal Return Analysis Result

| Sample Company | Number of Sample | Cumulative Abnormal Return $\overline{\text{CAR}}$ | Standard Deviation Cumulative Abnormal Return $s(\overline{\text{CAR}})$ |
|---|------------------|---|--|
| Smoothing Company | 39 | 0.5466949 | 0.5688689 |
| Non-smoothing Company | 105 | -0.095152 | 0.2327605 |
| $T_{\text{calculated}} = 9.636$ $df = 142$ | | | |

Source: appendix 7

Based on data analysis in table 4.2 above, it is shown that cumulative abnormal return of smoothing company for 0.5466949; where cumulative abnormal return of non-smoothing company is for -0.095152. The amount of $t_{\text{calculated}}$ is for 9.636 with degree free for 142.

From t distribution table, for significance level of 5% of two tail test and degree free for 142 resulting the value of t_{table} for 1.98. If the value of $t_{\text{calculated}}$ compared with t_{table} , found that $t_{\text{calculated}} (9.636) > t_{\text{table}} (1.98)$, so null hypothesis (H_0) is rejected and alternative hypothesis (H_a) is accepted.

Test of this hypothesis has the implication that, at trustworthy level of 95% smoothing company gives bigger cumulative abnormal return than non-smoothing company.

4.2.2 Test of Second Hypothesis

This test of second hypothesis presumed that, income smoothing and company size is affecting cumulative abnormal return. Testing toward this hypothesis was conducted using multiple linear regression analysis, where cumulative abnormal return as the dependent variable while income smoothing and company size as the independent variable.

The result of multiple linear regression analysis was calculated using SPSS 11.5 program for income smoothing and company size toward cumulative abnormal return show in table 4.1 below:

Table 4.3
Multiple Linear Regression Analysis Result

| Free variable | Coefficient Regression (b) | Significance (p) |
|--|----------------------------|------------------|
| Constants (b ₀) | -0.075786 | |
| Income Smoothing (SMOOTH) | 0.030189 | 0.000 |
| Company Size (SIZE) | 316×10^{-9} | 0.000 |
| Multiple coefficient correlation, $R = 0.834$ | | |
| Coefficient determination, $R^2 = 0.695$ or 69.5% | | |
| $F_{\text{calculated}} = 160.682$; Significance (p) = 0.000 | | |

Source: appendix 8

Systematically, linear regression model resulted can be deriving as follows:

$$\text{CAR} = -0.075786 + 0.030189 \text{ SMOOTH} + 316 \times 10^{-9} \text{ SIZE}$$

a. Simultaneous Effect of Income Smoothing and Company Size toward Cumulative Abnormal Return

Testing toward significance of income smoothing and company size simultaneously toward cumulative abnormal return was conducted using F test.

Where hypothesis formulation are as follows:

Ho: $R=0$ Income smoothing and company size simultaneously do not have significant effect toward cumulative abnormal return.

Ha: $R \neq 0$ Income smoothing and company size simultaneously have significant effect toward cumulative abnormal return.

Testing criterion used to accept or reject the hypothesis is as follows:

If the value of $F_{\text{calculated}} > F_{\text{table}}$ or $p < \alpha$, so the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted.

where, p is error probability in rejecting null hypothesis (Ho), while α is significance level used, at $\alpha=5\%$ or 0.05.

Based on multiple linear regression analysis result shown in table 4.3 above, that regression model gained has $F_{\text{calculated}}$ for 160.682 with $p=0.000$. If p value compare with significance level used, that $\alpha=0.05$ so $p < \alpha$: so that null hypothesis is rejected and alternative hypothesis (Ha) is accepted.

The implication of the testing hypothesis is whether the cumulative abnormal return is high or low in 10 days after financial statement publication was affected by the income smoothing behavior conducted by manager and the company size.

b. The Effect of Income Smoothing toward Cumulative Abnormal Return

Testing toward significance effect of income smoothing toward cumulative abnormal return was conducted using t-test. Where the hypothesis formulation are as follow:

Ho: $\beta_1 = 0$ income smoothing does not have significant effect toward cumulative abnormal return.

Ha: $\beta_1 \neq 0$ income smoothing does not have significant effect toward cumulative abnormal return.

Testing criterion used to accept or reject the hypothesis is as follows:

If the value of $t_{\text{calculated}} > t_{\text{table}}$ or $p < \alpha$, so the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted.

where, p is error probability in rejecting null hypothesis (Ho), while α is significance level used, at $\alpha=5\%$ or 0.05.

Based on multiple linear regression analysis result shown in table 4.3 above, that regression model gained has $t_{\text{calculated}}$ for 5.430 with $p=0.000$. If p

value compare with significance level used, that $\alpha=0.05$ so $p<\alpha$: so that null hypothesis is rejected and alternative hypothesis (H_a) is accepted.

The implication of the testing hypothesis is income smoothing which was conducted by the manager have positive and significant effect toward cumulative abnormal return in 10 days after financial statement publication.

c. The Effect of Company Size toward Cumulative Abnormal Return

Testing toward significance effect of company size toward cumulative abnormal return was conducted using t-test. Where the hypothesis formulations are as follow:

$$H_0: \beta_2 = 0$$

Company size does not have significant effect toward cumulative abnormal return.

$$H_a: \beta_2 \neq 0$$

Company size have significant effect toward cumulative abnormal return.

Testing criterion used to accept or reject the hypothesis is as follows:

If the value of $t_{\text{calculated}} > t_{\text{table}}$ or $p < \alpha$, so the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted.

where, p is error probability in rejecting null hypothesis (H_0), while α is significance level used, that $\alpha=5\%$ or 0.05 .

Based on multiple linear regression analysis result shown in table 4.3 above, that regression model gained has $t_{\text{calculated}}$ for 11.772 with $p=0.000$. If p

value compare with significance level used, at $\alpha=0.05$ so $p<\alpha$: so that null hypothesis is rejected and alternative hypothesis (H_a) is accepted.

The implication of the testing hypothesis is that company size has positive and significant effect toward cumulative abnormal return in 10 days after financial statement publication. In other words we can say that for a big company size will yield a big cumulative abnormal return compared from cumulative abnormal return of company in a smaller company size.

Based on test result of significance effect from income smoothing and company size simultaneously or individually, so it was empirically proven that the two variables have significant effect (which can not be ignored) towards cumulative abnormal return in 10 days after the announcement of financial statement publication.

4.2.3 Test of Assumption

1. Test of Autocorrelation

Autocorrelation is correlation between members in time series data or between spaces for cross section data. The existence of autocorrelation significance, so that determiners from OLS becoming inconsistent, even though it is not bias.

Test toward autocorrelation phenomenon in the analyzed data can be conducted using Durbin-Watson Test, with following criterion:

| | |
|-------------------------------|-----------------------|
| $d < d_L$ | : Ho rejected |
| $d > d_U$ | : HO is not rejected |
| $d_L \leq d \leq d_U$ | : testing is doubtful |
| $d > 4 - d_L$ | : HO rejected |
| $d > 4 - d_U$ | : HO is not rejected |
| $4 - d_U \leq d \leq 4 - d_L$ | : testing is doubtful |

where, d , d_U , and d_L each of them are Durbin-Watson statistic, the upper limit of Durbin-Watson statistic, and the lower limit of Durbin-Watson statistic. The value of d_U and d_L are resulted from table d, where the value of d resulted from calculation using the following formula (Gujarati, 1995; 421):

$$d = \frac{\sum_{i=2}^{i=n} (\hat{u}_i - \hat{u}_{i-1})^2}{\sum_{i=2}^{i=n} \hat{u}_i^2}$$

Based on analysis result using SPSS 11.5, resulted that the value of Durbin-Watson statistic, $d=1.229$. Whereas, for the number of sample $n=144$, $k'=2$ and the significance level $\alpha=5\%$ from Table d result the value of $d_L=1.706$ and $d_U=1.760$.

The value of $d=2.229$ and $d_U=1.760$, if it compared those two variables it shown that $d > d_U$ so that the decision is not rejected H_0 , and H_0 which stated the non-occurrence of autocorrelation is accepted. Based on this testing result, it found that in the significance level of 5% of processed data is not shown any autocorrelation symptom, so that classic assumption about non-occurrence of autocorrelation symptom can be fulfilled by the model.

2. Test of Heterocedasticity

Homoskedasticity (same variance) is phenomenon where at certain value of independent variable, each mistakes (e_i) have the same value as σ^2 . If it is found that the resulted model not fulfilling the assumption or that phenomenon, so heterocedasticity in those model is occur. This heterocedasticity makes the estimator value (regression coefficient) from that model is not efficient even though it is not bias and consistent.

Test toward heterocedasticity phenomenon is conducted using Spearman's Rank Correlation Test. Testing toward this heterocedasticity phenomenon will be based on following hypothesis:

$H_0 : r_s = 0$ non occurrence of heterocedasticity

$H_a : r_s > 0$ occurrence of heterocedasticity

The coefficient of Spearman's correlation between absolute value from residual with free variable (r_s) calculated using following formula:
(Gujarati, 1995;372)

$$r_s = 1 - 6 \left[\frac{\sum d_i^2}{n(n^2 - 1)} \right]$$

where, r_s = Spearman's correlation between free variables with absolute residual value, d_i = rank difference, n = number of sample.

Based on data analysis which conducted using SPSS 11.5, resulted the level of Spearman's correlation between free variables with absolute residual value are as follows:

Table 4.4
Spearman's Coefficient Correlation between Free Variables and Absolute Residual Value

| Free Variables | Coefficient Correlation (r_s) | p |
|----------------|--------------------------------------|-------|
| IS | 0.363 | 0.096 |
| Size | -0.293 | 0.164 |

If each of Spearman's correlation value above is tested its significance, found that each of Spearman's correlation has $p > 0.05$.

Based on testing result of Spearman's coefficient correlation (r_s) between free variables and that absolute residual value, conclude that data analyzed is not having heterocedasticity symptom. So that, the classical assumption about non occurrence of heterocedasticity is accepted.

3. Test of multicollinearity

Multicollinearity is the phenomenon of the perfect correlation between one variable with another free variables. Practical consequence that will be appearing as the result of this multicollinearity is the bigger standard mistakes of estimation, and probability to accept wrong hypothesis is bigger. Test toward the existence of multicollinearity conducted using VIF method (Variance Inflation Factor). And the criterion used in testing this VIF method is as follows:

If $VIF_j > 10$, there is a high multicollinearity between regressor (free variables) j with another regressor (free variables).

Based on data analysis result using SPSS 11.5, the VIF value of each free variable is as follows:

Table 4.5
VIF of each Free Variable

| Free Variable | VIF |
|---------------|-------|
| IS | 6.420 |
| Size | 1.215 |

From data analysis using SPSS 11.5 above it is clear that each free variable have VIF less than 10. Which also means that data used in the analysis is not having multicollinearity symptom.

4.3 Discussion

It was found that the result of this study is similar to the result of the research conducted by Michelson (2000) that showing the difference of average abnormal return of smoothing company and non-smoothing company. Smoothing company percept having a stable earning which becomes investor preference, this is in accordance with one of the purpose of income smoothing conducted by the company in order to attract the investor. On this research, it is shown that company which is conducting income smoothing has higher average abnormal return than company which is not conducting income smoothing, it also mean that smoothing company more capable to increase shareholder welfare.

The significant difference between averages abnormal return of smoothing company with those of non smoothing company is implicitly shown that income smoothing affecting investor decision making process in conducting their investment activities (stock purchase) in JSX. Higher abnormal return shown that stock price of related company is experiencing the increase of stock price over the average.

In economic crisis where company having difficulties to get fund both externally and internally, so with income smoothing company has probability to get fund externally through right issued, because stock issued by smoothing company are preferable by the investor. So that, smoothing in economic crisis era could become a way to attract investor to purchase the shares, which mean that it would give input fund to the company. Income smoothing in crisis era or in unstable economical condition can increase investor trustworthiness, because with income smoothing company would seem to have stable earnings even though its economical condition is in crisis, as stated by Hepworth (in Jatiningrum, 2000). So during economic crisis facing by Indonesia, it would tend to stimulate managers to conduct income smoothing as resulted from the research conducted by Jin and Mas'ud (1998). In condition of low company profitability in the monetary crisis facing by Indonesia in 1997 tend to stimulate company which has low profitability, as stated by Ashari et al (1994).

CHAPTER V

CONCLUSIONS AND RECOMMENDATION

5.1 Conclusion

Based on the result of the analysis conducted in this research, the researcher would like to draw the following conclusions:

1. There are significant differences between abnormal return of the company which is conducts income smoothing and the company which does not. It has been proven that the company conducting income smoothing has bigger abnormal return. In the condition that operating profit as the smoothing variable: the average abnormal return of smoothing company is 0.054695 and for non smoothing company is -0.009515 (Calculated = 9.636). Whereas, in the condition that operating profit as smoothing variable: the average abnormal return of smoothing company is 0.0421869 and the average abnormal return of non smoothing company is -0.000777 (Calculated = 4.891).
2. Income smoothing and company size have significant influence toward cumulative abnormal return ($F_{\text{calculated}} = 160.682$ and $p = 0.000$).

5.2 Recommendation

There are several suggestions that expectedly can give contribution to the future researcher and also for another related party. First that based on the above conclusions, it is empirically proven that the income smoothing which is conducted by managers and the company size affected the cumulative abnormal return. If the cumulative abnormal return is put as an indicator of the increasing of investor welfare in conducting their investment, it would be better for the investor to purchase stocks of the company conducting income smoothing. It is because in 10 days after the publication of its financial statement, the company conducting income smoothing is able to give higher abnormal return. The second variable beside of income smoothing which can increase abnormal return is company size. Companies with higher size are more likely to give higher cumulative abnormal return.

Second, beside of those positive impact of the income smoothing as stated above and as concluded by several previous researcher, such as Michelson and friend(1995), it also have negative impact indeed. As the example for the negative impact is that whenever income smoothing is conducted excessively and discovered by the public, as the consequence it would resulted to the decreasing of public trust. Whereas at the end it would lead to the decreasing of the stock price. If this phenomenon is happen, the party who will suffer a loss is the stockholders. So that, as the sample given above, in here resercher would recommend the future resercher to investigate more on the negative impact of income smoothing.

Third, another consideration of the researcher is regarding the ethical boarder of income smoothing. So far, accounting regulation in Indonesia have not been discussed specifically about substances related with income smoothing behaviour that can be conducted by the management. While it is implicitly stated in GAAP that income smoothing as a part of earning management can be conducted as long as it still in the boarder of GAAP. Because of that, resercher suggest, for the future researcher to investigate and examining more on this problem. Researcher also suggest that it is better for the Ikatan Akuntan Indonesia to conduct empirical examination which is followed by the arragement of certain code of ethic or specific regulation that can restrict income smoothing behaviour.

Fourth, concerning some cases that company which conducting income smoothing continuously could drive it into collaps, research toward bankruptcy company whether previously they had also conducting income smoothing or not is also an interesting issue to be examined. So that, we will be able to determine how long does smoothing company can survive. Therefore, reseracher would recommend the future researcher to also investigate more on this problem.

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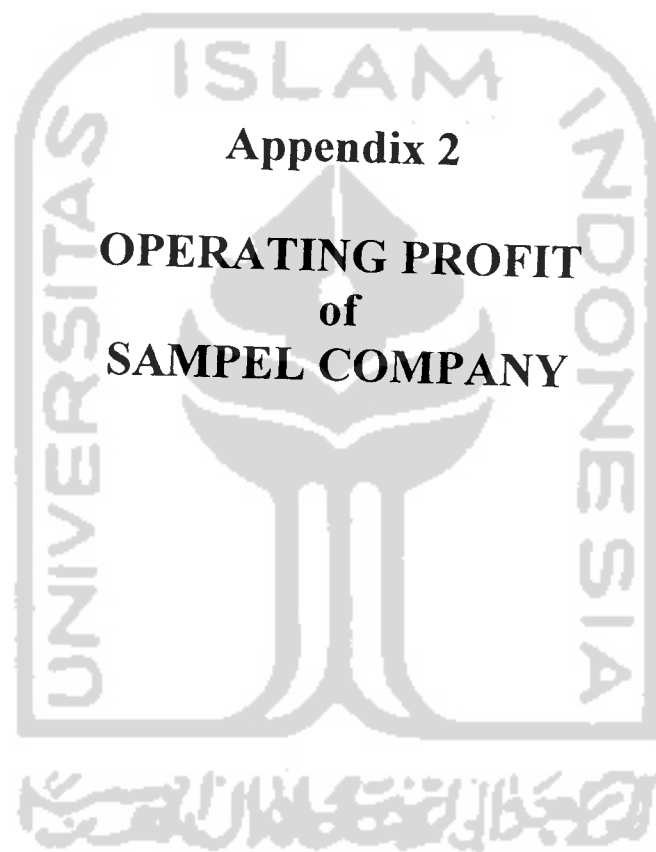


UNIVERSITAS ISLAM INDONESIA

| | | | | | | | | |
|----|------|----------------------------------|--------------|--------------|--------------|--------------|---------------|---------------|
| 35 | CMNP | Citra Marga Nusthapala P. Tbk | 77.881.00 | 75.669.00 | 90.122.00 | 116.377.00 | 156.837.00 | 211.670.00 |
| 36 | ISAT | Indosat Tbk | 90.271.00 | 124.878.00 | 149.914.00 | 196.813.00 | 307.882.00 | 383.641.00 |
| 37 | TLKM | Telekomunikasi Indonesia Tbk | 114.744.00 | 110.952.00 | 157.301.00 | 229.194.00 | 289.378.00 | 329.410.00 |
| 38 | BLTA | Berlian Laju Tanker Tbk | 160.916.00 | 206.572.00 | 427.347.00 | 417.488.00 | 567.194.00 | 764.069.00 |
| 39 | CMPP | Centris Multi Persada P. Tbk | 15.155.00 | 69.638.00 | 228.394.00 | 172.499.00 | 191.064.00 | 195.012.00 |
| 40 | HITS | Humpuss Intermoda Trans. Tbk | 1.253.914.00 | 1.321.947.00 | 1.682.245.00 | 2.378.746.00 | 2.877.121.00 | 3.513.123.00 |
| 41 | MIRA | Mitra Rajasa Tbk | 1.624.753.00 | 1.922.919.00 | 2.885.305.00 | 3.499.113.00 | 4.615.407.00 | 5.567.615.00 |
| 42 | RIGS | Rig Tenders Tbk | 997.832.00 | 1.290.703.00 | 1.810.102.00 | 2.402.591.00 | 3.299.453.00 | 3.884.391.00 |
| 43 | SAFE | Steady Safe Tbk | 1.808.604.00 | 2.295.271.00 | 3.840.857.00 | 4.137.718.00 | 5.491.705.00 | 6.621.109.00 |
| 44 | SMDR | Samudera Indonesia Tbk | 963.624.00 | 1.098.823.00 | 1.929.206.00 | 1.595.016.00 | 1.410.630.00 | 1.600.691.00 |
| 45 | ZBRA | Zebra Nusantara Tbk | 214.504.00 | 244.125.00 | 570.511.00 | 555.586.00 | 546.227.00 | 600.323.00 |
| 46 | BUKK | Buaka Teknik Utama Tbk | 291.602.00 | 344.906.00 | 766.452.00 | 788.106.00 | 838.128.00 | 887.610.00 |
| 47 | PTRO | Petrosea Tbk | 339.408.00 | 389.280.00 | 677.535.00 | 627.104.00 | 556.175.00 | 495.363.00 |
| 48 | ANKB | Bank Agra Niaga Kencana Tbk | 350.287.00 | 511.477.00 | 1.047.522.00 | 1.025.098.00 | 1.262.702.00 | 1.180.203.00 |
| 49 | BABP | Bank Bumiputera Indonesia Tbk | 1.812.475.00 | 2.948.439.00 | 9.322.802.00 | 9.274.645.00 | 14.817.315.00 | 11.442.373.00 |
| 50 | BBKA | Bank Central Asia Tbk | 1.391.108.00 | 2.020.585.00 | 5.082.698.00 | 6.164.603.00 | 7.954.668.00 | 7.388.342.00 |
| 51 | BBIA | Bank Buana Indonesia Tbk | 151.015.00 | 170.704.00 | 385.339.00 | 407.747.00 | 458.326.00 | 454.780.00 |
| 52 | BBNI | Bank Negara Indonesia Tbk | 239.909.00 | 253.513.00 | 655.700.00 | 622.956.00 | 634.730.00 | 634.852.00 |
| 53 | BBNP | Bank Nusantara Parahyangan Tbk | 20.954.00 | 44.191.00 | 119.442.00 | 28.417.00 | 373.442.00 | 28.806.00 |
| 54 | BCIC | Bank CIBC International Tbk | 22.511.00 | 110.621.00 | 86.254.00 | 103.016.00 | 124.485.00 | 150.459.00 |
| 55 | BDMN | Bank Danamon Tbk | 79.296.00 | 111.230.00 | 71.318.00 | 187.024.00 | 78.252.00 | 257.054.00 |
| 56 | BDPC | Bank Danpac Tbk | 2.345.00 | 11.972.00 | 7.550.00 | 7.367.00 | 2.509.00 | 2.233.00 |
| 57 | BEKS | Bank Eksekutif Internasional Tbk | 564.529.00 | 381.913.00 | 223.026.00 | 248.560.00 | 268.102.00 | 329.419.00 |
| 58 | BGIN | Bank Global Internasional Tbk | 185.713.00 | 102.659.00 | 60.314.00 | 104.461.00 | 104.026.00 | 96.156.00 |
| 59 | BKSW | Bank Kesavan Tbk | 257.496.00 | 237.652.00 | 239.908.00 | 327.805.00 | 199.146.00 | 238.073.00 |
| 60 | BNGA | Bank Niaga Tbk | 84.220.00 | 128.303.00 | 286.667.00 | 233.569.00 | 196.572.00 | 263.996.00 |
| 61 | BNII | Bank Permata Tbk | 337.238.00 | 460.761.00 | 432.427.00 | 391.703.00 | 604.991.00 | 1.205.068.00 |
| 62 | BNLI | Bank Pikkot Tbk | 134.271.00 | 115.522.00 | 84.629.00 | 67.095.00 | 110.993.00 | 115.740.00 |
| 63 | BNPK | Bank Swadesi Tbk | 100.644.00 | 121.164.00 | 265.384.00 | 83.529.00 | 96.172.00 | 120.005.00 |
| 64 | BSWD | Bank Victoria Int'l Tbk | 320.918.00 | 172.483.00 | 127.604.00 | 163.723.00 | 209.106.00 | 149.892.00 |
| 65 | BYIC | Inter-Pacific Bank Tbk | 547.900.00 | 423.434.00 | 99.479.00 | 107.477.00 | 145.735.00 | 261.828.00 |
| 66 | INPC | Bank Lippo Tbk | 183.657.00 | 135.441.00 | 40.595.00 | 62.740.00 | 95.459.00 | 96.535.00 |
| 67 | LPBN | Bank Mayapada Tbk | 351.009.00 | 175.631.00 | 107.341.00 | 122.620.00 | 206.307.00 | 226.175.00 |
| 68 | MAYA | Bank Mega Tbk | 285.262.00 | 36.628.00 | 11.284.00 | 11.729.00 | 10.539.00 | 10.941.00 |
| 69 | MEGA | Bank NISP Tbk | 555.369.00 | 474.629.00 | 698.190.00 | 537.542.00 | 506.752.00 | 614.929.00 |
| 70 | NISP | Bank Pan Indonesia Tbk | 229.455.00 | 253.388.00 | 145.894.00 | 123.147.00 | 152.842.00 | 174.903.00 |
| 71 | PNBN | BBL Dharmala Finance Tbk | 34.404.00 | 12.044.00 | 3.888.00 | 704.00 | 615.00 | 154.00 |
| 72 | BBLD | BFI Finance Indonesia Tbk | 97.606.00 | 94.055.00 | 116.993.00 | 46.514.00 | 49.050.00 | 70.126.00 |
| 73 | BFIN | | 91.451.00 | 105.703.00 | 98.651.00 | 113.581.00 | 101.003.00 | 107.718.00 |

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|-----|------|-----------------------------------|--------------|--------------|--------------|--------------|--------------|---------------|
| 74 | CFIN | Clippan Finance Indonesia Tbk | 26.358.00 | 41.418.00 | 14.811.00 | 16.707.00 | 5.973.00 | 6.980.00 |
| 75 | DEFI | Danasupra Erapacific Tbk | 271.108.00 | 280.080.00 | 157.557.00 | 157.638.00 | 249.501.00 | 285.230.00 |
| 76 | INCF | Indo Citra Finance Tbk | 37.210.00 | 133.420.00 | 21.514.00 | 12.260.00 | 21.550.00 | 60.367.00 |
| 77 | MANY | Manly Unitama Finance Tbk | 61.418.00 | 46.580.00 | 39.107.00 | 23.451.00 | 49.398.00 | 31.945.00 |
| 78 | MITI | Siwani Trimitra Tbk | 626.947.00 | 572.710.00 | 305.767.00 | 205.280.00 | 285.649.00 | 376.815.00 |
| 79 | TRUS | Trust Trimitra Tbk | 225.445.00 | 281.164.00 | 271.178.00 | 281.511.00 | 317.620.00 | 347.691.00 |
| 80 | TRUS | Trust Finance Indonesia | 1.223.247.00 | 1.454.892.00 | 2.108.245.00 | 3.004.674.00 | 2.992.244.00 | 5.247.939.00 |
| 81 | AKSI | Asia Kapitalindo Securities Tbk | 5.075.799.00 | 5.909.026.00 | 6.600.000.00 | 7.790.209.00 | 9.385.720.00 | 16.130.789.00 |
| 82 | APIC | Artha Pacific Securities Tbk | 67.959.00 | 109.419.00 | 581.555.00 | 512.525.00 | 635.299.00 | 879.888.00 |
| 83 | ARTA | Artha Securities Tbk | 40.497.00 | 62.026.00 | 38.540.00 | 40.363.00 | 41.808.00 | 51.341.00 |
| 84 | BCAP | Bhakti Capital Indonesia Tbk | 241.933.00 | 278.794.00 | 695.030.00 | 635.104.00 | 537.212.00 | 751.175.00 |
| 85 | KREN | Kresna Graha Sekurindo Tbk | 53.158.00 | 60.960.00 | 51.836.00 | 71.916.00 | 87.525.00 | 98.396.00 |
| 86 | PANS | Panin Sekuritas Tbk | 36.944.00 | 55.044.00 | 203.237.00 | 169.982.00 | 187.940.00 | 237.748.00 |
| 87 | TRIM | Trimegah Securities Tbk | 149.860.00 | 163.325.00 | 42.383.00 | 37.875.00 | 36.497.00 | 40.890.00 |
| 88 | UNIT | United Capital Indonesia Tbk | 38.669.00 | 31.852.00 | 26.273.00 | 37.491.00 | 43.901.00 | 49.162.00 |
| 89 | ABDA | Asuransi Bina Dana Arta Tbk | 392.268.00 | 371.755.00 | 469.975.00 | 577.113.00 | 499.688.00 | 664.587.00 |
| 90 | AHAP | Asuransi Harga Aman P Tbk | 190.372.00 | 266.960.00 | 813.504.00 | 812.685.00 | 1.229.395.00 | 862.217.00 |
| 91 | ASBI | Asuransi Bintang Tbk | 1.193.728.00 | 1.819.087.00 | 4.805.802.00 | 1.336.040.00 | 929.796.00 | 1.512.905.00 |
| 92 | ASDM | Asuransi Davin Mitra Tbk | 81.940.00 | 162.775.00 | 546.460.00 | 355.759.00 | 467.385.00 | 1.014.189.00 |
| 93 | ASRM | Asuransi Ramayana Tbk | 2.788.935.00 | 4.836.272.00 | 6.373.589.00 | 4.322.208.00 | 5.207.063.00 | 7.627.434.00 |
| 94 | LPGI | Lippo General Insurance Tbk | 19.611.00 | 47.507.00 | 135.155.00 | 115.293.00 | 87.682.00 | 144.746.00 |
| 95 | MREI | Maskapai Reasuransi Ind. Tbk | 2.336.735.00 | 3.945.532.00 | 8.081.584.00 | 5.473.557.00 | 4.063.942.00 | 3.861.118.00 |
| 96 | PNJN | Panin Insurance Tbk | 79.127.00 | 133.495.00 | 253.651.00 | 122.483.00 | 86.191.00 | 156.704.00 |
| 97 | PNLF | Panin Life Tbk | 117.839.00 | 1.497.670.00 | 2.908.985.00 | 1.652.433.00 | 2.404.380.00 | 2.851.261.00 |
| 98 | BHIT | Bhakti Investama Tbk | 179.284.00 | 278.332.00 | 733.125.00 | 570.471.00 | 575.586.00 | 816.093.00 |
| 99 | GSMF | Equity Development Investment Tbk | 43.942.00 | 97.133.00 | 299.067.00 | 212.677.00 | 76.058.00 | 75.763.00 |
| 100 | LPPE | Pacific Utama Tbk | 577.567.00 | 862.121.00 | 1.599.188.00 | 1.048.033.00 | 1.411.549.00 | 1.689.095.00 |
| 101 | LPPS | Lippo Securities Tbk | 14.881.00 | 49.195.00 | 392.367.00 | 69.824.00 | 90.037.00 | 153.182.00 |
| 102 | MKDO | Makindo Tbk | 131.356.00 | 163.891.00 | 284.331.00 | 160.766.00 | 86.400.00 | 91.380.00 |
| 103 | MTFN | Bakrie Finance Corporation Tbk | 116.379.00 | 174.344.00 | 188.939.00 | 141.402.00 | 124.891.00 | 141.522.00 |
| 104 | SMMA | Sinar Mas Multiartha Tbk | 179.629.00 | 299.333.00 | 282.133.00 | 285.137.00 | 164.527.00 | 133.543.00 |
| 105 | AIMS | Akbar Indo Makmur Stimec Tbk | 60.860.00 | 35.831.00 | 38.350.00 | 18.916.00 | 46.627.00 | 46.943.00 |
| 106 | AKRA | Aneka Kimia Raya Tbk | 27.471.00 | 23.235.00 | 12.779.00 | 6.877.00 | 2.134.00 | 364.00 |
| 107 | EMPT | Ensevel Putra Megatrading Tbk | 55.297.00 | 64.273.00 | 123.424.00 | 83.648.00 | 100.296.00 | 110.825.00 |
| 108 | GEMA | Gemma Grahasarana Tbk | 54.153.00 | 44.740.00 | 86.552.00 | 43.908.00 | 45.570.00 | 64.930.00 |
| 109 | HEXA | Hexindo Adiperkasa Tbk | 11.430.00 | 11.584.00 | 5.793.00 | 4.432.00 | 6.391.00 | 8.685.00 |
| 110 | INTA | Intraco Penta Tbk | 69.818.00 | 78.101.00 | 121.583.00 | 62.330.00 | 52.994.00 | 46.034.00 |
| 111 | INTD | Inter Delta Tbk | 30.170.00 | 54.775.00 | 78.127.00 | 108.225.00 | 2.039.00 | 50.258.00 |
| 112 | KONI | Perdana Bangun Perkasa Tbk | 60.436.00 | 64.504.00 | 108.586.00 | 49.951.00 | 49.060.00 | 14.394.00 |

| | | | | | | | | |
|-----|-------|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 113 | L.TLS | Lautan Luas Tbk | 121.422.00 | 248.620.00 | 294.944.00 | 68.468.00 | 206.879.00 | 210.588.00 |
| 114 | MDRN | Modern Photo Film Company Tbk | 82.576.00 | 189.233.00 | 286.711.00 | 118.835.00 | 182.370.00 | 166.549.00 |
| 115 | ME-TA | Metamedia Technologies Tbk | 323.686.00 | 503.476.00 | 268.649.00 | 248.610.00 | 230.981.00 | 258.575.00 |
| 116 | SDPC | Millenium Pharmacon Int'l Tbk | 1.256.262.00 | 116.026.00 | 1.131.902.00 | 95.428.00 | 163.600.00 | 135.352.00 |
| 117 | TGKA | Tigaraksa Satria Tbk | 1.256.262.00 | 116.026.00 | 1.131.902.00 | 101.654.00 | 7.375.00 | 21.304.00 |
| 118 | TIRA | Tira Austinite Tbk | 93.902.00 | 94.865.00 | 30.831.00 | 104.338.00 | 84.629.00 | 29.233.00 |
| 119 | TMPI | AGIS Tbk | 514.185.00 | 629.409.00 | 995.810.00 | 1.058.868.00 | 1.257.015.00 | 1.455.125.00 |
| 120 | TURI | Tunas Ridien Tbk | 90.557.00 | 80.267.00 | 99.627.00 | 117.957.00 | 105.706.00 | 102.004.00 |
| 121 | ANTR | United Tractors Tbk | 247.987.00 | 315.109.00 | 600.408.00 | 639.978.00 | 820.805.00 | 1.039.517.00 |
| 122 | WAPO | Wahana Phonix Mandiri Tbk | 129.563.00 | 161.706.00 | 192.371.00 | 257.037.00 | 328.681.00 | 286.130.00 |
| 123 | WICO | Wicaksono Overseas Int'l Tbk | 666.165.00 | 880.171.00 | 1.946.391.00 | 1.520.683.00 | 1.733.728.00 | 1.912.996.00 |
| 124 | ALFA | Alfa Retailindo Tbk | 74.713.00 | 68.115.00 | 55.290.00 | 47.506.00 | 53.483.00 | 50.144.00 |
| 125 | GRIV | Great River International Tbk | 517.882.00 | 592.506.00 | 730.285.00 | 921.478.00 | 1.085.848.00 | 1.395.801.00 |
| 126 | HERO | Hero Supermarket Tbk | 909.465.00 | 1.165.997.00 | 544.208.00 | 734.244.00 | 2.063.187.00 | 2.350.738.00 |
| 127 | MPPA | Matahari Putra Prima Tbk | 1.979.744.00 | 2.508.542.00 | 3.682.633.00 | 3.828.048.00 | 5.193.532.00 | 7.058.396.00 |
| 128 | MTSM | Metro Supermarket Realty Tbk | 894.638.00 | 1.236.367.00 | 1.848.748.00 | 2.572.638.00 | 2.524.600.00 | 2.242.495.00 |
| 129 | RAIS | Ramayana Lestari Sentosa Tbk | 904.635.00 | 1.017.388.00 | 1.380.094.00 | 1.491.914.00 | 1.692.338.00 | 1.989.911.00 |
| 130 | RIMO | Rimo Catur Lestari Tbk | 1.888.914.00 | 625.765.00 | 691.167.00 | 3.043.513.00 | 4.265.183.00 | 5.430.465.00 |
| 131 | SONA | Sona Topas Tourism Inds. Tbk | 70.388.00 | 72.971.00 | 57.767.00 | 57.577.00 | 75.896.00 | 60.422.00 |
| 132 | TKGA | Toko Gunung Agung Tbk | 865.604.00 | 1.131.448.00 | 1.297.620.00 | 1.654.293.00 | 2.363.369.00 | 2.878.059.00 |
| 133 | ANTA | Anta Express Tour & Travel S. Tbk | 108.672.00 | 133.626.00 | 148.048.00 | 162.766.00 | 255.985.00 | 294.757.00 |
| 134 | BAYU | Bayu Buana Tbk | 143.431.00 | 145.626.00 | 374.134.00 | 321.117.00 | 349.515.00 | 544.793.00 |
| 135 | FAST | Fast Food Indonesia Tbk | 339.332.00 | 393.570.00 | 556.480.00 | 472.316.00 | 527.947.00 | 636.545.00 |
| 136 | HPSB | Aryaduta Hotels Tbk | 78.886.00 | 93.648.00 | 81.733.00 | 57.549.00 | 64.798.00 | 73.616.00 |
| 137 | JSPT | Jakarta Setiabudi Int'l Tbk | 191.120.00 | 220.725.00 | 385.411.00 | 358.362.00 | 408.815.00 | 508.869.00 |
| 138 | MAMI | Mas Murni Indonesia Tbk | 178.559.00 | 206.445.00 | 214.225.00 | 160.271.00 | 207.175.00 | 250.411.00 |
| 139 | MAMP | Mas Murni Tbk (Preferm) | 889.358.00 | 865.239.00 | 1.298.488.00 | 1.340.300.00 | 634.622.00 | 713.680.00 |
| 140 | PANR | Panorama Sentrawisata Tbk | 349.930.00 | 460.293.00 | 494.292.00 | 676.724.00 | 867.641.00 | 1.139.133.00 |
| 141 | PLIN | Plaza Indonesia Realty Tbk | 144.927.00 | 2.273.186.00 | 2.373.375.00 | 239.885.00 | 375.884.00 | 631.639.00 |
| 142 | PNSE | Pudjiadi & Sons Estate Tbk | 1.571.851.00 | 1.967.250.00 | 3.521.917.00 | 2.223.092.00 | 1.596.611.00 | 1.362.886.00 |
| 143 | PTSP | Pioneerindo Gourmnet Int'l Tbk | 848.181.00 | 1.290.635.00 | 1.442.889.00 | 1.400.470.00 | 1.757.807.00 | 1.660.939.00 |
| 144 | SHID | Hotel Sahid Java Tbk | 17.543.00 | 22.409.00 | 35.768.00 | 7.132.00 | 15.362.00 | 9.210.00 |



OPERATING PROFIT PERUSAHAAN SAMPEL

| No. | Operating Profit | | | | | | |
|-----|------------------|----------|-----------|----------|-----------|-----------|--|
| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
| 1 | 111.572 | 177.210 | 421.953 | 330.342 | 259.143 | 318.630 | |
| 2 | 51.718 | 57.457 | 144.230 | 37.401 | 39.793 | 50.480 | |
| 3 | (1.649) | (6.984) | (13.490) | 5.403 | 4.207 | 1.789 | |
| 4 | 3.032 | (29.712) | (31.168) | 54.687 | 50.722 | 49.243 | |
| 5 | 105.463 | 248.317 | 827.910 | 640.242 | 1.459.733 | 2.044.884 | |
| 6 | 87.819 | 146.170 | 475.327 | 318.016 | 537.280 | 471.022 | |
| 7 | 200.646 | 215.281 | 71.175 | 253.222 | 1.452.923 | 354.765 | |
| 8 | 183.168 | 196.833 | 1.104.838 | 509.911 | 384.697 | 136.421 | |
| 9 | 36.344 | 27.898 | 32.424 | 7.025 | (8.590) | (9.555) | |
| 10 | 590.532 | 530.059 | 436.967 | 370.941 | 705.399 | 672.067 | |
| 11 | 189.081 | 184.032 | (13.871) | (36.880) | (28.255) | (156.796) | |
| 12 | 321.554 | 384.803 | 630.710 | 742.960 | 781.555 | 981.741 | |
| 13 | 15.274 | 49.066 | 19.089 | (19.046) | (4.543) | (9.448) | |
| 14 | 12.891 | (10.106) | (58.967) | (23.132) | 12.178 | 18.908 | |
| 15 | 150.078 | 131.952 | 99.501 | 105.311 | 358.132 | 483.956 | |
| 16 | 35.001 | 47.815 | 67.751 | 34.110 | 66.229 | 74.732 | |
| 17 | 2.813 | (1.699) | 1.288 | 2.469 | (191) | 373 | |
| 18 | 31.200 | 22.032 | 164.724 | 124.430 | 121.474 | 99.820 | |
| 19 | 12.213 | 41.816 | 230.404 | 3.442 | 5.362 | 14.435 | |
| 20 | 10.973 | 32.388 | 31.849 | 24.275 | 23.001 | 16.237 | |
| 21 | 8.605 | 16.190 | 24.781 | (1.422) | (23.366) | (7.090) | |
| 22 | (241) | (937) | 13.851 | 1.450 | (3.223) | 5.308 | |
| 23 | 3.626 | 4.395 | 2.584 | 2.182 | 4.845 | 4.368 | |
| 24 | 6.321 | 2.210 | (4.467) | 10.153 | 11.322 | 11.639 | |
| 25 | 27.405 | 24.065 | (20.764) | 9.466 | 15.180 | 1.426 | |
| 26 | 3.708 | 15.760 | 96.441 | 23.867 | 62.781 | 53.742 | |
| 27 | 78.675 | 71.880 | 264.375 | 142.537 | 59.527 | 93.285 | |
| 28 | 9.258 | 12.720 | 49.244 | 18.889 | 13.112 | 9.846 | |
| 29 | 3.556 | 6.880 | 12.303 | 11.747 | 7.564 | 5.094 | |
| 30 | 49.038 | 93.805 | 60.884 | 102.253 | (20.714) | (42.116) | |
| 31 | 14.459 | 8.553 | 12.392 | 33.513 | 20.310 | 26.925 | |
| 32 | 72.578 | 16.248 | 142.243 | 60.463 | (7.816) | (42.915) | |
| 33 | 54.665 | 97.306 | 348.194 | 238.740 | 256.240 | 321.598 | |
| 34 | 36.606 | 24.535 | 164.734 | 96.943 | 143.006 | 230.309 | |

| | | | | | | |
|----|---------|-----------|-----------|-----------|-----------|-----------|
| 35 | 16,084 | 13,920 | 25,754 | 36,965 | 41,777 | 58,850 |
| 36 | 17,335 | 16,828 | 26,363 | 34,890 | 58,315 | 70,297 |
| 37 | 9,159 | 11,626 | 33,526 | 46,919 | 48,291 | 27,168 |
| 38 | 34,005 | 96,640 | 100,202 | 40,952 | 155,661 | 173,533 |
| 39 | (6,369) | 21,617 | 67,096 | 26,199 | 11,638 | 33,020 |
| 40 | 86,330 | 54,905 | 220,717 | 438,048 | 405,475 | 298,966 |
| 41 | 112,483 | 74,280 | 518,972 | 642,829 | 736,860 | 520,446 |
| 42 | 64,506 | 5,393 | 74,977 | 144,125 | 5,517 | 30,552 |
| 43 | 136,143 | 130,016 | 692,894 | 701,036 | 878,036 | 686,984 |
| 44 | 67,643 | 121,486 | 463,823 | 142,911 | (100,837) | (146,380) |
| 45 | 16,547 | 29,227 | 142,533 | 50,761 | 70,447 | 14,396 |
| 46 | 12,707 | 19,350 | 148,078 | 18 | 16,440 | (60,767) |
| 47 | 67,820 | 58,888 | 237,163 | 149,891 | 56,399 | 10 |
| 48 | 68,747 | 75,499 | 172,614 | 93,646 | 189,008 | 50,578 |
| 49 | 456,270 | 1,106,475 | 3,923,989 | 3,042,670 | 3,724,347 | 750,095 |
| 50 | 244,764 | 440,916 | 1,208,836 | 1,305,410 | (591,704) | 271,506 |
| 51 | 22,848 | 21,034 | 105,650 | 49,307 | 53,954 | 50,367 |
| 52 | 46,987 | 58,461 | 82,171 | (104,031) | (108,329) | (58,919) |
| 53 | 2,794 | 7,744 | (5,573) | (13,661) | 247,687 | (3,157) |
| 54 | 11,151 | 43,963 | (10,015) | 13,731 | 18,663 | 19,562 |
| 55 | 14,055 | 10,401 | 4,067 | 61,296 | (59,116) | (20,911) |
| 56 | 490 | 1,680 | 304 | 694 | 423 | (335) |
| 57 | 183,470 | 68,525 | (35,270) | (19,463) | 11,863 | 41,877 |
| 58 | 76,795 | 25,299 | (4,956) | 2,968 | (1,787) | (9,672) |
| 59 | 63,588 | 47,345 | 43,493 | 22,238 | (13,337) | 5,982 |
| 60 | 18,757 | 44,820 | 142,070 | 109,208 | 94,029 | 118,705 |
| 61 | 53,848 | 81,784 | 111,937 | 142,346 | 211,174 | 244,668 |
| 62 | 41,696 | (3,646) | (210) | 1,360 | 14,083 | 7,299 |
| 63 | 1,739 | (52,236) | (70,547) | (152,491) | (131,528) | (106,553) |
| 64 | 143,536 | 35,269 | 22,557 | 43,015 | 57,447 | 28,264 |
| 65 | 192,460 | 94,902 | 4,007 | 379 | 22,695 | 64,845 |
| 66 | 67,786 | 46,459 | (28,392) | (37,944) | (27,630) | (8,526) |
| 67 | 125,580 | 27,249 | (47,268) | (86,892) | (61,350) | (73,595) |
| 68 | 217,356 | (11,334) | (1,945) | 4,028 | 3,023 | 4,833 |
| 69 | 259,003 | 244,468 | 348,525 | 193,125 | 124,496 | 192,709 |
| 70 | 99,404 | 111,930 | 35,394 | 19,428 | 26,766 | 36,013 |
| 71 | 769 | (9,930) | (3,517) | (4,011) | (3,443) | (3,023) |
| 72 | 23,136 | 18,927 | 55,582 | 17,067 | 18,328 | 30,456 |
| 73 | 11,408 | 1,175 | (8,821) | 7,046 | 8,661 | 3,604 |

| | | | | | | |
|-----|-----------|-----------|--------------|-------------|-----------|-------------|
| 74 | 6,297 | 7,605 | (1,624) | 830 | 215 | (1,434) |
| 75 | 81,873 | 71,564 | 72,777 | 57,951 | 135,635 | 142,520 |
| 76 | 14,179 | 71,612 | 10,493 | 2,566 | 10,122 | 94 |
| 77 | 15,504 | 982 | (9,403) | (15,321) | 541 | (12,649) |
| 78 | 93,395 | 90,379 | (26,851) | 14,000 | 12,673 | 20,510 |
| 79 | 154,362 | (258,930) | (51,138) | 166,940 | 171,068 | 123,636 |
| 80 | 586,388 | 691,388 | 1,107,094 | 1,638,663 | 1,475,309 | 1,828,804 |
| 81 | 1,503,276 | 1,152,100 | 168,670 | 2,943,463 | 3,741,234 | 7,615,700 |
| 82 | 23,885 | 39,395 | 199,419 | 173,240 | 191,527 | 287,060 |
| 83 | 11,321 | 24,079 | 321 | 2,028 | 4,774 | 8,967 |
| 84 | 80,712 | 89,670 | 300,919 | 233,725 | 234,247 | 327,489 |
| 85 | 16,399 | 14,130 | 569 | 3,158 | 7,008 | 11,991 |
| 86 | 5,846 | 4,562 | 89,095 | 63,717 | 58,596 | 66,540 |
| 87 | 59,830 | 46,664 | (50,965) | (50,248) | (52,378) | (21,461) |
| 88 | 5,333 | 4,828 | 1,452 | 832 | 458 | 2,180 |
| 89 | 142,066 | 11,224 | 125,500 | 232,237 | 101,333 | 231,376 |
| 90 | 13,133 | 18,568 | 122,939 | 73,607 | 77,141 | 131,710 |
| 91 | 164,432 | 91,423 | (2,662,229) | (2,073,150) | (958,520) | 13,913 |
| 92 | 5,654 | 17,042 | (138,906) | (102,618) | 45,336 | (121,677) |
| 93 | 267,005 | 46,842 | (27,805,658) | (5,120,286) | 284,646 | 608,087 |
| 94 | 1,262 | 9,075 | (27,649) | (7,392) | 2,576 | 831 |
| 95 | 376,119 | 358,857 | (11,755,284) | (2,234,515) | 89,753 | (3,730,533) |
| 96 | 8,761 | 1,527 | (42,098) | (44,629) | (29,643) | (29,052) |
| 97 | 132,921 | 68,519 | (3,983,578) | (5,795,599) | 57,130 | 21,593 |
| 98 | 25,755 | 34,927 | 34,530 | 26,426 | 68,278 | 94,079 |
| 99 | 8,389 | 18,505 | 11,700 | 2,174 | (176,285) | 105,634 |
| 100 | 32,093 | 17,618 | (3,884,210) | (1,483,167) | (21,856) | (1,264,068) |
| 101 | 1,891 | 2,852 | 2,379 | 3,625 | 6,415 | 6,486 |
| 102 | 24,406 | 15,884 | (852,670) | (170,479) | 1,207 | 24,442 |
| 103 | 46,299 | (145,186) | (267,524) | 63,459 | (189,700) | (40,736) |
| 104 | 35,363 | (77) | (1,448,247) | (18,531) | (273,709) | 84,704 |
| 105 | 2,009 | 2,714 | (2,614) | 2,656 | 11,221 | 8,124 |
| 106 | 2,854 | 566 | (4,384) | (1,729) | (4,153) | (3,080) |
| 107 | 3,350 | 4,482 | 7,559 | 13,819 | 14,315 | 8,541 |
| 108 | 14,008 | 11,671 | 14,600 | 22,302 | 11,639 | 11,120 |
| 109 | 4,260 | 3,128 | 287 | 288 | 594 | 1,810 |
| 110 | 10,023 | 951 | 9,318 | 14,594 | 7,094 | 14,503 |
| 111 | 6,619 | 24,208 | 39,591 | 87,282 | (23,730) | 12,874 |
| 112 | 2,678 | 6,456 | 7,162 | 4,130 | 1,573 | 6,357 |



UNIVERSITAS ISLAM INDONESIA

NET INCOME PERUSAHAAN SAMPEL

| No. | Profit After Taxes | | | | | |
|-----|--------------------|-----------|-------------|-----------|-------------|-------------|
| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| 1 | 82.862 | 123.875 | 316.339 | 172.892 | 70.371 | 89.285 |
| 2 | 43.147 | 50.478 | 58.056 | (6.445) | (193.650) | (70.543) |
| 3 | 621 | (28.226) | (34.576) | 9.391 | (14.686) | (16.557) |
| 4 | 2.167 | (41.355) | (247.489) | 41.755 | (127.935) | (40.997) |
| 5 | 40.207 | 95.952 | 375.362 | 175.964 | 572.329 | 704.519 |
| 6 | 32.624 | 69.517 | 319.597 | 234.345 | 383.155 | 358.155 |
| 7 | 145.818 | 128.790 | 50.074 | 150.861 | 772.225 | 96.356 |
| 8 | 156.605 | 177.813 | 518.828 | 318.039 | 331.567 | 36.775 |
| 9 | 26.634 | (30.836) | (103.892) | (37.249) | (182.334) | (89.850) |
| 10 | 551.489 | (377.802) | (1.052.751) | 521.108 | (877.775) | (63.129) |
| 11 | 105.386 | (268.560) | (2.329.404) | 15.421 | (6.915.655) | (1.163.525) |
| 12 | 219.268 | 232.552 | 267.028 | 240.586 | 342.763 | 317.467 |
| 13 | 7.508 | (29.876) | (432.556) | (206.741) | 3.356 | (34.279) |
| 14 | 16.629 | (55.970) | (529.786) | (148.816) | (726.678) | (274.611) |
| 15 | 113.122 | 13.045 | (639.818) | (436.099) | (960.131) | (446.017) |
| 16 | 22.665 | 26.250 | (21.647) | 3.672 | (55.035) | 15.440 |
| 17 | 139 | (22.116) | (64.142) | (767) | (43.438) | (44.945) |
| 18 | 20.590 | (37.255) | 85.051 | 88.283 | 2.901 | 33.566 |
| 19 | 14.206 | 46.206 | 172.343 | 23.534 | 3.140 | 16.098 |
| 20 | 12.114 | 3.512 | 5.113 | 15.096 | (9.949) | 1.355 |
| 21 | 4.241 | (36.117) | (117.905) | (45.200) | (209.248) | (80.038) |
| 22 | 68 | (3.377) | (27.757) | 1.221 | (8.833) | 9.946 |
| 23 | 1.004 | 715 | (8.152) | 938 | (877) | 959 |
| 24 | 1.004 | 715 | (8.152) | 7.651 | 12.275 | 11.729 |
| 25 | 10.820 | (37.323) | (309.544) | 24.748 | 17.368 | 1.279 |
| 26 | 1.324 | (27.159) | 9.716 | 4.752 | 7.093 | 19.400 |
| 27 | 56.467 | (14.685) | 3.303 | 81.119 | (78.779) | (16.916) |
| 28 | 6.942 | 10.441 | 33.982 | 13.365 | 17.390 | 10.792 |
| 29 | 1.885 | 2.338 | 11.183 | 12.396 | 6.095 | 5.976 |
| 30 | 25.158 | 17.430 | (377.302) | 1.498 | (409.502) | (293.899) |
| 31 | 9.354 | 2.189 | 19.664 | 19.893 | 20.075 | 22.132 |
| 32 | 26.003 | (388.832) | (589.710) | (13.331) | (625.153) | (560.816) |
| 33 | 40.727 | 6.260 | 53.436 | 63.551 | 132.862 | 92.149 |
| 34 | 28.650 | (30.105) | (106.409) | (13.280) | (477.293) | (181.538) |

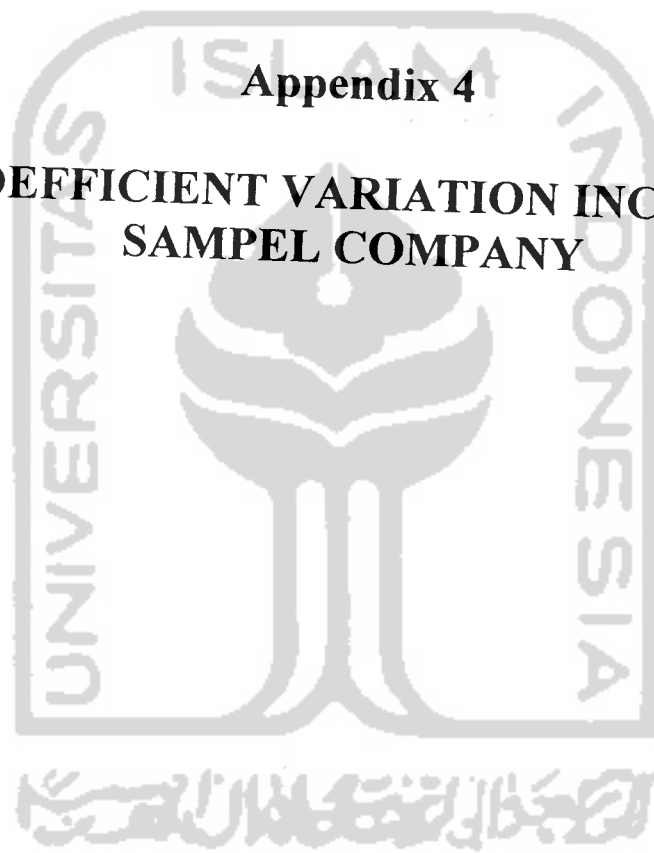
| | | | | | | |
|----|---------|-----------|-------------|-----------|-------------|-------------|
| 35 | 9,148 | 2,533 | 6,041 | 21,017 | 23,552 | 36,265 |
| 36 | 13,134 | 15,596 | 22,064 | 28,976 | 29,449 | 33,160 |
| 37 | 3,401 | 2,881 | 13,940 | 28,857 | 21,039 | 8,030 |
| 38 | 31,106 | (24,674) | (89,530) | 145,660 | (161,465) | 297,563 |
| 39 | (8,678) | 1,099 | 5,914 | (112,417) | 45,594 | (204,299) |
| 40 | 50,659 | (94,855) | (53,789) | 255,538 | 129,307 | 120,208 |
| 41 | 17,392 | (390,753) | (509,645) | 268,765 | (93,645) | 38,202 |
| 42 | 31,243 | (334,967) | (1,224,749) | 202,589 | (969,605) | (493,697) |
| 43 | 14,639 | (207,468) | (387,397) | 247,033 | (15,837) | 100,784 |
| 44 | 87,284 | (39,086) | (958,676) | (103,364) | (1,024,335) | (1,508,794) |
| 45 | 6,887 | (2,240) | 12,202 | 33,366 | (14,275) | (36,173) |
| 46 | 5,273 | (20,056) | 26,091 | (1,554) | (316,114) | (352,010) |
| 47 | -46,318 | 41,288 | 34,259 | (53,241) | (532,088) | (272,813) |
| 48 | 3,549 | (179,058) | (475,886) | 209,880 | (130,137) | 182,245 |
| 49 | 264,585 | 392,472 | 2,125,200 | 28,592 | (3,844,553) | (1,896,867) |
| 50 | 145,095 | 348,422 | 884,695 | 738,320 | (3,242,832) | (527,088) |
| 51 | 7,043 | (7,675) | (8,610) | 21,127 | (168,571) | (60,919) |
| 52 | 5,149 | 4,189 | (33,123) | (68,665) | (902,003) | (700,133) |
| 53 | (4,999) | (35,242) | (114,436) | (22,100) | (217,031) | (75,535) |
| 54 | 1,275 | (89,228) | (453,403) | (141,174) | (222,667) | (118,150) |
| 55 | 1,880 | 10,213 | (333,839) | 264,136 | (105,895) | 183 |
| 56 | 835 | 2,476 | 648 | 823 | 431 | 8 |
| 57 | 131,443 | (53,863) | (588,479) | (192,420) | (734,057) | (689,594) |
| 58 | 66,543 | 1,088 | (3,718) | 15,603 | 2,244 | 12,728 |
| 59 | 70,299 | (169,681) | (201,329) | 18,324 | (274,291) | (102,706) |
| 60 | 33,045 | (204,422) | (441,676) | (238,737) | (587,584) | (72,833) |
| 61 | 96,111 | 36,683 | (4,577) | 65,146 | 92,321 | 41,952 |
| 62 | 15,226 | (56,549) | (323,523) | (101,170) | (121,468) | (42,305) |
| 63 | 23,900 | (176,851) | (1,165,661) | 3,896 | (347,810) | 249,502 |
| 64 | 125,165 | 19,667 | 2,031 | 16,900 | 14,585 | 13,753 |
| 65 | 186,547 | (160,429) | (96,290) | (529,942) | (1,979,646) | 15,433 |
| 66 | 70,876 | 14,534 | 9,051 | (21,783) | (75,987) | 68,513 |
| 67 | 100,964 | (87,997) | (393,328) | (25,940) | (108,227) | 49,057 |
| 68 | 92,898 | (154,941) | (485,151) | (50,984) | (196,071) | 30,442 |
| 69 | 142,765 | 70,309 | 362,003 | 212,573 | (710,038) | (191,241) |
| 70 | -40,386 | (114,775) | (744,357) | (19,914) | 537,240 | (333,793) |
| 71 | (4,068) | (28,159) | (65,629) | (43,720) | (39,367) | (20,546) |
| 72 | 22,516 | 8,560 | (51,107) | 11,560 | (15,127) | (2,679) |
| 73 | 10,945 | (48,709) | (113,537) | (312,692) | (647,738) | (240,236) |

| | | | | | | |
|-----|---------|----------|----------|-----------|-----------|----------|
| 74 | 4,428 | 5,992 | (1,784) | 405 | (560) | 11,648 |
| 75 | 38,497 | (95,739) | (93,078) | 66,573 | 28,708 | 213,814 |
| 76 | 9,434 | 55,389 | 8,304 | 2,300 | 8,764 | (5,270) |
| 77 | 28,014 | (39,609) | 64,610 | (275,158) | (562,231) | (23,019) |
| 78 | 49,319 | 13,995 | (70,810) | 36,421 | (119,231) | 87,844 |
| 79 | 116,126 | -469,550 | -110,945 | 14,393 | -406,436 | 145,279 |
| 80 | 521,685 | 64,075 | 110,043 | 159,479 | 164,215 | 425,011 |
| 81 | | | | 217,231 | 240,372 | 112,831 |
| 82 | 13,233 | 20,674 | 74,540 | 132,642 | 25,452 | 26,76 |
| 83 | 10,091 | 12,449 | 95,18 | 570 | 20,46 | 21,041 |
| 84 | 22,695 | 24,964 | 74,947 | 11,125 | 43,289 | 16,01 |
| 85 | 10,237 | -14,172 | -46,103 | -3,270 | -10,188 | 103,195 |
| 86 | 8,133 | 30,429 | 11,410 | 47,676 | 133,349 | -47,032 |
| 87 | 48,018 | -38,720 | -102,312 | 11,544 | -12,452 | 28,43 |
| 88 | 30,25 | 13,73 | -8,527 | -11,168 | 7,261 | -11,962 |
| 89 | 45,437 | -62,568 | -43,882 | 14,509 | -7,631 | 11,751 |
| 90 | 14,017 | 8,401 | 15,382 | 5,675 | 35,526 | 223,396 |
| 91 | 13,787 | 69,878 | -266,408 | -202,427 | -1,074 | -12,552 |
| 92 | 5,003 | 11,256 | -1,399 | -9,805 | 35,256 | 722,900 |
| 93 | 20,165 | -5,022 | -2,787 | -7,002 | 3,400 | 4,499 |
| 94 | 10,12 | 6,248 | -1,700 | 3,206 | 1,791 | -41,305 |
| 95 | 26,041 | 24,406 | -11,790 | -209,280 | 26,747 | -21,379 |
| 96 | 6,092 | 11,236 | -41,968 | -20,202 | -20,489 | 200,180 |
| 97 | 9,797 | 44,575 | -39,895 | -560,433 | 64,829 | 71,893 |
| 98 | 18,637 | 24,182 | 25,154 | 19,491 | 60,552 | 5,388 |
| 99 | 5,841 | 12,488 | 7,509 | 1,777 | -11,285 | -12,591 |
| 100 | 21,937 | 10,393 | -39,847 | -169,747 | 3,483 | 4,898 |
| 101 | 1,210 | 1,774 | 1,628 | 2,798 | 4,554 | 24,484 |
| 102 | 16,374 | 10,426 | -85,325 | -170,128 | 1,257 | -26,593 |
| 103 | 33,742 | -14,498 | -24,756 | 62,639 | -20,268 | 385,571 |
| 104 | 32,738 | 3,175 | -14,381 | 63,188 | -190,223 | 6,794 |
| 105 | 13 | 1,808 | -30,19 | 2,807 | 9,458 | -3,740 |
| 106 | 1,981 | 1,250 | -2,885 | -1,493 | -3,457 | 8,695 |
| 107 | 2,777 | 4,182 | 4,276 | 11,919 | 12,665 | 9,129 |
| 108 | 12,334 | 10,397 | 14,374 | 16,245 | 11,348 | 20,21 |
| 109 | 4,082 | 3,328 | 676 | 512 | 1,173 | 13,139 |
| 110 | 7,023 | 2,806 | 7,375 | 8,894 | 6,303 | 10,452 |
| 111 | 5,784 | 21,921 | 3,345 | 8,245 | -25,183 | 664 |
| 112 | 25,44 | 5,317 | 3,341 | 2,787 | 664 | 3,819 |

| | | | | | | |
|-----|--------|---------|----------|---------|----------|---------|
| 113 | 29053 | 51681 | 21190 | 63474 | 21816 | 13789 |
| 114 | 25890 | 30031 | 3871 | 24807 | 14170 | 3597 |
| 115 | 19477 | -50824 | -462755 | -92475 | 356173 | -191143 |
| 116 | 61496 | 62957 | -1315132 | 82147 | 96359 | 50973 |
| 117 | 61496 | 62957 | -1315132 | 62286 | -132470 | 33476 |
| 118 | 61114 | 80646 | 118847 | 109296 | 83280 | 37907 |
| 119 | 17784 | -260611 | -507871 | 73248 | -470144 | 1139879 |
| 120 | -6274 | -14351 | -46249 | 8695 | -31166 | 4266 |
| 121 | 11110 | 18166 | 93078 | 26009 | 26009 | 48975 |
| 122 | -10087 | -9198 | -15045 | 8925 | -6689 | -11354 |
| 123 | 63542 | -25852 | -62120 | 11757 | -56853 | 1529 |
| 124 | -3067 | -23910 | 6431 | -213 | -4058 | 132 |
| 125 | 28264 | 2468 | 202938 | 30367 | 15911 | 45493 |
| 126 | 17423 | 9338 | 3187 | 25636 | 94933 | 79408 |
| 127 | 73427 | -298048 | -1109011 | 456686 | 6130 | 238009 |
| 128 | 23526 | -3316 | -516951 | 99376 | -201015 | -139172 |
| 129 | 25122 | -45779 | -68996 | 90872 | 67688 | 61886 |
| 130 | 15498 | -115283 | 66899 | 232369 | 283060 | 101295 |
| 131 | 5041 | 644 | -34744 | 6863 | -17883 | -12059 |
| 132 | 82408 | 112368 | 94876 | 208724 | 257194 | 320077 |
| 133 | 13584 | 4887 | 822 | 18931 | 1798 | 6576 |
| 134 | -5538 | -20093 | -11918 | 2347 | 5355 | 268 |
| 135 | 9086 | -91153 | -88335 | 37818 | 4327 | 14668 |
| 136 | 10322 | 5013 | -4057 | 21395 | -79000 | -72989 |
| 137 | 6808 | 22672 | -196587 | 75320 | -214661 | -40666 |
| 138 | 49776 | 5983 | 17173 | 10134 | -5882 | -18274 |
| 139 | 12655 | -49568 | -19077 | 50207 | 16844 | 26673 |
| 140 | 14462 | 12379 | -78890 | 41699 | 40916 | 106445 |
| 141 | 3718 | -167791 | -330498 | 8257 | 126633 | 157935 |
| 142 | 187051 | -283934 | -2182347 | -758676 | -1075857 | 955719 |
| 143 | 157509 | 11385 | -381554 | 218410 | 286453 | 341664 |
| 144 | 1898 | 7340 | 7078 | 2834 | 1504 | 7782 |

Appendix 4

**COEFFICIENT VARIATION INCOME
SAMPEL COMPANY**



KOEFISIEN VARIASI PENERIMAAN

| No. | Koefisien Variasi Penerimaan | | | | | | | CV(dS) |
|-----|------------------------------|-----------|-------------|-------------|-----------|--|---------|--------|
| | 1998 | 1999 | 2000 | 2001 | 2002 | | | |
| 1 | 114.897 | 396.760 | 83.204 | 204.359 | 276.181 | | 0.59 | |
| 2 | 225.996 | 1.309.878 | (1.844.917) | 67.878 | (80.331) | | (17.67) | |
| 3 | (4.631) | (42.047) | 5.956 | 7.422 | 3.673 | | (3.50) | |
| 4 | 54.677 | 178.022 | 61.771 | (4.567) | 787 | | 1.26 | |
| 5 | 301.093 | 1.174.559 | (207.418) | 1.489.707 | 839.046 | | 0.95 | |
| 6 | 91.001 | 572.353 | (55.766) | 600.164 | 168.915 | | 1.07 | |
| 7 | 337.241 | 250.786 | 308.965 | 2.366.544 | (770.921) | | 2.29 | |
| 8 | 83.710 | 1.342.947 | (339.722) | (57.845) | 230.253 | | 2.56 | |
| 9 | 13.855 | 160.946 | (106.308) | (30.055) | (29.805) | | 57.32 | |
| 10 | 122.864 | 17.721 | 169.084 | 689.007 | 1.005.438 | | 1.06 | |
| 11 | (130.955) | 242.964 | 308.242 | 303.853 | 312.199 | | 0.92 | |
| 12 | 277.078 | 674.761 | 776.858 | (2.732.019) | 4.299.561 | | 3.79 | |
| 13 | 77.907 | (28.539) | (20.033) | 43.892 | 39.319 | | 2.01 | |
| 14 | 37.682 | (59.086) | 19.501 | 41.348 | 51.012 | | 2.47 | |
| 15 | 63.824 | 494.288 | 312.047 | 389.391 | 375.554 | | 0.49 | |
| 16 | 21.651 | 79.305 | (21.767) | 126.948 | 78.624 | | 1.01 | |
| 17 | (7.252) | (7.847) | 115.408 | 147.164 | 130.562 | | 1.01 | |
| 18 | 68.769 | 302.317 | 258.030 | 251.753 | (976.801) | | (28.29) | |
| 19 | 47.012 | 311.651 | (265.914) | 46.807 | 199.537 | | 3.21 | |
| 20 | 34.935 | 28.156 | 8.555 | 37.746 | 101.307 | | 0.83 | |
| 21 | 45.113 | (80.492) | (97.661) | (33.624) | 13.037 | | (1.97) | |
| 22 | (7.546) | 62.053 | (29.959) | 38.842 | (31.835) | | 6.69 | |
| 23 | 6.291 | (10.235) | 3.472 | 15.347 | 7.407 | | 2.09 | |
| 24 | (581) | 2.827 | (4.855) | 17.712 | 7.741 | | 1.90 | |
| 25 | 29.754 | (12.840) | 55.821 | (10.273) | (1.573) | | 2.44 | |
| 26 | (67.432) | 78.846 | 104.322 | 244.412 | 276.367 | | 1.09 | |
| 27 | 23.079 | 470.485 | (57.343) | (44.234) | 133.599 | | 2.07 | |
| 28 | 11.452 | 51.434 | (32.870) | (923) | 15.364 | | 3.42 | |
| 29 | (2.519) | 63.327 | (11.109) | (10.933) | (1.696) | | 4.26 | |
| 30 | 244.236 | 334.765 | 275.547 | 117.721 | (15.183) | | 0.73 | |
| 31 | 4.679 | 32.234 | 1.427 | (12.535) | 21.202 | | 1.86 | |
| 32 | 4.923 | 363.024 | 45.758 | 497.687 | 30.389 | | 1.20 | |
| 33 | 86.557 | 793.089 | (110.524) | 466.534 | 276.519 | | 1.15 | |
| 34 | 38.892 | 417.437 | (161.344) | 160.246 | 201.122 | | 1.62 | |

| | | | | | | |
|----|-----------|-----------|-----------|-----------|-------------|----------|
| 35 | (2,212) | 14,453 | 26,255 | 40,460 | 54,833 | 0.83 |
| 36 | 34,607 | 25,036 | 46,899 | 111,069 | 75,759 | 0.60 |
| 37 | (3,792) | 46,349 | 71,893 | 60,184 | 40,032 | 0.67 |
| 38 | 45,656 | 220,775 | (9,859) | 149,706 | 196,875 | 0.82 |
| 39 | 54,483 | 158,756 | (55,895) | 18,565 | 3,948 | 2.21 |
| 40 | 68,033 | 360,298 | 696,501 | 498,375 | 636,002 | 0.56 |
| 41 | 298,166 | 962,386 | 613,808 | 1,116,294 | 952,208 | 0.42 |
| 42 | 292,871 | 519,399 | 592,489 | 896,862 | 584,938 | 0.37 |
| 43 | 486,667 | 1,545,586 | 296,861 | 1,353,987 | 1,129,404 | 0.57 |
| 44 | 135,199 | 830,383 | (334,190) | (184,386) | 190,061 | 3.53 |
| 45 | 29,621 | 326,386 | (14,925) | (9,359) | 54,096 | 1.84 |
| 46 | 53,304 | 421,546 | 21,654 | 50,022 | 49,482 | 1.42 |
| 47 | 49,872 | 288,255 | (50,431) | (70,929) | (60,812) | 4.86 |
| 48 | 161,190 | 536,045 | (22,424) | 237,604 | (82,499) | 1.47 |
| 49 | 1,135,964 | 6,374,363 | (48,157) | 5,542,670 | (3,374,942) | 2.10 |
| 50 | 629,477 | 3,062,113 | 1,081,905 | 1,790,065 | (566,326) | 1.12 |
| 51 | 19,689 | 214,635 | 22,408 | 50,579 | (3,546) | 1.45 |
| 52 | 13,604 | 402,187 | (32,744) | 11,774 | 122 | 2.30 |
| 53 | 23,237 | 75,251 | (91,025) | 345,025 | (344,636) | 159.92 |
| 54 | 88,110 | (24,367) | 16,762 | 21,469 | 25,974 | 1.58 |
| 55 | 31,934 | (39,912) | 115,706 | (108,772) | 178,802 | 3.25 |
| 56 | 9,627 | (4,422) | (183) | (4,858) | (276) | (260.25) |
| 57 | (182,616) | (158,887) | 25,534 | 19,542 | 61,317 | (2.43) |
| 58 | (83,054) | (42,345) | 44,147 | (435) | (7,870) | (2.66) |
| 59 | (19,844) | 2,256 | 87,897 | (128,659) | 38,927 | (20.80) |
| 60 | 44,083 | 158,364 | (53,098) | (36,997) | 67,424 | 2.38 |
| 61 | 123,523 | (28,334) | (40,724) | 213,288 | 600,077 | 1.50 |
| 62 | (18,749) | (30,893) | (17,534) | 43,898 | 4,747 | (7.97) |
| 63 | 20,520 | 144,220 | (181,855) | 12,643 | 23,833 | 30.27 |
| 64 | (148,435) | (44,879) | 36,119 | 45,383 | (59,214) | (2.31) |
| 65 | (124,466) | (323,955) | 7,998 | 38,258 | 116,093 | (3.02) |
| 66 | (48,216) | (94,846) | 22,145 | 32,719 | 1,076 | (3.06) |
| 67 | (175,378) | (68,290) | 15,279 | 83,687 | 19,868 | (4.00) |
| 68 | (248,634) | (25,344) | 445 | (1,190) | 402 | (1.98) |
| 69 | (80,740) | 223,561 | (160,648) | (30,790) | 108,177 | 12.89 |
| 70 | 23,933 | (107,494) | (22,747) | 29,695 | 22,061 | (5.31) |
| 71 | (22,360) | (8,156) | (3,184) | (89) | (461) | (1.35) |
| 72 | (3,551) | 22,938 | (70,479) | 2,536 | 21,076 | (6.93) |
| 73 | 14,252 | (7,052) | 14,930 | (12,578) | 6,715 | 3.85 |

| | | | | | | |
|-----|-----------|-----------|-------------|-------------|-----------|---------|
| 74 | 15,060 | (26,607) | 1,896 | (10,734) | 1,007 | (4,04) |
| 75 | 8,972 | (122,523) | 81 | 91,863 | 35,729 | 27,86 |
| 76 | 96,210 | (111,906) | (9,254) | 9,290 | 38,817 | 16,50 |
| 77 | (14,838) | (7,473) | (15,656) | 25,947 | (17,453) | (3,09) |
| 78 | (54,237) | (266,943) | (100,487) | 80,369 | 91,166 | (2,94) |
| 79 | 55,719 | (9,986) | 10,333 | 36,109 | 30,071 | 1,03 |
| 80 | 231,645 | 653,353 | 896,429 | (12,430) | 2,255,695 | 1,10 |
| 81 | 833,227 | 690,974 | 1,190,209 | 1,595,511 | 6,745,069 | 1,16 |
| 82 | 41,460 | 472,136 | (69,030) | 122,774 | 244,589 | 1,28 |
| 83 | 21,529 | (23,486) | 1,823 | 1,445 | 9,533 | 7,60 |
| 84 | 36,861 | 416,236 | (59,926) | (97,892) | 213,963 | 2,09 |
| 85 | 7,802 | (9,124) | 20,080 | 15,609 | 10,871 | 1,24 |
| 86 | 18,100 | 148,193 | (33,255) | 17,958 | 49,808 | 1,68 |
| 87 | 13,465 | (120,942) | (4,508) | (1,378) | 4,393 | (2,56) |
| 88 | (6,817) | (5,579) | 11,218 | 6,410 | 5,261 | 3,77 |
| 89 | (20,513) | 98,220 | 107,138 | (77,425) | 164,899 | 1,83 |
| 90 | 76,588 | 546,544 | (819) | 416,710 | (367,178) | 2,69 |
| 91 | 625,359 | 2,986,715 | (3,469,762) | (406,244) | 583,109 | 36,60 |
| 92 | 80,835 | 383,685 | (190,701) | 111,626 | 546,804 | 1,54 |
| 93 | 2,047,337 | 1,537,317 | (2,051,381) | 884,855 | 2,420,371 | 1,84 |
| 94 | 27,896 | 87,648 | (19,862) | (27,611) | 57,064 | 1,97 |
| 95 | 1,608,797 | 4,136,052 | (2,608,027) | (1,409,615) | (202,824) | 8,69 |
| 96 | 54,368 | 120,156 | (131,168) | (36,292) | 70,513 | 6,42 |
| 97 | 1,379,831 | 1,411,315 | (1,256,552) | 751,947 | 446,881 | 1,99 |
| 98 | 99,048 | 454,793 | (162,654) | 5,115 | 240,507 | 1,84 |
| 99 | 53,191 | 201,934 | (86,390) | (136,619) | (295) | 20,72 |
| 100 | 284,554 | 737,067 | (551,155) | 363,516 | 277,546 | 2,12 |
| 101 | 34,314 | 343,172 | (322,543) | 20,213 | 63,145 | 8,55 |
| 102 | 32,535 | 120,440 | (123,565) | (74,366) | 4,980 | (11,88) |
| 103 | 57,965 | 14,595 | (47,537) | (16,511) | 16,631 | 7,86 |
| 104 | 119,904 | (17,400) | 3,004 | (120,610) | (30,984) | (9,36) |
| 105 | (25,029) | 2,519 | (19,434) | 27,711 | 316 | (7,49) |
| 106 | (4,236) | (10,456) | (5,902) | (4,743) | (1,770) | (0,59) |
| 107 | 8,976 | 59,151 | (39,776) | 16,648 | 10,529 | 3,16 |
| 108 | (9,413) | 41,812 | (42,644) | 1,662 | 19,360 | 14,69 |
| 109 | 154 | (5,791) | (1,361) | 1,959 | 2,294 | (5,97) |
| 110 | 8,283 | 43,482 | (59,253) | (9,336) | (6,960) | (7,79) |
| 111 | 24,605 | 23,352 | 30,098 | (106,186) | 48,219 | 15,53 |
| 112 | 4,068 | 44,082 | (58,635) | (891) | (34,666) | (4,27) |

| | | | | | | |
|-----|-------------|-----------|-------------|-----------|-----------|---------|
| 113 | 127,198 | 46,324 | (226,476) | 138,411 | 3,709 | 8.28 |
| 114 | 106,657 | 97,478 | (167,876) | 63,535 | (15,821) | 6.78 |
| 115 | 179,790 | (234,827) | (20,039) | (17,629) | 27,594 | (11.40) |
| 116 | (1,140,236) | 1,015,876 | (1,036,474) | 68,172 | (28,248) | (3.97) |
| 117 | (1,140,236) | 1,015,876 | (1,030,248) | (94,279) | 13,929 | (3.56) |
| 118 | 963 | (64,034) | 73,507 | (19,709) | (55,396) | (4.26) |
| 119 | 115,224 | 366,401 | 63,058 | 198,147 | 198,110 | 0.61 |
| 120 | (10,290) | 19,360 | 18,330 | (12,251) | (3,702) | 6.75 |
| 121 | 67,122 | 285,299 | 39,570 | 180,827 | 218,712 | 0.65 |
| 122 | 32,143 | 30,665 | 64,666 | 71,644 | (42,551) | 1.45 |
| 123 | 214,006 | 1,066,220 | (425,708) | 213,045 | 179,268 | 2.13 |
| 124 | (6,598) | (12,825) | (7,784) | 5,977 | (3,339) | (1.42) |
| 125 | 74,624 | 137,779 | 191,193 | 164,370 | 309,953 | 0.49 |
| 126 | 256,532 | (621,789) | 190,036 | 1,328,943 | 287,551 | 2.40 |
| 127 | 528,798 | 1,174,091 | 145,415 | 1,365,484 | 1,864,864 | 0.67 |
| 128 | 341,729 | 612,381 | 723,890 | (48,038) | (282,105) | 1.59 |
| 129 | 112,953 | 362,506 | 111,820 | 200,424 | 297,573 | 0.51 |
| 130 | (1,263,149) | 65,402 | 2,352,346 | 1,221,670 | 1,165,282 | 1.93 |
| 131 | 2,583 | (15,204) | (190) | 18,319 | (15,474) | (7.06) |
| 132 | 265,844 | 166,172 | 356,673 | 709,076 | 514,690 | 0.53 |
| 133 | 24,954 | 14,422 | 14,718 | 93,219 | 38,772 | 0.88 |
| 134 | 2,195 | 228,508 | (53,017) | 28,398 | 195,278 | 1.55 |
| 135 | 54,238 | 162,910 | (84,164) | 55,631 | 108,598 | 1.55 |
| 136 | 14,762 | (11,915) | (24,184) | 7,249 | 8,818 | (15.51) |
| 137 | 29,605 | 164,686 | (27,049) | 50,453 | 100,054 | 1.14 |
| 138 | 27,886 | 7,780 | (33,954) | 46,904 | 43,236 | 2.87 |
| 139 | (24,119) | 433,249 | 41,812 | (705,678) | 79,058 | (11.80) |
| 140 | 110,343 | 33,999 | 182,432 | 190,917 | 271,492 | 0.57 |
| 141 | 2,128,259 | 100,189 | (2,133,490) | 135,999 | 255,755 | 15.52 |
| 142 | 395,399 | 1,554,667 | (1,298,825) | (626,481) | (233,725) | (25.93) |
| 143 | 442,454 | 152,254 | (42,419) | 357,337 | (96,868) | 1.46 |
| 144 | 4,866 | 13,359 | (28,636) | 8,230 | (6,152) | (10.01) |



Appendix 5

**COEFFICIENT VARIATION
OPERATING PROFIT
SAMPEL COMPANY**

KOEFISIEN VARIASI OPERATING PROFIT

| No. | Koefisien Variasi Operating Profit | | | | | CV(dOP) |
|-----|------------------------------------|-----------|-----------|-----------|-------------|----------|
| | 1998 | 1999 | 2000 | 2001 | 2002 | |
| 1 | 65.638 | 244.743 | (91.611) | (71.199) | 59.487 | 3.25 |
| 2 | 5.739 | 86.773 | (106.829) | 2.392 | 10.687 | (279.04) |
| 3 | (5.335) | (6.506) | 18.893 | (1.196) | (2.418) | 15.13 |
| 4 | (32.744) | (1.456) | 85.855 | (3.965) | (1.479) | 4.85 |
| 5 | 142.854 | 579.593 | (187.668) | 819.491 | 585.151 | 1.04 |
| 6 | 58.351 | 329.157 | (157.311) | 219.264 | (66.258) | 2.61 |
| 7 | 14.635 | (144.106) | 182.047 | 1.199.701 | (1.098.158) | 26.63 |
| 8 | 13.665 | 908.005 | (594.927) | (125.214) | (248.276) | (59.92) |
| 9 | (8.446) | 4.526 | (25.399) | (15.615) | (965) | (1.29) |
| 10 | (60.473) | (93.092) | (66.026) | 334.458 | (33.332) | 10.98 |
| 11 | (5.049) | (197.903) | (23.009) | 8.625 | (128.541) | (1.30) |
| 12 | 63.249 | 245.907 | 112.250 | 38.595 | 200.186 | 0.67 |
| 13 | 33.792 | (29.977) | (38.135) | 14.503 | (4.905) | (6.07) |
| 14 | (22.997) | (48.861) | 35.835 | 35.310 | 6.730 | 30.77 |
| 15 | (18.126) | (32.451) | 5.810 | 252.821 | 125.824 | 1.82 |
| 16 | 12.814 | 19.936 | (33.641) | 32.119 | 8.503 | 3.13 |
| 17 | (4.512) | 2.987 | 1.181 | (2.660) | 564 | (6.22) |
| 18 | (9.168) | 142.692 | (40.294) | (2.956) | (21.654) | 5.36 |
| 19 | 29.603 | 188.588 | (226.962) | 1.920 | 9.073 | 333.84 |
| 20 | 21.415 | (539) | (7.574) | (1.274) | (6.764) | 11.22 |
| 21 | 7.585 | 8.591 | (26.203) | (21.944) | 16.276 | (6.20) |
| 22 | (696) | 14.788 | (12.401) | (4.673) | 8.531 | 9.68 |
| 23 | 769 | (1.811) | (402) | 2.663 | (477) | 11.30 |
| 24 | (4.111) | (6.677) | 14.620 | 1.169 | 317 | 7.74 |
| 25 | (3.340) | (44.829) | 30.230 | 5.714 | (13.754) | (5.29) |
| 26 | 12.052 | 80.681 | (72.574) | 38.914 | (9.039) | 5.70 |
| 27 | (6.795) | 192.495 | (121.838) | (83.010) | 33.758 | 41.89 |
| 28 | 3.462 | 36.524 | (30.355) | (5.777) | (3.266) | 204.41 |
| 29 | 3.324 | 5.423 | (556) | (4.183) | (2.470) | 12.99 |
| 30 | 44.767 | (32.921) | 41.369 | (122.967) | (21.402) | (3.75) |
| 31 | (5.906) | 3.839 | 21.121 | (13.203) | 6.615 | 5.24 |
| 32 | (56.330) | 125.995 | (81.780) | (68.279) | (35.099) | (3.68) |
| 33 | 42.641 | 250.888 | (109.454) | 17.500 | 65.358 | 2.43 |
| 34 | (12.071) | 140.199 | (67.791) | 46.063 | 87.303 | 2.11 |

| | | | | | | |
|----|-----------|-----------|-----------|-------------|-------------|----------|
| 35 | (2,164) | 11,834 | 11,211 | 4,812 | 17,073 | 0.87 |
| 36 | (507) | 9,535 | 8,527 | 23,425 | 11,982 | 0.81 |
| 37 | 2,467 | 21,900 | 13,393 | 1,372 | (21,123) | 4.49 |
| 38 | 62,635 | 3,562 | (59,250) | 114,709 | 17,872 | 2.34 |
| 39 | 27,986 | 45,479 | (40,897) | (14,561) | 21,382 | 4.44 |
| 40 | (31,425) | 165,812 | 217,331 | (32,573) | (106,509) | 3.31 |
| 41 | (38,203) | 444,692 | 123,857 | 94,031 | (216,414) | 2.98 |
| 42 | (59,113) | 69,584 | 69,148 | (138,608) | 25,035 | (13.32) |
| 43 | (6,127) | 562,878 | 8,142 | 177,000 | (191,052) | 2.58 |
| 44 | 53,843 | 342,337 | (320,912) | (243,748) | (45,543) | (6.13) |
| 45 | 12,680 | 113,306 | (91,772) | 19,686 | (56,051) | (183.58) |
| 46 | 6,643 | 128,728 | (148,060) | 16,422 | (77,207) | (7.11) |
| 47 | (8,932) | 178,275 | (87,272) | (93,492) | (56,389) | (8.28) |
| 48 | 6,752 | 97,115 | (78,968) | 95,362 | (138,430) | (28.83) |
| 49 | 650,205 | 2,817,514 | (881,319) | 681,677 | (2,974,252) | 36.53 |
| 50 | 196,152 | 767,920 | 96,574 | (1,897,114) | 863,210 | 208.65 |
| 51 | (1,814) | 84,616 | (56,343) | 4,647 | (3,587) | 9.18 |
| 52 | 11,474 | 23,710 | (186,202) | (4,298) | 49,410 | (4.45) |
| 53 | 4,950 | (13,317) | (8,088) | 261,348 | (250,844) | (152.33) |
| 54 | 32,812 | (53,978) | 23,746 | 4,932 | 899 | 20.08 |
| 55 | (3,654) | (6,334) | 57,229 | (120,412) | 38,205 | (9.87) |
| 56 | 1,190 | (1,376) | 390 | (271) | (758) | (6.04) |
| 57 | (114,945) | (103,795) | 15,807 | 31,326 | 30,014 | (2.63) |
| 58 | (51,496) | (30,255) | 7,924 | (4,755) | (7,885) | (1.36) |
| 59 | (16,243) | (3,852) | (21,255) | (35,575) | 19,319 | (1.79) |
| 60 | 26,063 | 97,250 | (32,862) | (15,179) | 24,676 | 2.51 |
| 61 | 30,936 | 27,153 | 30,409 | 68,828 | 33,494 | 0.45 |
| 62 | (45,342) | 3,436 | 1,570 | 12,723 | (6,784) | (3.28) |
| 63 | (53,975) | (18,311) | (81,944) | 20,963 | 24,975 | (2.15) |
| 64 | (108,267) | (12,712) | 20,458 | 14,432 | (29,183) | (2.24) |
| 65 | (97,558) | (90,895) | (3,628) | 22,316 | 42,150 | (2.54) |
| 66 | (21,327) | (74,851) | (9,552) | 10,314 | 19,104 | (2.42) |
| 67 | (98,331) | (74,517) | (39,624) | 25,542 | (12,245) | (1.23) |
| 68 | (228,690) | 9,389 | 5,973 | (1,005) | 1,810 | (2.45) |
| 69 | (14,535) | 104,057 | (155,400) | (68,629) | 68,213 | (7.88) |
| 70 | 12,526 | (76,536) | (15,966) | 7,338 | 9,247 | (2.95) |
| 71 | (10,699) | 6,413 | (494) | 568 | 420 | (8.17) |
| 72 | (4,209) | 36,655 | (38,515) | 1,261 | 12,128 | 18.65 |
| 73 | (10,233) | (9,996) | 15,867 | 1,615 | (5,057) | (6.96) |

| | | | | | | |
|-----|-----------|--------------|-------------|-----------|-------------|-----------|
| 74 | 1,308 | (9,229) | 2,454 | (615) | (1,649) | (2,96) |
| 75 | (10,309) | 1,213 | (14,826) | 77,684 | 6,885 | 3,11 |
| 76 | 57,433 | (61,119) | (7,927) | 7,556 | (10,028) | (15,08) |
| 77 | (14,522) | (10,385) | (5,918) | 15,862 | (13,190) | (2,21) |
| 78 | (3,016) | (117,230) | 40,851 | (1,327) | 7,837 | (4,12) |
| 79 | (413,292) | 207,792 | 218,078 | 4,128 | (47,432) | (41,78) |
| 80 | 105,000 | 415,706 | 531,569 | (163,354) | 353,495 | 1,12 |
| 81 | (351,176) | (983,430) | 2,774,793 | 797,771 | 3,874,466 | 1,68 |
| 82 | 15,510 | 160,024 | (26,179) | 18,287 | 95,533 | 1,41 |
| 83 | 12,758 | (23,758) | 1,707 | 2,746 | 4,193 | (29,16) |
| 84 | 8,958 | 211,249 | (67,194) | 522 | 93,242 | 2,17 |
| 85 | (2,269) | (13,561) | 2,589 | 3,850 | 4,983 | (8,63) |
| 86 | (1,284) | 84,533 | (25,378) | (5,121) | 7,944 | 3,48 |
| 87 | (13,166) | (97,629) | 717 | (2,130) | 30,917 | (2,97) |
| 88 | (505) | (3,376) | (620) | (374) | 1,722 | (2,88) |
| 89 | (130,842) | 114,276 | 106,737 | (130,904) | 130,043 | 7,62 |
| 90 | 5,435 | 104,371 | (49,332) | 3,534 | 54,569 | 2,45 |
| 91 | (73,009) | (2,753,652) | 589,079 | 1,114,630 | 972,433 | (52,83) |
| 92 | 11,388 | (155,948) | 36,288 | 147,954 | (167,013) | (5,28) |
| 93 | (220,163) | (27,852,500) | 22,685,372 | 5,404,932 | 323,441 | 266,27 |
| 94 | 7,813 | (36,724) | 20,257 | 9,968 | (1,745) | (254,32) |
| 95 | (17,262) | (12,114,141) | 9,520,769 | 2,324,268 | (3,820,286) | (9,70) |
| 96 | (7,234) | (43,625) | (2,531) | 14,986 | 591 | (2,88) |
| 97 | (64,402) | (4,052,097) | (1,812,021) | 5,852,729 | (35,537) | (164,96) |
| 98 | 9,172 | (397) | (8,104) | 41,852 | 25,801 | 1,48 |
| 99 | 10,116 | (6,805) | (9,526) | (178,459) | 281,919 | 8,51 |
| 100 | (14,475) | (3,901,828) | 2,401,043 | 1,461,311 | (1,242,212) | (9,51) |
| 101 | 961 | (473) | 1,246 | 2,790 | 71 | 1,36 |
| 102 | (8,522) | (868,554) | 682,191 | 171,686 | 23,235 | 77,636,88 |
| 103 | (191,485) | (122,338) | 330,983 | (253,159) | 148,964 | (14,25) |
| 104 | (35,440) | (1,448,170) | 1,429,716 | (255,178) | 358,413 | 105,50 |
| 105 | 705 | (5,328) | 5,270 | 8,565 | (3,097) | 4,70 |
| 106 | (2,288) | (4,950) | 2,655 | (2,424) | 1,073 | (2,55) |
| 107 | 1,132 | 3,077 | 6,260 | 496 | (5,774) | 4,26 |
| 108 | (2,337) | 2,929 | 7,702 | (10,663) | (519) | (11,80) |
| 109 | (1,132) | (2,841) | 1 | 306 | 1,216 | (3,18) |
| 110 | (9,072) | 8,367 | 5,276 | (7,500) | 7,409 | 9,46 |
| 111 | 17,589 | 15,383 | 47,691 | (111,012) | 36,604 | 51,30 |
| 112 | 3,778 | 706 | (3,032) | (2,557) | 4,784 | 4,84 |

| | | | | | | |
|-----|-----------|-------------|-----------|-----------|----------|----------|
| 113 | 25,150 | (74,774) | 66,079 | (39,031) | (5,848) | (9.63) |
| 114 | 4,267 | (25,537) | 17,687 | (12,397) | (7,105) | (3.56) |
| 115 | (85,580) | (441,714) | 347,393 | (232,715) | 175,604 | (6.65) |
| 116 | (240,088) | (2,408,495) | 2,470,040 | 58,624 | (36,965) | (55.11) |
| 117 | (240,088) | (2,408,495) | 2,455,426 | (83,596) | 13,050 | (32.68) |
| 118 | (9,680) | (81,018) | 74,684 | (21,903) | (64,991) | (2.96) |
| 119 | 8,666 | 80,952 | (71,000) | (645) | 6,143 | 11.16 |
| 120 | 634 | 5,417 | (2,335) | (1,006) | (18,119) | (2.89) |
| 121 | 7,776 | 137,349 | (106,352) | 17,870 | (6,132) | 8.58 |
| 122 | 9,509 | 7,849 | (9,081) | (150) | (10,842) | (17.24) |
| 123 | (249) | 238,706 | (235,149) | 9,862 | (35,876) | (37.10) |
| 124 | 2,583 | 18,552 | (20,538) | 5,828 | (1,594) | 14.68 |
| 125 | 12,920 | (49,035) | 1,849 | 1,272 | (6,154) | (3.07) |
| 126 | 4,271 | (26,740) | 17,397 | 80,540 | (12,776) | 3.31 |
| 127 | 193,459 | 723,828 | (305,602) | 168,307 | (5,673) | 2.42 |
| 128 | (12,145) | 58,521 | (11,367) | (30,149) | (9,919) | (33.89) |
| 129 | (2,741) | 43,729 | 25,194 | (279) | 2,981 | 1.46 |
| 130 | (54,632) | 4,968 | 123,465 | 105,132 | (86,506) | 5.07 |
| 131 | (37) | 701 | 118 | 2,252 | 2,209 | 1.06 |
| 132 | 146 | 31,107 | 47,841 | 62,653 | 64,331 | 0.64 |
| 133 | 10,880 | (7,258) | (4,754) | 33,798 | (12,708) | 4.72 |
| 134 | 1,405 | 18,357 | (10,100) | (544) | (8,146) | 57.94 |
| 135 | (6,276) | (3,851) | (75) | 4,243 | (7,779) | (1.77) |
| 136 | (9,737) | 9,432 | (18,475) | (264) | 3,709 | (3.62) |
| 137 | 17,123 | 78,278 | (24,540) | 12,219 | 22,102 | 1.75 |
| 138 | 15,686 | (3,902) | (45,825) | 36,253 | 30,190 | 5.10 |
| 139 | 41,694 | 197,037 | (118,823) | (132,482) | 11,027 | (434.69) |
| 140 | 17,273 | 251 | 29,336 | (7,707) | (9,532) | 2.84 |
| 141 | 109,796 | (51,023) | (45,559) | 16,065 | 21,388 | 6.42 |
| 142 | (140,584) | 51,294 | (122,279) | (4,686) | 25,164 | (2.29) |
| 143 | 8,290 | (45,141) | (62,825) | (18,525) | 1,421 | (1.30) |
| 144 | 2,411 | 107 | 837 | 8,668 | (6,341) | 4.73 |

Appendix 6

**ABNORMAL AND CUMULATIVE
ABNORMAL RETURN
SAMPEL COMPANY**



ABNORMAL DAN KUMULATIF ABNORMAL RETURN
SMOOTHING VARIABEL OPERATING PROFIT

| No. | IS | Abnormal Return | | | | | | | | | | | Rata-rata AR | Kumulatif AR |
|-----|----|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|-----------------|-----------------|
| | | t1 | t2 | t3 | t4 | t5 | t6 | t7 | t8 | t9 | t10 | | | |
| 1 | 0 | (0.134) | (0.158) | (0.024) | (0.066) | (0.085) | (0.193) | (0.262) | 0.017 | (0.182) | (0.087) | (0.1174) | (0.1174) | |
| 2 | 0 | (0.032) | (0.048) | (0.010) | (0.030) | (0.034) | (0.032) | (0.031) | 0.115 | 0.202 | (0.032) | 0.0068 | 0.0680 | |
| 3 | 0 | 0.012 | 0.012 | 0.005 | 0.017 | 0.007 | 0.004 | 0.006 | (0.024) | (0.032) | 0.024 | 0.0031 | 0.0310 | |
| 4 | 0 | 0.012 | 0.012 | (0.015) | 0.015 | 0.006 | 0.004 | 0.006 | (0.015) | (0.003) | 0.081 | 0.0103 | 0.1030 | |
| 5 | 0 | 0.012 | 0.012 | 0.015 | 0.011 | 0.005 | 0.003 | 0.006 | 0.003 | (0.003) | 0.132 | 0.0196 | 0.1960 | |
| 6 | 0 | 0.009 | 0.012 | (0.115) | 0.008 | (0.002) | 0.001 | 0.001 | (0.018) | (0.010) | (0.031) | (0.0145) | (0.1450) | |
| 7 | 0 | 0.010 | 0.012 | 0.076 | 0.008 | (0.001) | 0.001 | 0.001 | 0.073 | (0.058) | (0.017) | 0.0105 | 0.1050 | |
| 8 | 0 | 0.009 | 0.012 | 0.096 | 0.008 | (0.001) | 0.001 | 0.001 | (0.018) | 0.006 | (0.057) | 0.0057 | 0.0570 | |
| 9 | 1 | 0.036 | 0.026 | 0.025 | 0.045 | 0.016 | 0.020 | 0.022 | (0.004) | (0.026) | (0.011) | 0.0149 | 0.1490 | |
| 10 | 0 | 0.026 | 0.016 | (0.005) | 0.030 | 0.010 | 0.013 | 0.014 | (0.031) | 0.039 | 0.004 | 0.0116 | 0.1160 | |
| 11 | 0 | 0.024 | 0.014 | (0.033) | 0.029 | 0.008 | 0.012 | 0.013 | 0.006 | 0.003 | (0.038) | 0.0038 | 0.0380 | |
| 12 | 1 | 0.032 | 0.025 | (0.011) | 0.039 | 0.015 | 0.019 | 0.020 | (0.037) | 0.000 | 0.050 | 0.0152 | 0.1520 | |
| 13 | 0 | 0.006 | (0.008) | 0.151 | 0.000 | (0.008) | (0.008) | (0.008) | 0.003 | 0.009 | 0.020 | 0.0157 | 0.1570 | |
| 14 | 0 | 0.005 | (0.009) | (0.048) | (0.001) | (0.008) | (0.008) | (0.008) | 0.003 | 0.009 | 0.020 | (0.0045) | (0.0450) | |
| 15 | 0 | 0.000 | (0.011) | 0.011 | (0.006) | (0.009) | (0.008) | (0.012) | 0.003 | 0.003 | 0.020 | (0.0043) | (0.0430) | |
| 16 | 0 | 0.006 | (0.007) | (0.062) | 0.000 | (0.008) | (0.005) | (0.007) | (0.010) | 0.035 | (0.003) | (0.0061) | (0.0610) | |
| 17 | 0 | 0.004 | (0.011) | (0.009) | (0.004) | (0.009) | (0.008) | (0.010) | (0.002) | (0.013) | (0.003) | (0.0065) | (0.0650) | |
| 18 | 1 | 0.037 | 0.026 | 0.019 | 0.046 | 0.018 | 0.020 | 0.022 | (0.018) | 0.005 | (0.036) | 0.0139 | 0.1390 | |
| 19 | 0 | 0.006 | (0.004) | (0.158) | 0.003 | (0.008) | (0.002) | (0.004) | 0.006 | 0.003 | 0.015 | (0.0143) | (0.1430) | |
| 20 | 0 | 0.009 | 0.008 | (0.045) | 0.008 | (0.006) | 0.001 | 0.001 | (0.007) | 0.014 | (0.034) | (0.0051) | (0.0510) | |
| 21 | 0 | 0.008 | (0.002) | 0.022 | 0.005 | (0.006) | (0.002) | (0.002) | (0.022) | (0.003) | 0.015 | 0.0013 | 0.0130 | |
| 22 | 0 | 0.013 | 0.012 | 0.025 | 0.020 | 0.008 | 0.006 | 0.006 | (0.028) | 0.025 | 0.024 | 0.0111 | 0.1110 | |
| 23 | 0 | 0.007 | (0.004) | (0.055) | 0.003 | (0.006) | (0.002) | (0.004) | 0.012 | (0.009) | (0.003) | (0.0061) | (0.0610) | |
| 24 | 0 | 0.008 | 0.000 | (0.015) | 0.005 | (0.006) | (0.002) | (0.002) | (0.022) | (0.003) | 0.015 | (0.0022) | (0.0220) | |
| 25 | 0 | 0.009 | 0.000 | 0.289 | 0.006 | (0.006) | (0.002) | 0.001 | (0.018) | 0.025 | (0.037) | 0.0267 | 0.2670 | |
| 26 | 0 | 0.009 | 0.001 | (0.015) | 0.006 | (0.006) | (0.002) | 0.001 | (0.007) | 0.014 | (0.034) | (0.0033) | (0.0330) | |
| 27 | 0 | 0.009 | 0.003 | 0.282 | 0.007 | (0.006) | (0.002) | 0.001 | (0.018) | 0.007 | 0.006 | 0.0289 | 0.2890 | |
| 28 | 0 | 0.009 | 0.005 | (0.036) | 0.007 | (0.006) | (0.002) | 0.001 | (0.018) | 0.025 | (0.037) | (0.0089) | (0.0890) | |
| 29 | 0 | 0.009 | 0.007 | 0.002 | 0.008 | (0.006) | (0.002) | 0.001 | (0.020) | 0.025 | (0.037) | (0.0009) | (0.0090) | |
| 30 | 0 | 0.009 | 0.009 | (0.092) | 0.008 | (0.005) | (0.002) | 0.001 | (0.020) | (0.033) | (0.014) | (0.0136) | (0.1360) | |
| 31 | 0 | 0.009 | 0.010 | 0.020 | 0.008 | (0.005) | (0.002) | 0.001 | (0.018) | 0.022 | (0.026) | 0.0036 | 0.0360 | |
| 32 | 0 | 0.009 | 0.005 | 0.011 | 0.007 | (0.006) | (0.001) | 0.001 | (0.018) | (0.005) | (0.050) | 0.0047 | 0.0470 | |
| 33 | 0 | (0.002) | (0.011) | 0.005 | (0.007) | (0.011) | (0.008) | (0.018) | (0.009) | 0.007 | (0.009) | (0.0063) | (0.0630) | |
| 34 | 0 | 0.000 | (0.011) | (0.007) | (0.006) | (0.010) | (0.008) | (0.013) | (0.016) | 0.037 | 0.081 | 0.0047 | 0.0470 | |

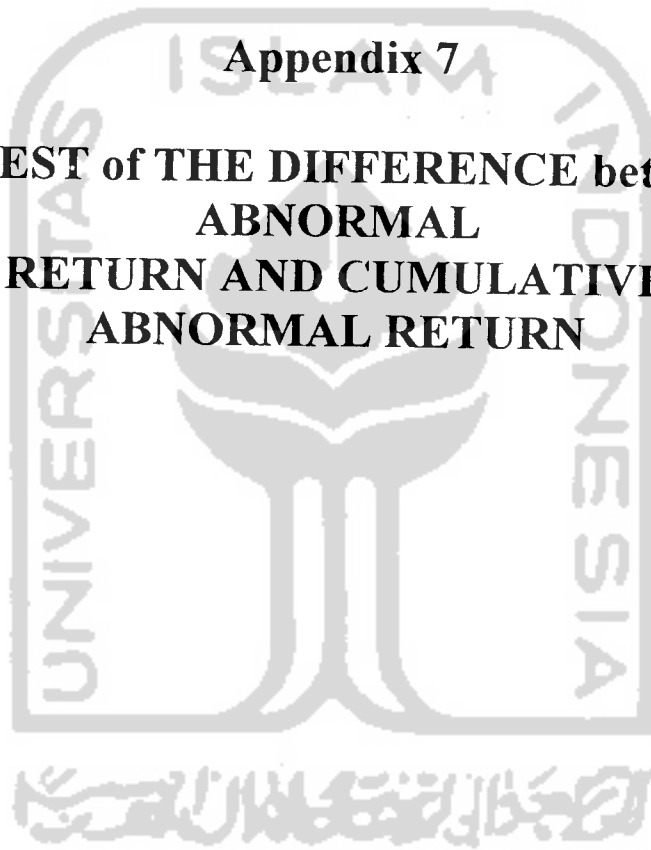
| | | | | | | | | | | | | |
|----|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| 35 | 0 | 0.006 | (0.011) | (0.028) | (0.006) | (0.009) | (0.008) | (0.011) | (0.018) | 0.001 | (0.019) | (0.0109) |
| 36 | 0 | 0.001 | (0.011) | 0.003 | (0.005) | (0.009) | (0.008) | (0.011) | 0.006 | 0.005 | 0.011 | (0.0109) |
| 37 | 0 | (0.002) | (0.011) | 0.121 | (0.006) | (0.011) | (0.008) | (0.015) | (0.018) | (0.023) | (0.075) | (0.0180) |
| 38 | 0 | 0.002 | (0.011) | 0.473 | (0.005) | (0.009) | (0.008) | (0.010) | 0.006 | (0.010) | 0.023 | (0.0480) |
| 39 | 0 | 0.004 | (0.009) | 0.083 | (0.004) | (0.008) | (0.008) | (0.010) | 0.006 | 0.003 | (0.003) | 0.4510 |
| 40 | 0 | 0.005 | (0.009) | (0.015) | 0.000 | (0.008) | (0.008) | (0.008) | 0.009 | (0.011) | 0.011 | 0.0540 |
| 41 | 0 | 0.009 | 0.010 | 0.008 | 0.008 | (0.005) | 0.001 | 0.001 | 0.006 | 0.003 | (0.015) | 0.0260 |
| 42 | 0 | 0.009 | 0.010 | 0.019 | 0.008 | (0.002) | 0.001 | 0.001 | (0.018) | 0.025 | 0.043 | 0.0960 |
| 43 | 0 | 0.009 | 0.011 | (0.015) | 0.008 | (0.002) | 0.001 | 0.001 | (0.018) | (0.009) | 0.043 | 0.0290 |
| 44 | 0 | 0.009 | 0.011 | (0.003) | 0.008 | (0.002) | 0.001 | 0.001 | (0.018) | 0.025 | 0.043 | 0.0750 |
| 45 | 0 | 0.012 | 0.012 | 0.173 | 0.020 | 0.008 | 0.005 | 0.006 | 0.003 | (0.015) | 0.268 | 0.4920 |
| 46 | 0 | 0.017 | 0.012 | (0.027) | 0.022 | 0.008 | 0.009 | 0.007 | (0.023) | 0.003 | (0.003) | 0.0250 |
| 47 | 0 | 0.021 | 0.012 | (0.015) | 0.025 | 0.008 | 0.009 | 0.008 | (0.054) | 0.003 | (0.003) | 0.0140 |
| 48 | 0 | 0.021 | 0.012 | 0.018 | 0.025 | 0.008 | 0.010 | 0.011 | (0.038) | 0.030 | (0.001) | 0.0960 |
| 49 | 0 | 0.023 | 0.012 | 0.015 | 0.029 | 0.008 | 0.011 | 0.013 | (0.028) | (0.032) | (0.003) | 0.0480 |
| 50 | 0 | 0.016 | 0.012 | 0.043 | 0.022 | 0.008 | 0.008 | 0.006 | 0.003 | 0.004 | (0.014) | 0.1080 |
| 51 | 0 | 0.014 | 0.012 | 0.002 | 0.020 | 0.008 | 0.007 | 0.006 | 0.094 | (0.086) | 0.056 | 0.1330 |
| 52 | 0 | 0.012 | 0.012 | (0.031) | 0.014 | 0.005 | 0.003 | 0.006 | (0.028) | 0.025 | 0.024 | 0.0420 |
| 53 | 1 | 0.060 | 0.057 | 0.015 | 0.094 | 0.059 | 0.053 | 0.049 | 0.058 | (0.041) | 0.023 | 0.4270 |
| 54 | 0 | 0.012 | 0.012 | (0.015) | 0.010 | 0.003 | 0.001 | 0.002 | (0.009) | (0.025) | 0.003 | (0.0006) |
| 55 | 0 | 0.012 | 0.012 | (0.037) | 0.019 | 0.008 | 0.004 | 0.006 | 0.017 | 0.000 | (0.013) | 0.0280 |
| 56 | 1 | 0.037 | 0.032 | 0.057 | 0.048 | 0.018 | 0.023 | 0.022 | (0.018) | 0.005 | (0.036) | 0.1880 |
| 57 | 0 | (0.022) | (0.027) | 0.211 | (0.021) | (0.028) | (0.028) | (0.023) | (0.018) | 0.025 | (0.054) | 0.0150 |
| 58 | 1 | 0.081 | 0.083 | 0.034 | 0.121 | 0.085 | 0.092 | 0.088 | 0.006 | 0.003 | (0.003) | 0.5900 |
| 59 | 1 | 0.059 | 0.053 | 0.018 | 0.090 | 0.057 | 0.048 | 0.035 | (0.003) | (0.025) | 0.067 | 0.3990 |
| 60 | 0 | (0.004) | (0.011) | 0.020 | (0.009) | (0.012) | (0.009) | (0.018) | 0.025 | (0.027) | 0.014 | (0.0031) |
| 61 | 1 | 0.058 | 0.053 | (0.015) | 0.083 | 0.048 | 0.045 | 0.033 | (0.034) | 0.009 | 0.011 | 0.2910 |
| 62 | 1 | 0.056 | 0.052 | (0.027) | 0.077 | 0.046 | 0.044 | 0.033 | (0.099) | 0.062 | 0.053 | 0.2970 |
| 63 | 1 | 0.054 | 0.048 | 0.043 | 0.076 | 0.044 | 0.036 | 0.032 | 0.015 | 0.008 | 0.001 | 0.3570 |
| 64 | 1 | 0.049 | 0.042 | 0.025 | 0.061 | 0.036 | 0.033 | 0.031 | (0.018) | (0.004) | 0.013 | 0.2680 |
| 65 | 1 | 0.042 | 0.032 | 0.251 | 0.055 | 0.020 | 0.028 | 0.023 | (0.018) | 0.004 | (0.001) | 0.4360 |
| 66 | 1 | 0.048 | 0.036 | 0.173 | 0.061 | 0.036 | 0.031 | 0.030 | (0.019) | 0.003 | (0.003) | 0.3960 |
| 67 | 1 | 0.047 | 0.036 | (0.037) | 0.060 | 0.035 | 0.031 | 0.028 | (0.018) | (0.014) | 0.084 | 0.2520 |
| 68 | 0 | (0.034) | (0.048) | 0.007 | (0.033) | (0.041) | (0.036) | (0.034) | (0.027) | 0.025 | (0.012) | (0.2330) |
| 69 | 1 | 0.045 | 0.033 | 0.015 | 0.057 | 0.031 | 0.031 | 0.027 | 0.033 | 0.001 | (0.007) | 0.2660 |
| 70 | 1 | 0.042 | 0.032 | (0.058) | 0.056 | 0.028 | 0.030 | 0.023 | (0.016) | 0.003 | (0.003) | 0.1370 |
| 71 | 0 | (0.033) | (0.048) | (0.011) | (0.030) | (0.038) | (0.032) | (0.031) | (0.001) | (0.066) | 0.008 | (0.2820) |
| 72 | 0 | (0.003) | (0.011) | 0.132 | (0.009) | (0.011) | (0.008) | (0.018) | 0.006 | (0.047) | 0.011 | 0.0420 |
| 73 | 0 | (0.031) | (0.037) | 0.000 | (0.028) | (0.033) | (0.032) | (0.031) | (0.001) | (0.066) | 0.008 | (0.2510) |

| | | | | | | | | | | | | | |
|-----|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|
| 74 | 1 | 0.049 | 0.047 | 0.002 | 0.074 | 0.036 | 0.033 | 0.032 | 0.084 | (0.045) | 0.011 | 0.0323 | 0.3230 |
| 75 | 1 | 0.067 | 0.067 | (0.005) | 0.103 | 0.067 | 0.067 | 0.059 | 0.006 | (0.015) | (0.003) | 0.0413 | 0.4130 |
| 76 | 1 | 0.066 | 0.066 | (0.033) | 0.101 | 0.067 | 0.059 | 0.051 | (0.028) | 0.03 | (0.110) | 0.0242 | 0.2420 |
| 77 | 1 | 0.166 | 0.159 | 0.031 | 0.208 | 0.154 | 0.159 | 0.138 | 0.006 | (0.024) | (0.032) | 0.0965 | 0.9650 |
| 78 | 0 | (0.034) | (0.054) | (0.011) | (0.033) | (0.042) | (0.036) | (0.035) | (0.018) | 0.003 | (0.016) | (0.0276) | (0.2760) |
| 79 | 0 | (0.026) | (0.037) | (0.011) | (0.028) | (0.032) | (0.031) | (0.030) | (0.034) | (0.041) | 0.006 | (0.0264) | (0.2640) |
| 80 | 0 | (0.024) | (0.032) | (0.016) | (0.027) | (0.032) | (0.030) | (0.030) | 0.006 | 0.003 | 0.004 | (0.0172) | (0.1720) |
| 81 | 0 | (0.023) | (0.032) | 0.029 | (0.026) | (0.032) | (0.030) | (0.028) | (0.032) | (0.003) | 0.040 | (0.0137) | (0.1370) |
| 82 | 0 | (0.023) | (0.032) | (0.011) | (0.025) | (0.030) | (0.029) | (0.026) | (0.018) | 0.007 | (0.023) | (0.0210) | (0.2100) |
| 83 | 0 | (0.022) | (0.030) | 0.001 | (0.025) | (0.030) | (0.029) | (0.023) | 0.006 | (0.014) | 0.015 | (0.0151) | (0.1510) |
| 84 | 0 | (0.024) | (0.036) | (0.002) | (0.027) | (0.032) | (0.031) | (0.030) | 0.004 | 0.003 | (0.001) | (0.0176) | (0.1760) |
| 85 | 0 | (0.034) | (0.055) | 0.033 | (0.034) | (0.044) | (0.041) | (0.037) | 0.000 | 0.061 | 0.015 | (0.0136) | (0.1360) |
| 86 | 0 | (0.050) | (0.076) | 0.036 | (0.051) | (0.063) | (0.048) | (0.073) | (0.047) | 0.031 | (0.030) | (0.0371) | (0.3710) |
| 87 | 0 | (0.034) | (0.058) | (0.011) | (0.035) | (0.044) | (0.042) | (0.037) | 0.000 | 0.061 | 0.015 | (0.0185) | (0.1850) |
| 88 | 1 | 0.333 | 0.289 | (0.030) | 0.406 | 0.224 | 0.351 | 0.241 | (0.009) | 0.049 | 0.026 | 0.1880 | 1.8800 |
| 89 | 0 | (0.071) | (0.135) | (0.018) | (0.061) | (0.082) | (0.142) | (0.149) | 0.061 | 0.04 | (0.031) | (0.0624) | (0.6240) |
| 90 | 1 | 0.290 | 0.282 | 0.057 | 0.339 | 0.208 | 0.351 | 0.191 | (0.170) | (0.068) | (0.003) | 0.1477 | 1.4770 |
| 91 | 0 | (0.065) | (0.122) | (0.011) | (0.061) | (0.072) | (0.085) | (0.103) | (0.037) | (0.042) | (0.051) | (0.0649) | (0.6490) |
| 92 | 0 | (0.058) | (0.102) | (0.011) | (0.058) | (0.072) | (0.072) | (0.103) | (0.018) | (0.068) | (0.213) | (0.0775) | (0.7750) |
| 93 | 0 | (0.056) | (0.088) | (0.011) | (0.057) | (0.069) | (0.069) | (0.087) | 0.111 | 0.006 | (0.044) | (0.0364) | (0.3640) |
| 94 | 0 | (0.072) | (0.158) | (0.047) | (0.066) | (0.085) | (0.193) | (0.173) | (0.123) | (0.092) | (0.023) | (0.1032) | (1.0320) |
| 95 | 0 | (0.055) | (0.076) | (0.102) | (0.057) | (0.069) | (0.048) | (0.087) | 0.111 | 0.006 | (0.044) | (0.0421) | (0.4210) |
| 96 | 1 | 0.268 | 0.282 | 0.019 | 0.251 | 0.194 | 0.185 | 0.184 | (0.051) | 0.019 | (0.018) | 0.1333 | 1.3330 |
| 97 | 0 | (0.044) | (0.072) | 0.010 | (0.047) | (0.050) | (0.048) | (0.054) | 0.003 | (0.003) | (0.002) | (0.0307) | (0.3070) |
| 98 | 1 | 0.268 | 0.268 | 0.025 | 0.208 | 0.160 | 0.184 | 0.148 | (0.056) | 0.026 | 0.019 | 0.1250 | 1.2500 |
| 99 | 1 | 0.152 | 0.159 | (0.011) | 0.171 | 0.137 | 0.149 | 0.115 | 0.202 | (0.011) | (0.030) | 0.1033 | 1.0330 |
| 100 | 0 | (0.043) | (0.071) | (0.011) | (0.047) | (0.048) | (0.048) | (0.051) | 0.019 | (0.018) | (0.019) | (0.0337) | (0.3370) |
| 101 | 1 | 0.132 | 0.151 | 0.104 | 0.165 | 0.124 | 0.138 | 0.115 | 0.202 | (0.011) | (0.030) | 0.1090 | 1.0900 |
| 102 | 0 | (0.038) | (0.062) | (0.011) | (0.047) | (0.048) | (0.042) | (0.042) | 0.027 | (0.018) | (0.002) | (0.0283) | (0.2830) |
| 103 | 0 | (0.037) | (0.062) | (0.011) | (0.041) | (0.047) | (0.042) | (0.042) | 0.027 | (0.018) | (0.002) | (0.0275) | (0.2750) |
| 104 | 0 | (0.022) | (0.027) | (0.011) | (0.023) | (0.030) | (0.029) | (0.023) | 0.006 | 0.003 | (0.003) | (0.0159) | (0.1590) |
| 105 | 1 | 0.117 | 0.151 | 0.103 | 0.160 | 0.119 | 0.117 | 0.112 | (0.118) | (0.086) | 0.043 | 0.0718 | 0.7180 |
| 106 | 0 | (0.034) | (0.055) | 0.057 | (0.034) | (0.044) | (0.038) | (0.036) | (0.031) | (0.001) | 0.003 | (0.0213) | (0.2130) |
| 107 | 0 | (0.022) | (0.027) | (0.011) | (0.021) | (0.030) | (0.028) | (0.023) | (0.018) | 0.025 | (0.054) | (0.0209) | (0.2090) |
| 108 | 1 | 0.094 | 0.089 | (0.011) | 0.154 | 0.101 | 0.097 | 0.097 | (0.030) | (0.034) | (0.041) | 0.0516 | 0.5160 |
| 109 | 1 | 0.086 | 0.083 | (0.011) | 0.132 | 0.094 | 0.092 | 0.092 | (0.018) | 0.025 | (0.040) | 0.0535 | 0.5350 |
| 110 | 0 | (0.013) | (0.018) | 0.015 | (0.011) | (0.020) | (0.017) | (0.018) | (0.010) | 0.000 | (0.013) | (0.0105) | (0.1050) |
| 111 | 0 | (0.012) | (0.015) | 0.011 | (0.011) | (0.017) | (0.016) | (0.018) | (0.009) | 0.007 | (0.009) | (0.0089) | (0.0890) |
| 112 | 0 | (0.011) | (0.015) | 0.017 | (0.011) | (0.016) | (0.016) | (0.018) | (0.004) | (0.001) | (0.004) | (0.0179) | (0.1790) |

| | | | | | | | | | | | | | |
|-----|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|
| 113 | 0 | (0.011) | (0.015) | 0.007 | (0.011) | (0.016) | (0.015) | (0.018) | 0.006 | (0.047) | 0.011 | (0.0109) | (0.1090) |
| 114 | 1 | 0.081 | 0.079 | 0.076 | 0.104 | 0.071 | 0.079 | 0.064 | 0.000 | (0.003) | 0.028 | 0.0579 | 0.5790 |
| 115 | 1 | 0.040 | 0.032 | (0.030) | 0.051 | 0.019 | 0.028 | 0.022 | (0.015) | 0.003 | (0.014) | 0.0136 | 0.1360 |
| 116 | 0 | (0.009) | (0.015) | 0.055 | (0.011) | (0.016) | (0.015) | (0.018) | 0.025 | 0.008 | (0.085) | (0.0081) | (0.0810) |
| 117 | 0 | (0.013) | (0.018) | 0.020 | (0.011) | (0.019) | (0.016) | (0.018) | 0.025 | (0.057) | (0.027) | (0.0134) | (0.1340) |
| 118 | 1 | 0.027 | 0.019 | (0.011) | 0.034 | 0.013 | 0.017 | 0.015 | 0.035 | (0.003) | (0.002) | 0.0144 | 0.1440 |
| 119 | 0 | (0.009) | (0.015) | 0.083 | (0.011) | (0.014) | (0.015) | (0.018) | 0.001 | (0.020) | (0.004) | (0.0022) | (0.0220) |
| 120 | 1 | 0.032 | 0.026 | 0.031 | 0.040 | 0.015 | 0.019 | 0.021 | 0.004 | (0.012) | 0.008 | 0.0184 | 0.1840 |
| 121 | 0 | (0.007) | (0.015) | 0.171 | (0.011) | (0.013) | (0.013) | (0.018) | (0.010) | 0.000 | (0.013) | 0.0071 | 0.0710 |
| 122 | 0 | (0.007) | (0.013) | (0.017) | (0.011) | (0.013) | (0.012) | (0.018) | (0.023) | 0.003 | (0.005) | (0.0116) | (0.1160) |
| 123 | 0 | (0.004) | (0.013) | 0.074 | (0.011) | (0.013) | (0.011) | (0.018) | 0.011 | 0.009 | (0.024) | (0.0000) | (0.0000) |
| 124 | 0 | (0.004) | (0.013) | 0.025 | (0.010) | (0.013) | (0.011) | (0.018) | (0.004) | (0.061) | (0.044) | (0.0153) | (0.1530) |
| 125 | 0 | (0.009) | (0.015) | 0.051 | (0.011) | (0.014) | (0.013) | (0.018) | (0.014) | (0.034) | (0.011) | (0.0088) | (0.0880) |
| 126 | 0 | (0.014) | (0.019) | 0.022 | (0.011) | (0.020) | (0.017) | (0.018) | (0.023) | 0.003 | (0.005) | (0.0102) | (0.1020) |
| 127 | 0 | (0.018) | (0.023) | (0.011) | (0.017) | (0.025) | (0.020) | (0.018) | 0.006 | 0.009 | (0.008) | (0.0125) | (0.1250) |
| 128 | 0 | (0.015) | (0.021) | (0.017) | (0.011) | (0.021) | (0.018) | (0.018) | 0.025 | (0.057) | (0.027) | (0.0180) | (0.1800) |
| 129 | 0 | (0.022) | (0.026) | (0.011) | (0.020) | (0.028) | (0.026) | (0.023) | 0.006 | 0.094 | (0.086) | (0.0142) | (0.1420) |
| 130 | 0 | (0.019) | (0.024) | 0.040 | (0.017) | (0.027) | (0.023) | (0.023) | 0.003 | (0.003) | 0.117 | 0.0024 | 0.0240 |
| 131 | 1 | 0.031 | 0.022 | 0.103 | 0.036 | 0.014 | 0.018 | 0.019 | (0.007) | 0.008 | (0.021) | 0.0223 | 0.2230 |
| 132 | 0 | (0.019) | (0.024) | (0.011) | (0.017) | (0.027) | (0.023) | (0.023) | 0.006 | (0.026) | (0.003) | (0.0167) | (0.1670) |
| 133 | 0 | (0.018) | (0.024) | 0.147 | (0.017) | (0.026) | (0.023) | (0.020) | 0.006 | 0.017 | 0.000 | 0.0042 | 0.0420 |
| 134 | 0 | (0.022) | (0.026) | 0.013 | (0.020) | (0.028) | (0.026) | (0.023) | (0.018) | 0.025 | (0.030) | (0.0155) | (0.1550) |
| 135 | 0 | (0.018) | (0.024) | (0.011) | (0.017) | (0.026) | (0.021) | (0.019) | 0.003 | (0.003) | (0.009) | (0.0145) | (0.1450) |
| 136 | 1 | 0.026 | 0.016 | 0.076 | 0.031 | 0.011 | 0.013 | 0.015 | (0.018) | (0.002) | 0.024 | 0.0192 | 0.1920 |
| 137 | 0 | (0.016) | (0.021) | (0.011) | (0.017) | (0.024) | (0.020) | (0.018) | (0.014) | (0.034) | (0.011) | (0.0186) | (0.1860) |
| 138 | 0 | (0.016) | (0.021) | (0.011) | (0.017) | (0.021) | (0.019) | (0.018) | 0.007 | 0.029 | (0.030) | (0.0117) | (0.1170) |
| 139 | 0 | (0.015) | (0.021) | (0.011) | (0.016) | (0.021) | (0.019) | (0.018) | 0.025 | (0.027) | 0.014 | (0.0109) | (0.1090) |
| 140 | 0 | (0.015) | (0.021) | (0.007) | (0.013) | (0.021) | (0.018) | (0.018) | 0.007 | 0.029 | (0.030) | (0.0107) | (0.1070) |
| 141 | 1 | 0.032 | 0.024 | 0.104 | 0.038 | 0.014 | 0.018 | 0.019 | (0.007) | 0.008 | (0.021) | 0.0229 | 0.2290 |
| 142 | 1 | 0.027 | 0.018 | 0.034 | 0.031 | 0.011 | 0.015 | 0.015 | (0.018) | (0.002) | 0.024 | 0.0155 | 0.1550 |
| 143 | 1 | 0.027 | 0.022 | (0.011) | 0.035 | 0.014 | 0.017 | 0.017 | (0.013) | (0.016) | 0.037 | 0.0129 | 0.1290 |
| 144 | 1 | 0.444 | 0.289 | 0.251 | 0.421 | 0.637 | 0.435 | 0.464 | (0.030) | (0.110) | 0.040 | 0.2841 | 2.8410 |

Appendix 7

**T-TEST of THE DIFFERENCE between
ABNORMAL
RETURN AND CUMULATIVE
ABNORMAL RETURN**



Summarize: T-Test

Case Processing Summary

| | Cases | | | | | |
|---------------------------------|----------|---------|----------|---------|-------|---------|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| AR Abnormal Return | 144 | 100.0% | 0 | .0% | 144 | 100.0% |
| CAR Cummulative Abnormal Return | 144 | 100.0% | 0 | .0% | 144 | 100.0% |
| IS Income Smoothing | 144 | 100.0% | 0 | .0% | 144 | 100.0% |

Case Summaries

| | AR Abnormal Return | CAR Cummulative Abnormal Return | IS Income Smoothing |
|----|--------------------|---------------------------------|---------------------|
| 1 | -.1174 | -1.1740 | 0 |
| 2 | .0068 | .0680 | 0 |
| 3 | .0031 | .0310 | 0 |
| 4 | .0103 | .1030 | 0 |
| 5 | .0196 | .1960 | 0 |
| 6 | -.0145 | -.1450 | 0 |
| 7 | .0105 | .1050 | 0 |
| 8 | .0057 | .0570 | 0 |
| 9 | .0149 | .1490 | 1 |
| 10 | .0116 | .1160 | 0 |
| 11 | .0038 | .0380 | 0 |
| 12 | .0152 | .1520 | 1 |
| 13 | .0157 | .1570 | 0 |
| 14 | -.0045 | -.0450 | 0 |
| 15 | -.0043 | -.0430 | 0 |
| 16 | -.0061 | -.0610 | 0 |
| 17 | -.0065 | -.0650 | 0 |
| 18 | .0139 | .1390 | 1 |

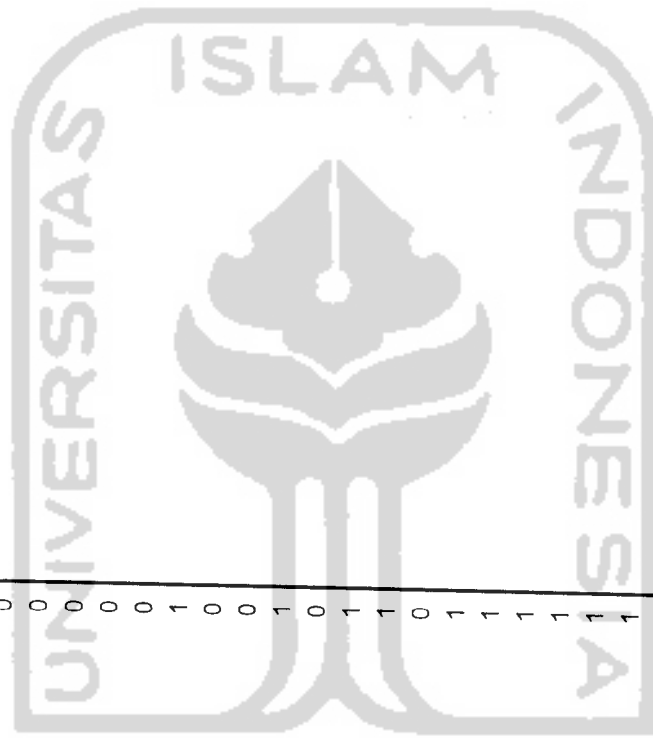
Case Summaries

| | AR Abnormal Return | CAR Cumulative Abnormal Return | IS Income Smoothing |
|----|--------------------|--------------------------------|---------------------|
| 19 | -.0143 | -.1430 | 0 |
| 20 | -.0051 | -.0510 | 0 |
| 21 | .0013 | .0130 | 0 |
| 22 | .0111 | .1110 | 0 |
| 23 | -.0061 | -.0610 | 0 |
| 24 | -.0022 | -.0220 | 0 |
| 25 | .0267 | .2670 | 0 |
| 26 | -.0033 | -.0330 | 0 |
| 27 | .0289 | .2890 | 0 |
| 28 | -.0089 | -.0890 | 0 |
| 29 | -.0009 | -.0090 | 0 |
| 30 | -.0136 | -.1360 | 0 |
| 31 | .0036 | .0360 | 0 |
| 32 | -.0047 | -.0470 | 0 |
| 33 | -.0063 | -.0630 | 0 |
| 34 | .0047 | .0470 | 0 |
| 35 | -.0109 | -.1090 | 0 |
| 36 | -.0018 | -.0180 | 0 |
| 37 | -.0048 | -.0480 | 0 |
| 38 | .0451 | .4510 | 0 |
| 39 | .0054 | .0540 | 0 |
| 40 | -.0034 | -.0340 | 0 |
| 41 | .0026 | .0260 | 0 |
| 42 | .0096 | .0960 | 0 |
| 43 | .0029 | .0290 | 0 |
| 44 | .0075 | .0750 | 0 |
| 45 | .0492 | .4920 | 0 |
| 46 | .0025 | .0250 | 0 |
| 47 | .0014 | .0140 | 0 |
| 48 | .0096 | .0960 | 0 |



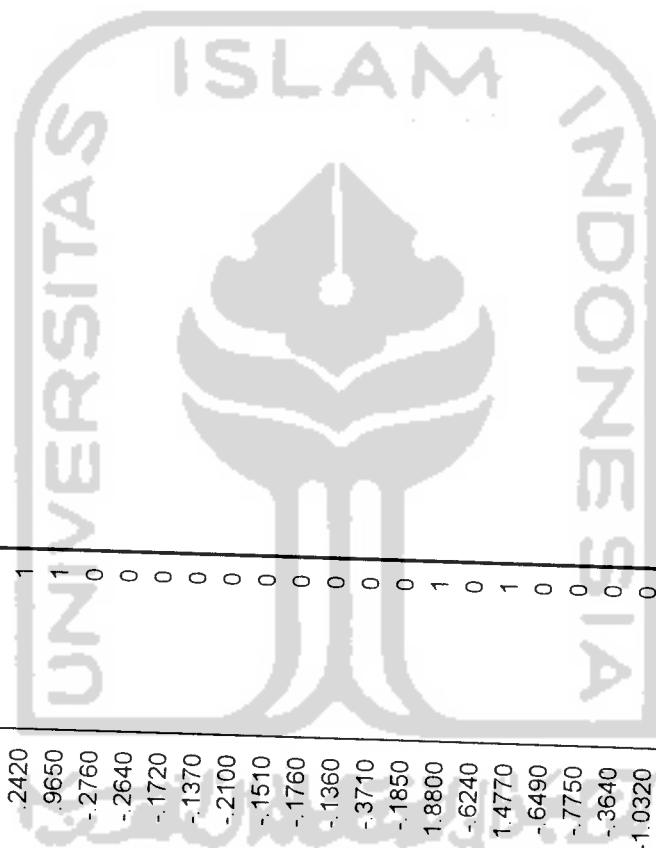
Case Summaries

| | AR Abnormal Return | CAR Cumulative Abnormal Return | IS Income Smoothing |
|----|--------------------|--------------------------------|---------------------|
| 45 | .0492 | .4920 | 0 |
| 46 | .0025 | .0250 | 0 |
| 47 | .0014 | .0140 | 0 |
| 48 | .0096 | .0960 | 0 |
| 49 | .0048 | .0480 | 0 |
| 50 | .0108 | .1080 | 0 |
| 51 | .0133 | .1330 | 0 |
| 52 | .0042 | .0420 | 0 |
| 53 | .0427 | .4270 | 1 |
| 54 | -.0006 | -.0060 | 0 |
| 55 | .0028 | .0280 | 0 |
| 56 | .0188 | .1880 | 1 |
| 57 | .0015 | .0150 | 0 |
| 58 | .0590 | .5900 | 1 |
| 59 | .0399 | .3990 | 1 |
| 60 | -.0031 | -.0310 | 0 |
| 61 | .0291 | .2910 | 1 |
| 62 | .0297 | .2970 | 1 |
| 63 | .0357 | .3570 | 1 |
| 64 | .0268 | .2680 | 1 |
| 65 | .0436 | .4360 | 1 |
| 66 | .0396 | .3960 | 1 |
| 67 | .0252 | .2520 | 1 |
| 68 | -.0233 | -.2330 | 0 |
| 69 | .0266 | .2660 | 1 |
| 70 | .0137 | .1370 | 1 |
| 71 | -.0282 | -.2820 | 0 |
| 72 | .0042 | .0420 | 0 |



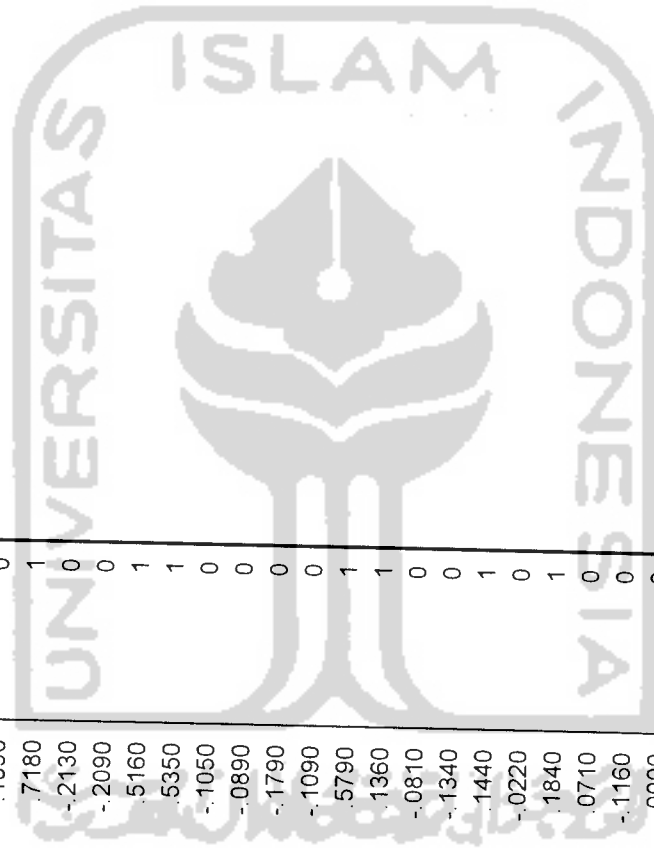
Case Summaries

| | AR Abnormal Return | CAR Cumulative Abnormal Return | IS Income Smoothing |
|-----|--------------------|--------------------------------|---------------------|
| 73 | -.0251 | -.2510 | 0 |
| 74 | .0323 | .3230 | 1 |
| 75 | .0413 | .4130 | 1 |
| 76 | .0242 | .2420 | 1 |
| 77 | .0965 | .9650 | 1 |
| 78 | -.0276 | -.2760 | 0 |
| 79 | -.0264 | -.2640 | 0 |
| 80 | -.0172 | -.1720 | 0 |
| 81 | -.0137 | -.1370 | 0 |
| 82 | -.0210 | -.2100 | 0 |
| 83 | -.0151 | -.1510 | 0 |
| 84 | -.0176 | -.1760 | 0 |
| 85 | -.0136 | -.1360 | 0 |
| 86 | -.0371 | -.3710 | 0 |
| 87 | -.0185 | -.1850 | 0 |
| 88 | .1880 | 1.8800 | 1 |
| 89 | -.0624 | -.6240 | 0 |
| 90 | .1477 | 1.4770 | 1 |
| 91 | -.0649 | -.6490 | 0 |
| 92 | -.0775 | -.7750 | 0 |
| 93 | -.0364 | -.3640 | 0 |
| 94 | -.1032 | -1.0320 | 0 |
| 95 | -.0421 | -.4210 | 0 |
| 96 | .1333 | 1.3330 | 1 |
| 97 | -.0307 | -.3070 | 0 |
| 98 | .1250 | 1.2500 | 1 |
| 99 | .1033 | 1.0330 | 1 |
| 100 | -.0337 | -.3370 | 0 |



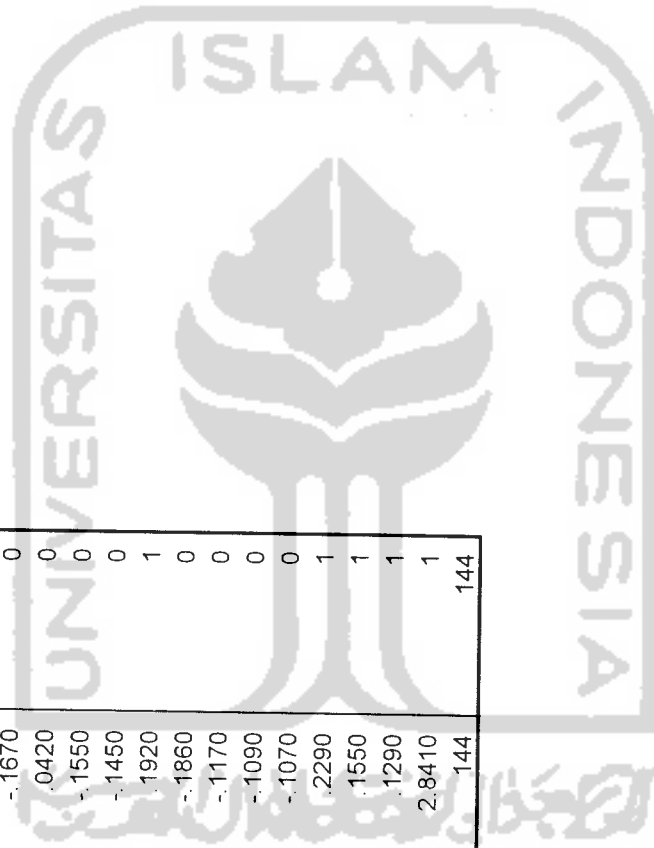
Case Summaries

| | AR Abnormal Return | CAR Cumulative Abnormal Return | IS Income Smoothing |
|-----|--------------------|--------------------------------|---------------------|
| 101 | .1090 | 1.0900 | 1 |
| 102 | -.0283 | -.2830 | 0 |
| 103 | -.0275 | -.2750 | 0 |
| 104 | -.0159 | -.1590 | 0 |
| 105 | .0718 | .7180 | 1 |
| 106 | -.0213 | -.2130 | 0 |
| 107 | -.0209 | -.2090 | 0 |
| 108 | .0516 | .5160 | 1 |
| 109 | .0535 | .5350 | 1 |
| 110 | -.0105 | -.1050 | 0 |
| 111 | -.0089 | -.0890 | 0 |
| 112 | -.0179 | -.1790 | 0 |
| 113 | -.0109 | -.1090 | 0 |
| 114 | .0579 | .5790 | 1 |
| 115 | .0136 | .1360 | 1 |
| 116 | -.0081 | -.0810 | 0 |
| 117 | -.0134 | -.1340 | 0 |
| 118 | .0144 | .1440 | 1 |
| 119 | -.0022 | -.0220 | 0 |
| 120 | .0184 | .1840 | 1 |
| 121 | .0071 | .0710 | 0 |
| 122 | -.0116 | -.1160 | 0 |
| 123 | .0000 | .0000 | 0 |
| 124 | -.0153 | -.1530 | 0 |
| 125 | -.0088 | -.0880 | 0 |
| 126 | -.0102 | -.1020 | 0 |
| 127 | -.0125 | -.1250 | 0 |
| 128 | -.0180 | -.1800 | 0 |



Case Summaries

| | AR Abnormal Return | CAR Cumulative Abnormal Return | IS Income Smoothing |
|-------|--------------------|--------------------------------|---------------------|
| 129 | -.0142 | -.1420 | 0 |
| 130 | .0024 | .0240 | 0 |
| 131 | .0223 | .2230 | 1 |
| 132 | -.0167 | -.1670 | 0 |
| 133 | .0042 | .0420 | 0 |
| 134 | -.0155 | -.1550 | 0 |
| 135 | -.0145 | -.1450 | 0 |
| 136 | .0192 | .1920 | 1 |
| 137 | -.0186 | -.1860 | 0 |
| 138 | -.0117 | -.1170 | 0 |
| 139 | -.0109 | -.1090 | 0 |
| 140 | -.0107 | -.1070 | 0 |
| 141 | .0229 | .2290 | 1 |
| 142 | .0155 | .1550 | 1 |
| 143 | .0129 | .1290 | 1 |
| 144 | .2841 | 2.8410 | 1 |
| Total | 144 | 144 | 144 |



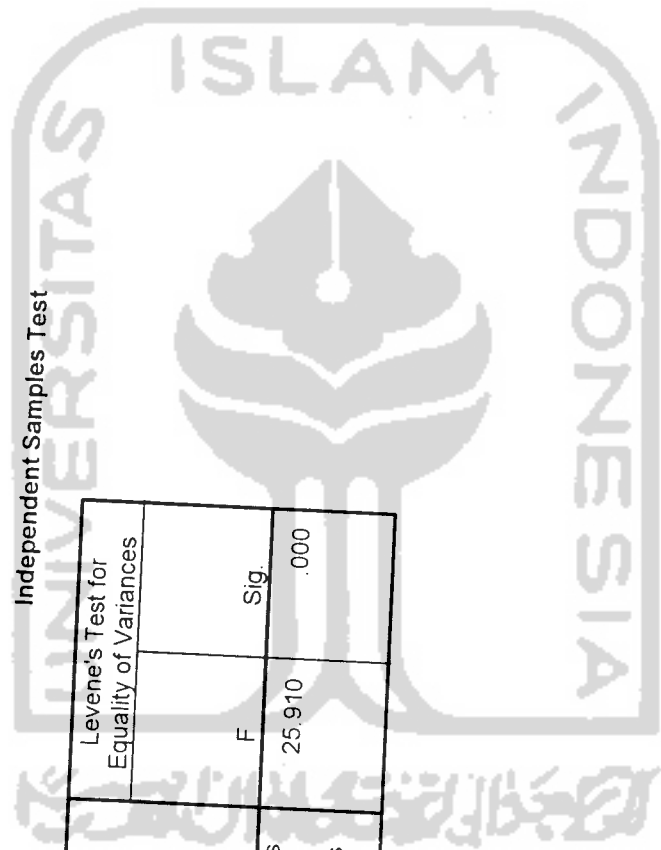
T-Test AR (Operating Profit)

Group Statistics

| IS Income Smoothing | N | Mean | Std. Deviation | Std. Error Mean |
|----------------------|-----|----------|----------------|-----------------|
| AR Abnormal Return 1 | 39 | .054695 | .0568869 | .0091092 |
| AR Abnormal Return 0 | 105 | -.009515 | .0232760 | .0022715 |

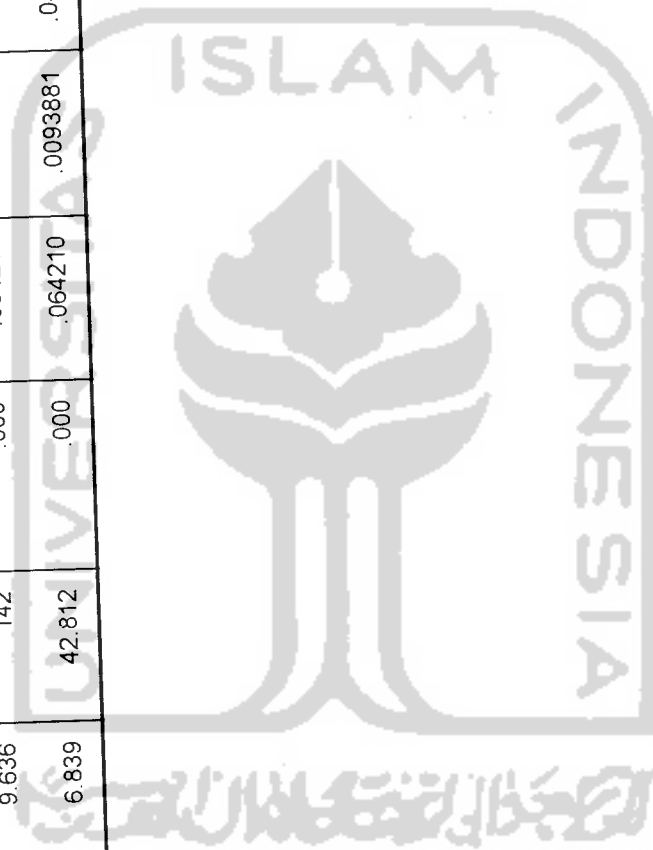
Independent Samples Test

| Levene's Test for Equality of Variances | | F | | Sig. | |
|---|-----------------------------|--------|------|------|--|
| AR Abnormal Return | Equal variances assumed | 25.910 | .000 | | |
| | Equal variances not assumed | | | | |



Independent Samples Test

| | | t-test for Equality of Means | | | | | | |
|--------------------|-----------------------------|------------------------------|--------|-----------------|-----------------|-----------------------|---|----------|
| | | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | Lower | Upper |
| AR Abnormal Return | Equal variances assumed | 9.636 | 142 | .000 | .064210 | .0066638 | .0510371 | .0773832 |
| | Equal variances not assumed | 6.839 | 42.812 | .000 | .064210 | .0093881 | .0452747 | .0831455 |



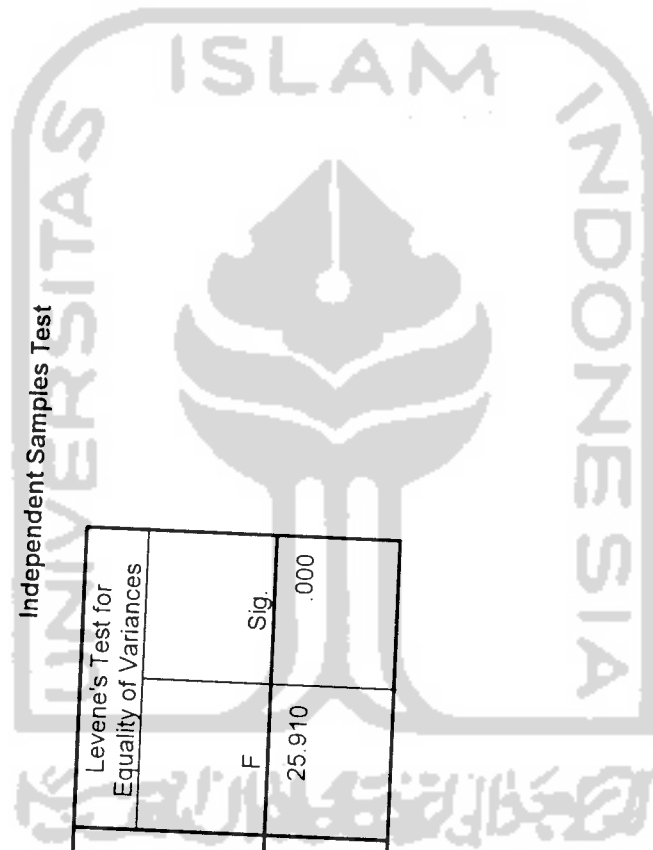
T-Test

Group Statistics

| | IS Income Smoothing | N | Mean | Std. Deviation | Std. Error Mean |
|--------------------------------|---------------------|-----|----------|----------------|-----------------|
| CAR Cumulative Abnormal Return | 1 | 39 | .546949 | .5688689 | .0910919 |
| | 0 | 105 | -.095152 | .2327605 | .0227151 |

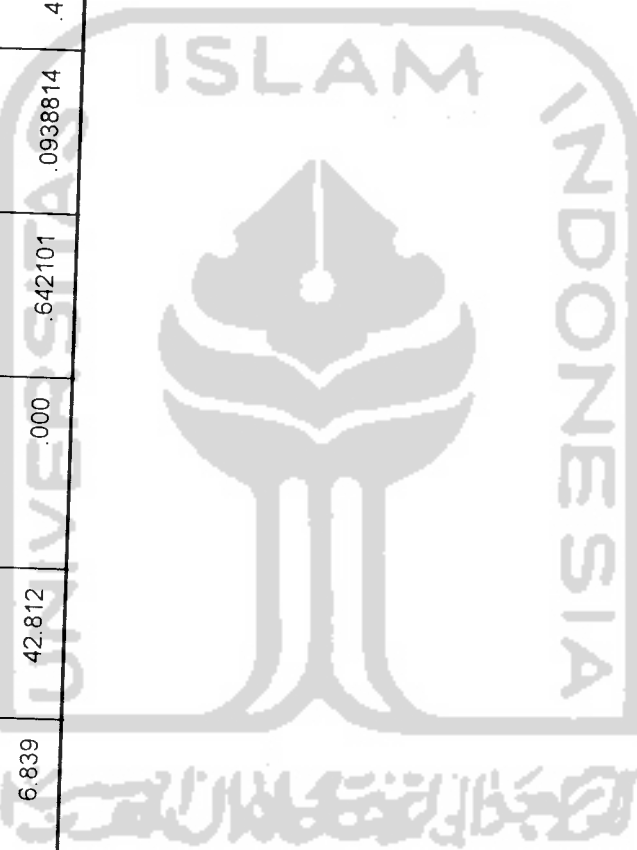
Independent Samples Test

| | Levene's Test for Equality of Variances | | F | Sig. |
|--------------------------------|---|--|--------|------|
| | | | | |
| CAR Cumulative Abnormal Return | Equal variances assumed | | 25.910 | .000 |
| | Equal variances not assumed | | | |



Independent Samples Test

| | | t-test for Equality of Means | | | | | | |
|---------------------------------|-----------------------------|------------------------------|--------|-----------------|-----------------|-----------------------|---|----------|
| | | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | Lower | Upper |
| CAR Cummulative Abnormal Return | Equal variances assumed | 9.636 | 142 | .000 | .642101 | .0666378 | .5103707 | .7738315 |
| | Equal variances not assumed | 6.839 | 42.812 | .000 | .642101 | .0938814 | .4527472 | .8314550 |



Appendix 8

REGRESSION ANALYSIS



Summarize - Data Analysis Regression

Case Processing Summary

| | Cases | | | | | |
|------|----------|---------|----------|---------|-------|---------|
| | Included | | Excluded | | Total | |
| | N | Percent | N | Percent | N | Percent |
| CAR | 144 | 100.0% | 0 | .0% | 144 | 100.0% |
| IS | 144 | 100.0% | 0 | .0% | 144 | 100.0% |
| Size | 144 | 100.0% | 0 | .0% | 144 | 100.0% |

Case Summaries

| | CAR | IS | Size |
|----|---------|----|------------|
| 1 | -.11740 | 0 | 55,135.00 |
| 2 | .00680 | 0 | 78,360.54 |
| 3 | .00310 | 0 | -47,693.69 |
| 4 | .01030 | 0 | 64,087.50 |
| 5 | .01960 | 0 | 114,304.88 |
| 6 | -.01450 | 0 | 223,507.85 |
| 7 | .01050 | 0 | 264,414.76 |
| 8 | .00570 | 0 | 256,560.63 |
| 9 | .01490 | 1 | 271,614.38 |
| 10 | .01160 | 0 | 266,214.66 |
| 11 | .00380 | 0 | 253,451.71 |
| 12 | .01520 | 1 | 172,105.26 |
| 13 | .01570 | 0 | 270,923.40 |
| 14 | -.00450 | 0 | 239,870.61 |
| 15 | -.00430 | 0 | 140,197.87 |
| 16 | -.00610 | 0 | 237,252.57 |
| 17 | -.00650 | 0 | 236,598.06 |
| 18 | .01390 | 1 | 269,978.10 |
| 19 | -.01430 | 0 | 123,835.10 |
| 20 | -.00510 | 0 | 238,888.85 |
| 21 | .00130 | 0 | 249,361.02 |
| 22 | .01110 | 0 | 265,396.53 |
| 23 | -.00610 | 0 | 117,252.57 |
| 24 | -.00220 | 0 | 123,634.05 |
| 25 | .02670 | 0 | 90,922.44 |
| 26 | -.00330 | 0 | 41,834.14 |
| 27 | .02890 | 0 | 94,522.25 |
| 28 | -.00890 | 0 | 232,671.00 |
| 29 | -.00090 | 0 | 245,761.21 |
| 30 | -.01360 | 0 | 224,980.50 |
| 31 | .00360 | 0 | 253,124.45 |
| 32 | -.00470 | 0 | 239,543.36 |
| 33 | -.00630 | 0 | 236,925.32 |
| 34 | .00470 | 0 | 254,924.36 |
| 35 | -.01090 | 0 | 229,398.44 |
| 36 | -.00180 | 0 | 244,288.56 |
| 37 | -.00480 | 0 | 239,379.73 |

Case Summaries

| | CAR | IS | Size |
|----|---------|----|------------|
| 38 | .04510 | 0 | 321,029.93 |
| 39 | .00540 | 0 | 256,069.75 |
| 40 | -.00340 | 0 | 241,670.52 |
| 41 | .00260 | 0 | 251,488.18 |
| 42 | .00960 | 0 | 262,942.11 |
| 43 | .00290 | 0 | 251,979.06 |
| 44 | .00750 | 0 | 259,505.93 |
| 45 | .04920 | 0 | 327,738.66 |
| 46 | .00250 | 0 | 251,324.55 |
| 47 | .00140 | 0 | 249,524.64 |
| 48 | .00960 | 0 | 262,942.11 |
| 49 | .00480 | 0 | 255,087.98 |
| 50 | .01080 | 0 | 264,905.64 |
| 51 | .01330 | 0 | 268,996.33 |
| 52 | .00420 | 0 | 254,106.22 |
| 53 | .04270 | 1 | 317,102.86 |
| 54 | -.00060 | 0 | 246,252.09 |
| 55 | .00280 | 0 | 251,815.43 |
| 56 | .01880 | 1 | 277,995.85 |
| 57 | .00150 | 0 | 249,688.27 |
| 58 | .05900 | 1 | 343,774.17 |
| 59 | .03990 | 1 | 312,521.29 |
| 60 | -.00310 | 0 | 242,161.40 |
| 61 | .02910 | 1 | 294,849.50 |
| 62 | .02970 | 1 | 295,831.27 |
| 63 | .03570 | 1 | 305,648.93 |
| 64 | .02680 | 1 | 291,086.07 |
| 65 | .04360 | 1 | 318,575.51 |
| 66 | .03960 | 1 | 312,030.40 |
| 67 | .02520 | 1 | 288,468.02 |
| 68 | -.02330 | 0 | 209,108.62 |
| 69 | .02660 | 1 | 290,758.81 |
| 70 | .01370 | 1 | 269,650.84 |
| 71 | -.02820 | 0 | 201,090.86 |
| 72 | .00420 | 0 | 254,106.22 |
| 73 | -.02510 | 0 | 206,163.32 |
| 74 | .03230 | 1 | 300,085.59 |
| 75 | .04130 | 1 | 314,812.07 |
| 76 | .02420 | 1 | 286,831.75 |
| 77 | .09650 | 1 | 405,134.54 |
| 78 | -.02760 | 0 | 202,072.63 |
| 79 | -.02640 | 0 | 204,036.16 |
| 80 | -.01720 | 0 | 219,089.90 |
| 81 | -.01370 | 0 | 224,816.87 |
| 82 | -.02100 | 0 | 212,872.05 |
| 83 | -.01510 | 0 | 222,526.08 |
| 84 | -.01760 | 0 | 218,435.39 |
| 85 | -.01360 | 0 | 224,980.50 |
| 86 | -.03710 | 0 | 186,528.00 |

Case Summaries

| | CAR | IS | Size |
|-----|---------|----|------------|
| 87 | -.01850 | 0 | 216,962.74 |
| 88 | .18800 | 1 | 554,853.83 |
| 89 | -.06240 | 0 | 145,130.21 |
| 90 | .14770 | 1 | 488,911.89 |
| 91 | -.06490 | 0 | 141,039.51 |
| 92 | -.07750 | 0 | 120,422.43 |
| 93 | -.03640 | 0 | 187,673.39 |
| 94 | -.10320 | 0 | 78,370.13 |
| 95 | -.04210 | 0 | 178,346.62 |
| 96 | .13330 | 1 | 465,349.51 |
| 97 | -.03070 | 0 | 197,000.17 |
| 98 | .12500 | 1 | 451,768.41 |
| 99 | .10330 | 1 | 416,261.22 |
| 100 | -.03370 | 0 | 192,091.34 |
| 101 | .10900 | 1 | 425,587.99 |
| 102 | -.02830 | 0 | 200,927.23 |
| 103 | -.02750 | 0 | 202,236.25 |
| 104 | -.01590 | 0 | 221,217.06 |
| 105 | .07180 | 1 | 364,718.51 |
| 106 | -.02130 | 0 | 212,381.17 |
| 107 | -.02090 | 0 | 213,035.68 |
| 108 | .05160 | 1 | 331,665.72 |
| 109 | .05350 | 1 | 334,774.65 |
| 110 | -.01050 | 0 | 230,052.95 |
| 111 | -.00890 | 0 | 232,671.00 |
| 112 | -.01790 | 0 | 217,944.51 |
| 113 | -.01090 | 0 | 229,398.44 |
| 114 | .05790 | 1 | 141,974.26 |
| 115 | .01360 | 1 | 119,487.22 |
| 116 | -.00810 | 0 | 233,980.02 |
| 117 | -.01340 | 0 | 225,307.75 |
| 118 | .01440 | 1 | 120,796.24 |
| 119 | -.00220 | 0 | 243,634.05 |
| 120 | .01840 | 1 | 277,341.34 |
| 121 | .00710 | 0 | 158,851.42 |
| 122 | -.01160 | 0 | 228,253.05 |
| 123 | .00000 | 0 | 247,233.86 |
| 124 | -.01530 | 0 | 222,198.83 |
| 125 | -.00880 | 0 | 232,834.62 |
| 126 | -.01020 | 0 | 130,543.84 |
| 127 | -.01250 | 0 | 226,780.40 |
| 128 | -.01800 | 0 | 217,780.88 |
| 129 | -.01420 | 0 | 223,998.73 |
| 130 | .00240 | 0 | 251,160.92 |
| 131 | .02230 | 1 | 283,722.82 |
| 132 | -.01670 | 0 | 219,908.04 |
| 133 | .00420 | 0 | 254,106.22 |
| 134 | -.01550 | 0 | 221,871.57 |
| 135 | -.01450 | 0 | 223,507.85 |

Case Summaries

| | CAR | IS | Size |
|---------|---------|-----|------------|
| 136 | .01920 | 1 | 278,650.36 |
| 137 | -.01860 | 0 | 116,799.11 |
| 138 | -.01170 | 0 | 128,089.42 |
| 139 | -.01090 | 0 | 229,398.44 |
| 140 | -.01070 | 0 | 229,725.70 |
| 141 | .02290 | 1 | 284,704.59 |
| 142 | .01550 | 1 | 272,596.14 |
| 143 | .01290 | 1 | 123,341.82 |
| 144 | .28410 | 1 | 712,100.00 |
| Total N | 144 | 144 | 144 |

Regression

Descriptive Statistics

| | Mean | Std. Deviation | N |
|------|--------------|----------------|-----|
| CAR | .0078750 | .04553974 | 144 |
| IS | .27 | .446 | 144 |
| Size | 239,063.9784 | 92,426.61584 | 144 |

Correlations

| | | CAR | IS | Size |
|---------------------|------|-------|-------|-------|
| Pearson Correlation | CAR | 1.000 | .629 | .795 |
| | IS | .629 | 1.000 | .520 |
| | Size | .795 | .520 | 1.000 |
| Sig. (1-tailed) | CAR | .000 | .000 | .000 |
| | IS | .000 | .000 | .000 |
| | Size | .000 | .000 | .000 |
| N | CAR | 144 | 144 | 144 |
| | IS | 144 | 144 | 144 |
| | Size | 144 | 144 | 144 |

Variables Entered/Removed^b

| Model | Variables Entered | Variables Removed | Method |
|-------|-----------------------|-------------------|--------|
| 1 | Size, IS ^a | | Enter |

a. All requested variables entered.

b. Dependent Variable: CAR

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .834 ^a | .695 | .691 | .02532599 |

Model Summary^b

| Model | Change Statistics | | | | | Durbin-Watson |
|-------|-------------------|----------|-----|-----|---------------|---------------|
| | R Square Change | F Change | df1 | df2 | Sig. F Change | |
| 1 | .695 | 160.682 | 2 | 141 | .000 | 2.290 |

a. Predictors: (Constant), Size, IS

b. Dependent Variable: CAR

ANOVA^b

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|---------|-------------------|
| 1 | Regression | .206 | 2 | .103 | 160.682 | .000 ^a |
| | Residual | .090 | 141 | .001 | | |
| | Total | .297 | 143 | | | |

a. Predictors: (Constant), Size, IS

b. Dependent Variable: CAR

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t |
|-------|------------|-----------------------------|------------|---------------------------|---------|
| | | B | Std. Error | Beta | |
| 1 | (Constant) | -.075785909 | .006 | | -12.326 |
| | IS | .030189977 | .006 | .296 | 5.430 |
| | Size | .000000316 | .000 | .641 | 11.772 |

Coefficients^a

| Model | Sig. | 95% Confidence Interval for B | |
|------------|------|-------------------------------|-------------|
| | | Lower Bound | Upper Bound |
| 1 | | | |
| (Constant) | .000 | -.088 | -.064 |
| IS | .000 | .019 | .041 |
| Size | .000 | .000 | .000 |



Coefficients^a

| Model | | Correlations | | | Collinearity Statistics | |
|-------|------------|--------------|---------|------|-------------------------|-------|
| | | Zero-order | Partial | Part | Tolerance | VIF |
| 1 | (Constant) | | | | | |
| | IS | .629 | .416 | .253 | .730 | 1.370 |
| | Size | .795 | .704 | .547 | .730 | 1.370 |

a. Dependent Variable: CAR

Coefficient Correlations^a

| Model | | Size | IS |
|-------|--------------|------|------------|
| 1 | Correlations | | |
| | | Size | 1.000 |
| | | IS | -.520 |
| | Covariances | | |
| | | Size | 7.195E-16 |
| | | IS | -7,752E-11 |
| | | | 3.091E-05 |

a. Dependent Variable: CAR

Collinearity Diagnostics^a

| Model | Dimension | Eigenvalue | Condition Index | Variance Proportions | | |
|-------|-----------|------------|-----------------|----------------------|-----|------|
| | | | | (Constant) | IS | Size |
| 1 | 1 | 2.415 | 1.000 | .02 | .06 | .02 |
| | 2 | .532 | 2.131 | .05 | .72 | .01 |
| | 3 | 5.355E-02 | 6.715 | .93 | .22 | .97 |

a. Dependent Variable: CAR

Casewise Diagnostics^a

| Case Number | Std. Residual | CAR |
|-------------|---------------|--------|
| 3 | 3.709 | .00310 |
| 144 | 4.140 | .28410 |

a. Dependent Variable: CAR

Residuals Statistics^a

| | Minimum | Maximum | Mean | Std. Deviation | N |
|----------------------|-----------|----------|----------|----------------|-----|
| Predicted Value | -.0908452 | .1792497 | .0078750 | .03796620 | 144 |
| Residual | -.0590230 | .1048503 | .0000000 | .02514827 | 144 |
| Std. Predicted Value | -2.600 | 4.514 | .000 | 1.000 | 144 |
| Std. Residual | -2.331 | 4.140 | .000 | .993 | 144 |

a. Dependent Variable: CAR

Nonparametric Correlations

Correlations

| | | ABS_RES | IS | Size | |
|----------------|---------|-------------------------|-------|-------|-------|
| Spearman's rho | ABS_RES | Correlation Coefficient | 1.000 | .363 | -.293 |
| | | Sig. (2-tailed) | . | .096 | .164 |
| | | N | 144 | 144 | 144 |
| IS | IS | Correlation Coefficient | .363 | 1.000 | .583 |
| | | Sig. (2-tailed) | .096 | . | .000 |
| | | N | 144 | 144 | 144 |
| Size | Size | Correlation Coefficient | -.293 | .583 | 1.000 |
| | | Sig. (2-tailed) | .164 | .000 | . |
| | | N | 144 | 144 | 144 |

