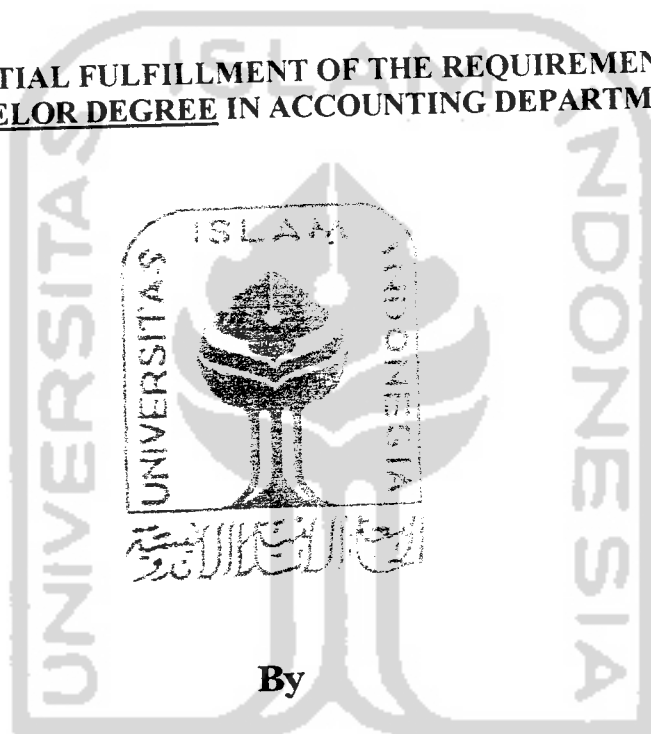


**The Market Reaction to Return on Equity Components:  
Implication for Valuation  
and Financial Statement Analysis**

**A THESIS**

**PRESENTED AS A PARTIAL FULFILLMENT OF THE REQUIREMENTS TO OBTAIN  
THE BACHELOR DEGREE IN ACCOUNTING DEPARTMENT**



**By**

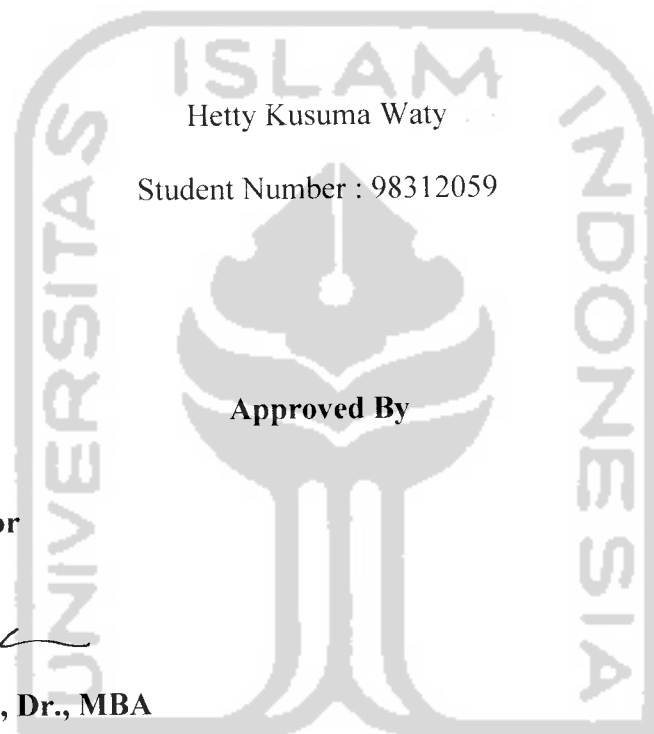
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Yogyakarta  
2005**

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By



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A THESIS

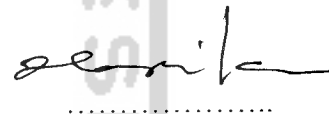
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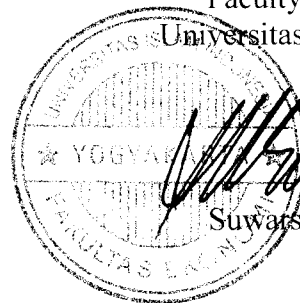


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Universitas Islam Indonesia

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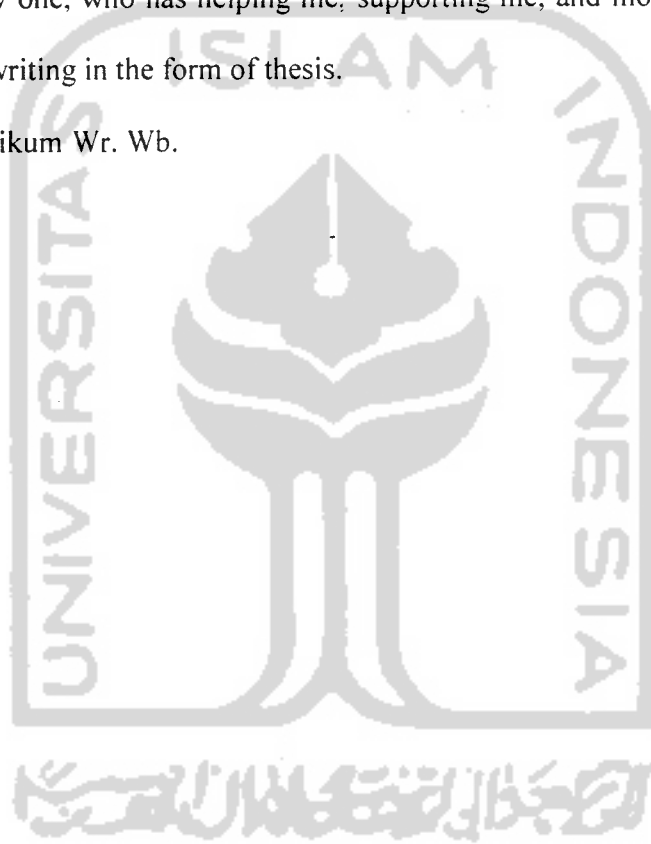
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## ABSTRACT

Kusuma Waty, Hetty (2005). **The Market Reaction to Return on Equity Components: Implication for Valuation and Financial Statement Analysis.** Yogyakarta: Accounting Department. International Program. Faculty of Economics. Universitas Islam Indonesia.

This study examines investor reaction to return on common equity (ROE) and its components around the announcement of yearly earnings. It is an issue that the accounting literature has rarely examined, notwithstanding the importance of ratio analysis in general and the DuPont decomposition in particular. It considers the importance of each of the ROE components relative to the others and shows that the influence of each component on market reaction depends on the value of the ROE as a whole and its other components. The researcher found that net profit margin (NPM) is the dominant component, low (high) NPM yielding a negative (positive) abnormal return, regardless of the value of the other components. In addition, an increase in NPM leads to a stronger effect on market reaction when other components (ROE, ATO, and LEV) are relatively high. Further, an increase in other components (ROE, ATO, and LEV) do not lead to an increase in the abnormal return when NPM is relatively low. Overall, these results may assist financial management and financial statement users in analyzing performance and value according to firm specification as reflected by its ROE components.

## ABSTRAK

Kusuma Waty, Hetty (2005). **The Market Reaction to Return on Equity Components: Implication for Valuation and Financial Statement Analysis.** Yogyakarta: Akuntansi. International Program. Fakultas Ekonomi. Universitas Islam Indonesia.

Penelitian ini menguji reaksi para investor terhadap pengembalian modal (Return on Equity/ROE) dan komponen-komponennya dalam jangka waktu seputar pengumuman laporan keuangan tahunan. Ini adalah kasus yang jarang diuji oleh bidang studi akuntansi, sekalipun yang berhubungan dengan kepentingan analisa rasio pada umumnya dan Du Pont pada khususnya. Penelitian ini mempertimbangkan peran pentingnya masing-masing komponen dari ROE sehubungan dengan yang lainnya dan menunjukkan bahwa pengaruh dari tiap komponen pada reaksi pasar tergantung pada nilai ROE secara keseluruhan dan komponen-komponennya. Peneliti menemukan bahwa net profit margin (NPM) adalah komponen yang paling dominan. tinggi (rendah) NPM menghasilkan negatif (positif) pengembalian yang tidak wajar (abnormal return), dengan tanpa melihat nilai dari komponen yang lain. Dengan kata lain, peningkatan NPM menunjukkan pengaruh yang lebih kuat pada reaksi pasar ketika komponen yang lain (ROE, ATO, dan LEV) juga memiliki nilai yang tinggi. Selanjutnya, peningkatan pada nilai komponen yang lain (ROE, ATO, dan LEV) tidak menunjukkan peningkatan pada pengembalian tidak wajar (abnormal return) ketika nilai NPM rendah. Secara keseluruhan, hasil ini akan membantu manajemen keuangan dan pengguna laporan keuangan dalam menganalisa keadaan dan nilai sesuai dengan spesifikasi perusahaan yang dicerminkan oleh komponen-komponen ROE.

## **Chapter I**

### **Introduction**

#### **1.1. Background of the Study**

Investors put a wrong investment will gain nothing but loss. One of the causes why investors can make mistake when they invest is that they did not know the real performance of the company. A measurement of a success of company is depending on company's performance year to year. If the company's performance increases from time to time, it indicates that the company is a successful company. On the contrary, if the company's performance decreases from year to year, it indicates that the company's performance is poor. There is an easy way to know the company's performance by analyzing their Annual Report.

Annual report is a report issued annually by a corporation to its stockholders. It contains basic financial statements, as well as management of the past year and the firm's future prospect (Brigham and Houston, 1998:33). By analyzing their annual report, not only by one year but several years, we can find out whether the company is in a good performance or not. The company's performance can be determined by the financial statement analysis from the annual report of that company.

Financial statements are, at best only an approximation of economic reality because of the selective reporting of economic events by the accounting system, compounded by alternative accounting methods and estimates (White, Sondhi, and Fried, 1998:2). The financial statement comprises of three main statements. The first is a balance sheet that shows the financial position of assets, liabilities,

and stockholders equity of the firms on a particular date, such as the end of quarter or year. The second one is the income statement that presents the result of operation revenue, expenditure, net profit or loss and net profit loss per share for the accounting method. The third one is the statement of retained earning. This statement shows the transaction, primarily net income or net loss and dividend that effect the balance sheet of retained earning account during certain accounting period. The common way to measure financial performance is financial ratio.

Financial ratios are perhaps the most common tool in financial statement analysis. They are used for summarizing data, analyzing current performance and financial position and comparing performance and financial position across companies and over time. Investors, lenders, rating agencies and regulators use them to analyze company performance, strategy, and risks. Consequently, Most financial statement analysis textbook contain a detailed chapter on analyzing financial ratios, often advocating their use for identifying trends, assessing risks, estimating the probably of default, analytical auditing, imposing debt restrictions (covenants), comparison with industry norms and company budgets, and equity valuation.

Financial ratios analysis provides a popular way to evaluate a company's financial performance. There are four categories to be covered in financial ratio (1) liquidity ratio, which measure a company's ability to meet cash need as they arise. Liquidity reflecting the company's ability to meet the financial obligation. (2) activity ratio, is used to measure the effectiveness of a company in using its assets which measures the liquidity ratio of specific asset and the efficiency of

managed asset, (3) leverage ratio, which measure the extent of the company's financing with debt relative to the equity and its ability to cover interest and other fixed charges. Solvability also can be obtained from comparison between total debt and total equity, and (4) Profitability ratio, which measures the overall performance of a company and its efficiency in managing assets, liabilities, and equities. A higher profitability ratio indicates the efficiency of working capital applied in resulting rate of return for company.

The previous study in the same field about Return on Common Equity (ROCE) and the market reaction to its components has been done by Eli Amir and Itay Kama from London Business School in 2004. The initial sample they used includes all public companies covered by Compustat and CRSP database during 1974-2003. The results show that the marker reaction increases with ROCE, as expected. Also, the market reaction to Net Profit Margin (NPM) and Total Asset Turnover (ATO) becomes monotonically more positive as NPM and ATO increase, although the reaction to NPM is stronger than the reaction to ATO. This result suggests that the market prefers an improvement in NPM than an improvement in ATO. Furthermore, they found that the market reaction to Financial Leverage (LEV) has an inverted-U shape, consistent with the *trade-off theory* between benefit from a tax-shield and the expected cost financial distress. They also examined the market reaction to ROCE components holding the level of ROCE constant. They found that when ROCE is relatively low, increasing ATO causes the market reaction to be more negative in the short return window and does not change market reaction in the long return windows. because higher

ATO may exacerbates losses to shareholders. In contrast, when ROCE is relatively high, higher ATO is rewarded by the market.

Based on the statement above, it can be concluded that financial ratios can be applied in evaluating the implication for valuation and financial statement analysis. In relation to the statement, the writer takes “**The Market Reaction to Return on Equity Components: Implication for Valuation and Financial Statement Analysis**” as the title of the thesis.

### **1.2. Problem Identification**

This study examines investors reaction to return on equity (ROE) and its components around the announcement of yearly earnings. The writer consider the importance of each of the ROE components relative to the others and show that the influence of each component on market depends on the value of the ROE as a whole and its other components.

### **1.3. Problem Formulation**

According to the problem identification mentioned above, the problem formulations are:

1. What is the role of ROE and ROE components in explaining stock returns around yearly earnings announcement? Is there a dominant component or does the market reacts to each component in a similar fashion?



2. Does the market react differently to ROE depending on the source of income (i.e., the components)? Moreover, does the role of each component depend on the value of the other companies?

#### **1.4. Research Objectives**

According to fundamental problems mentioned above, the research objectives are:

1. To know the role of ROE and ROE components in explaining stock returns around yearly earnings announcements.
2. To know whether there is a dominant component and to know whether the market react to each component in a similar fashion.
3. To know whether the market react differently to ROE depending on the source of income (i.e., the component).
4. To know whether the role of each component depend on the value of the other components.

#### **1.5. Problem Limitation**

The writer conducts the examination using a large sample of yearly earning announcements, using two empirical methodologies. First, form portfolio according to levels ROE components. Second, use linear regressions to confirm the portfolio results. The data of public companies obtained from Jakarta Stock Exchange database during 2001-2003. Since there are a large amount of companies listed in Jakarta Stock Exchange, the writer limit the data with deleting

observations with missing data needed to calculate abnormal stock returns around the earning announcements, ROE, NPM, ATO, and LEV. The writer also excluded financial institutions and public utilities because the structure of their financial statements is compatible with those of other companies.

### 1.6. Research Contribution

The research will hopefully benefit and give contribution for:

1. Scholars

The result of the research can be used as the reference in conducting another research in the similar field.

2. The company

The result of the research can be useful information in which they can use the research results to be one of the bases on their decision-making.

3. The investors

It can be a way for the investor in investment activities for considering and making decision to invest regarding of a company.

### 1.7. Definition of Terms

There are some terms that is used in this research:

- a. ROCE (ROE) : Return on Common Equity, that is obtained from income per share divided by common shareholders' equity per share.
- b. NPM : Net Profit Margin, that is obtained from net income per share divided by sales per share.

- c. ATO : Total Asset Turnover, that is obtained from sales divided by total assets.
- d. LEV : Financial Leverage, that is obtained from total sales divided by common shareholders' equity.

### **1.8. Research Structure**

The discussion of the research would be defined in several chapters:

#### **Chapter I: Introduction**

The first chapter describes the study background, problem identification, problem formulation, research objectives, limitation of research area, research contribution, definition of terms and research structure.

#### **Chapter II: Literature Review**

The second chapter describes the literature review related to the topic discussed. In this chapter the author would describe the definitions related to the financial statements and the formulations used in order to analyze the financial performance of the company.

#### **Chapter III: Research Method**

This chapter describes the research method used in discussing the topic. In this section contains of research subject, research setting, research data, research variables, research procedures, and technique of data analysis.

## **Chapter II**

### **Review of Related Literature**

As the title of the chapter, this chapter deals with the literature review related to the research. Some literatures would be reviewed in order to explain the research clearer. Here, the researcher would discuss some subjects that become the background of the research.

#### **2.1. Definition of Financial Statement**

The financial statements could be defined as a written report, which quantitatively describes the financial health of a company. This includes an income statement and a balance sheet, and often also includes a cash flow statement. Financial statements are usually compiled on a quarterly and annual basis.

Financial statement report is the basic to understanding the financial position of a business firm and for assessing its historical and prospective financial performance. Financial statement are, at best, only an approximation of economic reality because of selective reporting of economic events by the accounting system, compounded by alternative accounting methods and estimates. The tendency to delay accounting recognition of some transaction and valuation changes means that financial statement tends to lag behind reality as well (White, Sondhi, and Fried, 1998:2).

## 2.2. Function of Financial Statement

Financial statement serve three important economic functions (Bodie and Merton, 2000:64) :

- a. They provide information to the owners and creditors of the firm about the company current status and past financial performance. Although published financial statements rarely provides enough information to enable ones to form conclusive judgment about a company performance, they can provide important clues about aspect of a firm's operations that should be examined more carefully.
- b. Financial Statement provides a convenient way for owners and creditors to set performance targets and to impose restrictions on the managers of the firms. Boards of directors to specify performance target for management use financial statements. For example, the management needs to set targets in term of a growth rate of accounting earnings or return on equity (ROE). Creditors often specify restriction on management action in term of measures like the ratio of current assets to current liabilities.
- c. Financial Statement provides convenient templates for financial planning. By preparing projections of income statements, balance sheets, and statement of cash flows for the company as a whole, managers can check the overall consistency of separate plane made on a project-by-project basis estimates the firm's total financing requirements. Although other templates can be substituted for standard financial statements in the planning process, a major advantage of

using standard income statements and balance sheets is that the people involved are probably familiar with them from their professional education and training.

### **2.3. Underlying Assumptions**

According to Pernyataan Standard Akuntansi Keuangan (PSAK) prevailed in Indonesia per 1 April 2002, there are two underlying assumptions to financial statements.

#### **2.3.1. Accrual Basis**

In order to meet their objective, financial statements are prepared on the accrual basis of accounting. Under this basis, the effects of transactions and other events are recognized when they occur (and not as cash or its equivalent is received or paid) and recorded in the accounting records and reported in the financial statements of the period to which they relate. Financial statements prepared on the accrual basis inform users not only of past transactions involving the payment and receipt of cash but also of obligations to pay cash in the future and of resources that represent cash to be received in the future. Hence, they provide the type of information about past transactions and other events that is most useful to users in making economic decisions.

#### **2.3.2. Going Concern**

The financial statements are normally prepared on the assumption that an enterprise is a going concern and will continue in operation for the foreseeable

future. Hence, it is assumed that the enterprise has neither the intention nor the need to liquidate or curtail materially the scale of its operations; if such an intention or needs exists, the financial statements may have to be prepared on a different basis and, if so, the basis used is disclosed.

## **2.4. Qualitative Characteristics of Financial Statements**

Qualitative characteristics are the attributes that make the information provided in financial statements useful to users. The four principal qualitative characteristics are understandability, relevance, reliability and comparability (PSAK per 1 April 2002, 24-26).

### **2.4.1. Understandability**

An essential quality of the information provided in financial statements is that is readily understandable by users. For this purpose, users are assumed to have a reasonable knowledge of business and economic activities and accounting and willingness to study the information with reasonable diligence. However, information about complex matters that should be included in the financial statements because of its relevance to the economic decision-making needs of users should not be excluded merely on the grounds that it may be too difficult for certain users to understand.

### **2.4.2. Relevance**

To be useful, information must be relevance to the decision-making needs of users. Information has the quality of relevance when it influence the economic

decisions of users by helping them evaluate past, present or future events or confirming, or correcting, their past evaluations.

Information about financial position and past performance is frequently used as the basis for predicting future financial position and performance and other matters in which users are directly interested. Information is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial statements.

#### **2.4.3. Reliability**

To be useful, information must also be reliable. Information has the quality of reliability when it is free from material error and bias and can be depended upon by users to represent faithfully that which it either purports to represent or could reasonably be expected to represent.

#### **2.4.4. Comparability**

An important implication of the qualitative characteristic of comparability is that users be informed of the accounting policies employed in the preparation of the financial statements, any changes in those policies and the effects of such changes. Users need to be able to identify differences between the accounting policies for like transactions and other events used by the same enterprise from period to period and by different enterprises. Compliance with International Accounting Standards, including the disclosure of the accounting policies used by the enterprise, helps to achieve comparability.



## **2.5. Basic Accounting Financial Statements**

### **2.5.1 Balance Sheets**

Balance sheet is a list of assets, liabilities, and owner's equity of a business entity as of specific date, usually at the close of the last day of a month or a year.

Elements of balance sheets are (White, Sondhi, and Fried, 1998:12-13) :

#### **a. Assets**

Assets are defined as probable future economic benefits obtained or controlled by a particular entity as a result of a past transaction or event. In other words, it is defined as a total company wealth in day-to-day operating activities.

#### **b. Liabilities**

Liabilities are defined similarly as probable future sacrifices of economic benefit arising the form present obligation of a particular entity to transfer asset or provide services to other entities in the future as a result of past transaction or events.

#### **c. Stockholders equity**

Stockholders equity is the residual interests in the net asset of an entity that remains after deducting its liabilities.

### **2.5.2 Income Statements**

Income statement can be defined as a summary of revenue and the expenses of a business entity for a specific period of time, such as a month or a year. The income statement (statement of earning) reports the performance of the firms, the result of its operating activities. It explains some but not all of the changes in the

assets, liabilities, and the equities of the firm between two consecutive balance sheet dates. Elements of income statement are (White, Sondhi, and Fried, 1998:17) :

a. Revenue

It is called as inflows of entity from delivering or producing goods, rendering services or other activities that constitute the entity ongoing major or central operations.

b. Expenses

It is defined as outflows from delivering or producing goods, rendering services, or carrying out other activities that constitute the entity of ongoing major or central operations.

### 2.5.3. Statement of Cash Flow

Management decisions not only affect the profit for the period, but cause accompanying changes in most assets and liabilities, particularly in the accounts making up working capital, such as cash, receivables, inventories, and current payables. Statement of cash flows is a summary of the cash receipts and cash payments of a business entity for specific period of time, such as a month or a year. This statement gives us a dynamic picture of the ultimate changes in cash resulting from the combined decisions made during a given period.

## 2.6. Financial Ratio Analysis

### 2.6.1. Profitability Ratios

Profitability ratios measure how the firm's returns compare to its sales, asset investments, and equity. Stockholders have a special interest in the profitability ratios because profit ultimately leads to cash flow, a primary source of value for a firm. Managers, acting on behalf of stockholders, also pay close attention to profitability ratios to ensure that the managers preserve the firm's value (Gallagher and Andrew, 2000:87).

#### 2.6.1.1. Gross Profit Margin

The gross profit margin measures how much profit remains out of each sales dollar after the cost of goods sold is subtracted (Gallagher and Andrew, 2000:87).

The ratio is formulated as follows:

$$\text{Gross Profit margin} = \frac{\text{Gross Profit}}{\text{Sales}}$$

The ratio shows how well a firm generates revenue compared to its costs of goods sold. The higher the ratio, the better the cost controls compared to the sales revenues. In other hand, the higher rate of gross profit margin means that the company has an ability to produce high profit. On the contrary, the lower level of gross profit margin indicates the lower level of company's selling ability.

### 2.6.1.2. Operating Profit Margin

The operating profit margin ratio measures the cost of goods sold, as reflected in the gross profit ratio, as well as all other operating expenses. This ratio is calculated by dividing earnings before interest and taxes (EBIT or operating income) by sales revenue (Gallagher and Andrew, 2000:88).

The ratio is formulated as follows:

$$\text{Operating Profit Margin} = \frac{\text{Earning Before Interest and taxes (EBIT)}}{\text{Sales}}$$

The higher operating profit margin ratio means that the company has a good management to operate their company and the lower operating profit margin ratio means that the company has a poor management to operate their company.

### 2.6.1.3. Net Profit Margin

The net profit margin measures how much profit out of each sales dollar is left after all expenses are subtracted—that is, after all operating, interest, and tax expenses are subtracted (Gallagher and Andrew, 2000:89).

The ratio is formulated as follows:

$$\text{Net Profit Margin} = \frac{\text{Net Income}}{\text{Sales}}$$

If net profit margin ratio increases, it means that the company's ability to produce net income after tax is good. On the other hand, the decreasing of the ratio indicates that the company is in a bad performance.

#### 2.6.1.4. Return on Assets

The return on assets (ROA) ratio indicates how much income each dollar of assets produces on average. It shows whether the business is employing its assets effectively (Gallagher and Andrew, 2000:89).

The ratio is formulated as follows:

$$\text{Return on Assets} = \frac{\text{Net Income}}{\text{Total Assets}}$$

#### 2.6.1.5. Return on Equity

The return on equity (ROE) measures the average return on the firm's capital contributions from its owners (for a corporation, that means the contributions of common stockholders) (Gallagher and Andrew, 2000:89). It indicates how many dollars of income were produced for each dollar invested by the common stockholders. A high return on equity often reflects the firm's acceptance of strong investment opportunities and effective expense management.

The ratio is formulated as follows:

$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Common Equity}}$$

#### 2.6.2. Liquidity Ratios

Liquidity ratios are used to measure a firm's ability to meet short-term obligations. They compare short-term obligations to short-term (or current) resources available to meet these obligations. From these ratios, much insight can

be obtained into the present cash solvency of the firm and the firm's ability to remain solvent in the event of adversity (Horne and Wachowicz, 1995:128).

#### 2.6.2.1. Current Ratio

The current ratio shows a firm's ability to cover its current liabilities with its current assets.

The ratio is formulated as follows:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

The higher the current ratio, the greater the ability of the firm to pay its bills; however, this ratio must be regarded as a crude measure because it does not take into account the liquidity of the individual components of the current assets.

#### 2.6.2.2. Quick Ratio

The quick ratio shows a firm's ability to meet current liabilities with its most liquid (quick) assets (Horne and Wachowicz, 1995:129).

This ratio is formulated as follows:

$$\text{Quick Ratio} = \frac{\text{Current Assets} - \text{Inventories}}{\text{Current Liabilities}}$$

Quick ratio that has a small number indicates that the company has a high liquidity risk, but higher quick ratio shows the company ability to control the current liabilities.

### 2.6.3. Debt Ratios

The financial analyst uses debt ratios to assess the relative size of a firm's debt load and the firm's ability pay off the debt. The three primary debt ratios are the debt to total assets, debt to equity, and times interest earned ratios.

Current and potential lenders of long-term funds, such as banks and bondholders, are interested in debt ratios. When a business's debt ratios increase significantly, bondholder and lender risk increases because more creditors compete for that firm's resources if the company runs into financial trouble. Stockholders are also concerned with the amount of debt a business has because bondholders are paid before stockholders.

The optimal debt ratios depend on many factors, including the types of business and the amount of risk lenders and stockholders will tolerate. Generally, a profitable firm in a stable business can handle more debt-and a higher debt ratio-than a growth firm in a volatile business (Gallagher and Andrew, 2000:91).

#### 2.6.3.1. Debt to Total Assets Ratio

Debt to total assets ratio measures the percentage of the firm's assets that is financed with debt (Gallagher and Andrew, 2000:91).

The ratio is formulated as follows:

$$\text{Debt to Total Assets Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

The higher the percentage of financing provided by shareholders' equity, the larger the cushion of protection afforded the firm's creditors. The higher the debt

to total assets ratio, the greater the financial risk; the lower this ratio, the lower the financial risk (Horne and Wachowicz, 1995:131).

### 2.6.3.2. Debt to Equity

The debt equity ratio is the percentage of debt relative to the amount of common equity of the firm (Gallagher and Andrew, 2000:91).

This ratio is formulated as follows:

$$\text{Debt to Equity} = \frac{\text{Total Debt}}{\text{Common Equity}}$$

Creditors would generally like this ratio to be low. The lower the ratio, the higher the level of the firm's financing that is being provided by shareholders, and the larger the creditor cushion (margin of protection) in the event of shrinking asset values or outright losses (Horne and Wachowicz, 1995:130).

### 2.6.3.3. Times Interest Earned

The times interest earned ratio is often used to assess a company's ability to service the interest on its debt with operating income from the current period.

The ratio is formulated as follows:

$$\text{Times Interest Earned} = \frac{\text{EBIT}}{\text{Interest Expense}}$$

A high times interest earned ratio suggests that the company will have ample operating income to cover its interest expense. A low ratio signals that the



company may have insufficient operating income to pay interest as it become due. If so, the business might need to liquidate assets, or raise new debt or equity funds to pay the interest due. Recall, however, that operating income is not the same as cash flow. Operating income figures do not show the amount of cash available to pay interest. Because interest payments are made with cash, the times interest earned ratio is only a rough measure of a firm's ability to pay interest with current funds (Gallagher and Andrew, 2000:92).

#### **2.6.4. Asset Activity Ratios**

Activity ratios, also known as efficiency or turnover ratios, are use to measure how effectively a firm using its assets. Firm operating activities require investment in both short-term (inventory and receivable account) and long-term (property, land, and equipment) assets. Activity ratio describes the relationship between the firm level of operation that is usually defined as sales and assets needed to sustain operating activities.

##### **2.6.4.1. Average Collection Period**

The average collection period ratio measures how many days, on average, the company's credit customers take to pay their accounts. Managers, especially credit managers, use this ratio to decide to whom the firm should extend credit. Slow payers are not welcome customers. Financial analysts usually calculate this ratio using the total sales figure when they do not have the credit sales only figure (Gallagher and Andrew, 2000:92).

The ratio is formulated as follows:

$$\text{Average Collection Period} = \frac{\text{Accounts Receivable}}{\text{Average Daily Credit Sales}}$$

#### 2.6.4.2. Inventory Turnover

The inventory turnover ratio tells us how efficiently the firm convert inventory to sales. If the company has inventory that sells well, the ratio value will be high. If the inventory does not sell well due to lack of demand or of there is excess inventory, the ratio will be low.

The ratio is formulated as follows:

$$\text{Inventory Turnover} = \frac{\text{Sales}}{\text{Inventory}}$$

#### 2.6.4.3. Total Asset Turnover

The total asset turnover ratio measures how efficiently a firm utilizes its assets. Stockholders, bondholders, and managers know that the more efficiently the firm operates, the better the returns.

If a company has many assets that do not help generate sales (such as fancy offices and corporate jets for senior management), then the total asset turnover ratio will be relatively low. A company that has a high asset utilization ratio suggests that its assets help promote sales revenue.

The rate is formulated as follows:

$$\text{Total Asset Turnover} = \frac{\text{Sales}}{\text{Total Assets}}$$

#### 2.6.4.4. Fixed Asset Turnover

The fixed asset turnover measures the efficiency of (long-term) capital management investment.

The ratio is formulated as follows:

$$\text{Fixed Asset Turnover} = \frac{\text{Sales}}{\text{Average Fixed Assets}}$$

#### 2.6.5. Market Value Ratios

Market value ratios mainly rely on financial market data, such as the market price of a company's common stock, rather than financial statement like the others ratio. Market value ratios measure the market's perception of the future earning power of a company, as reflected in the stock share price.

##### 2.6.5.1. P/E Ratio

Investors and managers use the P/E ratio to gauge the future prospects of a company. The ratio measures how much investors are willing to pay for claim to one dollar of the earnings per share of the firm. The more investors are willing to pay over the value of EPS for the stock, the more confidence they are displaying about the firm's future growth. That is, the higher the P/E ratio, the higher the investors' growth expectations (Gallagher and Andrew, 2000:93).

The ratio is formulated as follows:

$$\text{P/E Ratio} = \frac{\text{Market Price per Share}}{\text{Earning per Share}}$$

#### 2.6.5.2. Market to Book Value Ratio

The market to book value ratio is the market price per share of a company's common stock divided by the accounting book value per share (BPS) ratio. The book value per share is the amount of common stock equity on the firm's balance sheet divided by the number of common shares outstanding (Gallagher, and Andrew, 2000:94).

The book value per share is a proxy for the amount remaining per share after selling the firm's assets for their balance sheet values, and paying the debt owed to all creditors and preferred stockholders.

The formulas would be as follows:

$$\text{BPS} = \frac{\text{Common Stock Equity}}{\text{Number of Common Share Outstanding}}$$

$$\text{Market to Book Value Ratio} = \frac{\text{Market Price per Share}}{\text{Book Value per Share}}$$

When the market price per share of stock is greater than the book value per share, analyst often conclude that the market believes the company's future earnings are worth more than the firm's liquidation value. The value of the firm's

future earnings minus the liquidation value is the going concern value of the firm. The higher the M/B ratio, when it is greater than 1, the greater the going concern value of the company seems to be (Gallagher and Andrew, 2000:94).

Companies that have market to book value of less than 1 are sometimes considered to be “worth more dead than alive.” Such M/B ratio suggests that if company liquidated and paid off all creditors and preferred stockholders, it would be have more left over for the common stockholders than what the common stock could be sold for on the marketplace (Gallagher and Andrew, 2000:94).

The M/B ratio is useful, but it is only a rough approximation of how liquidation and going concern values compare. This is because the M/B ratio uses an accounting-based book value. The actual liquidation value of a firm is likely to be different than the book value. For instance, the assets of the firm may be worth more or less than the value at which they are currently carried on the company's balance sheet. In addition, the current market price of the company's bonds and preferred stock may also differ from the accounting value of these claims (Gallagher and Andrew, 2000:95).

## 2.7. Du Pont Analysis

Du Pont Analysis shows how debts, rotation of assets and profit margin are combined to determine return on equity (ROE). Du Pont system splits ROE and ROA to be some other ratios. System that is developed by Du Pont, a chemical company, is very useful to describe the financial condition of a certain company.

A Du Pont equation is a formula which shows that the rate of return on assets can be found as the product of the profit margin times the total assets turnover (Brigham, and Houston, 1998:84). In the past, manager has intended to focus only on the margin earned and ignore the turnover of assets. One variation of Du Pont approach has special relevance to understanding a firm's return on investment (Horne and Wachowicz, 1996:141). By using Du Pont method, the calculation of return on investment (ROI) or return on assets (ROA) and return on equity (ROE) to measure the company's financial performance can be done.

Return on investment (ROI) or return on assets (ROA) is defined as a comparison between net profit margin and total assets turnover (ROA) in percentage. In other word, ROI is also described as the company ability to use its assets to achieve profit.

The Du Pont equation for ROA or ROI is:

$$\text{ROA or ROI} = \text{Profit Margin} \times \text{Total Assets Turnover.}$$

Neither the net profit margin nor the total assets turnover ratio, by itself, provides an adequate measure of overall effectiveness. The net profit margin ignores the utilization of assets, while the total assets turnover ratio ignores the profitability on sales. The return on investment ratio, or earning power, resolves these shortcomings. An improvement in the earning power of the firm will result if there is an increase in turnover on assets, and increase in the net profit margin, or both.

Another summary measures of overall firm performance are return on equity (ROE). Return on equity is defined as the ratio of net income to common

equity. It measures the rate of return on common stockholders' investment. Return on equity compares net profit after tax (minus preferred stock dividend, if any) to equity that shareholders have invested in the firm. This ratio tells us about the earning power on the stockholders book value investment and is frequently often reflect the firm's acceptance of strong investment opportunities and effective expense management. However, if the firm has chosen to employ a level of debt that is high by industry standards, a high ROE might simply be the result of assuming excessive financial risk.

The Du Pont equation for ROE is:

$$\text{ROE} = \text{Net Profit Margin} \times \text{Total Assets Turnover} \times \text{Equity Multiplier}$$

## 2.8. Stock Valuation

### 2.8.1. Types of Stock Market Transactions

We can classify stock market transactions into three distinct types (Brigham and Houston, 1998:311):

1. Trading the outstanding shares of established, publicly owned companies: the secondary market, in which "used" stocks are traded after they have been issued by corporations.
2. Additional shares sold by established, publicly owned companies: the primary market, in which firms issue new securities to raise corporate capital.
3. Initial public offerings by privately held firms: the IPO market. This type of transaction is also called as going public, that it the act of selling stock

to the public at large by closely held corporation or its principal stockholders.

### **2.8.2. Common Stock Valuation**

Common stock represents an ownership interest in a corporation, but to the typical investor, a share of common stock is simply a piece of paper characterized by two features (Brigham and Houston, 1998:314-315):

1. It entitles its owner to dividends, but only if the company has earnings out of which dividends can be paid, and only if management chooses to pay dividends rather than retaining and reinvesting all the earnings.
2. Stock can be sold at some future date, hopefully at a price greater than the purchase price. If the stock is actually sold at a price above its purchase price, the investors will receive a capital gain. Generally, at the time people buy common stocks, they do expect to receive capital gain; otherwise, they would not buy the stocks.

### **Expected Dividends as the Basis for Stock Values**

For any individual investors, the expected cash flows consist of expected dividends plus the expected sale price of the stock. However, the sale price the current investor receives will depend on the dividends some future investor expects. Therefore, for all present and future investors in total, expected cash flows must be based on expected future dividends. Put another way, unless a firm is liquidated or sold to another concern, the cash flows it provides to its



stockholders will consist only of a stream of dividends; therefore, the value of a share of its stock must be established as the present value of that expected dividend stream (Brigham and Houston, 1998:317). Therefore, the formula of the value of stock is:

$$\begin{aligned}
 P_0 &= \text{PV of expected future dividends} \\
 &= \frac{D_1}{(1+k_s)^1} + \frac{D_1}{(1+k_s)^2} + \dots + \frac{D_x}{(1+k_s)^x} \\
 &= \frac{D_1}{(1+k_s)^1}
 \end{aligned}$$

Where,  $P_0$  is the intrinsic value – the value of an asset that, the mind of a particular investor, is justified by the facts,  $D$  is dividend the stockholder expect to receive at the end of each year, and  $k_s$  is minimum acceptable, or required rate of return on the stock, considering both its riskiness and the returns available on other investments.

Brigham and Houston also considered there are three kinds of stock's growth, they are, zero growth, constant growth, and nonconstant growth.

#### a. Zero Growth Stock

A zero growth stock is a common stock whose future dividends are not expected to grow at all; that is  $g = 0$ . Therefore, a zero growth stock is a perpetuity—a security that is expected to pay a constant amount each year forever.

Although a zero growth stock is expected to provide a constant stream of dividends into definite future, each dividend has a smaller present value than the

preceding one, and as  $N$  - the amount of years the investors holding the stock - get very large, the present value of the future dividends approaches to zero.

The value of any perpetuity is simply the payment divided by the discount rate, so the value of a zero growth stock reduces to this formula:

$$P_0 = \frac{D}{k_s}$$

Where,  $P_0$  is the intrinsic value – the value of an asset that, the bid of a particular investor, is justified by the facts,  $D$  is dividend the stockholder expect to receive at the end of each year, and  $k_s$  is minimum acceptable, or required rate of return on the stock, considering both its riskiness and the returns available on other investments.

#### **b. Normal or Constant Growth**

Normal or constant growth is growth, which is expected to continue into the foreseeable future at about the same rate as that of the economy as a whole;  $g$  is a constant. Although zero growth model is applicable to few companies, the earnings and dividends of most companies are expected to increase over time. Expected growth rates vary from company to company, but dividend growth on average is expected to continue in the foreseeable future at about the same rate as that of the nominal gross domestic product (real GDP plus inflation) (Brigham and Houston, 1998:319).

Thus if a normal, or constant growth company's last dividend, which has already paid, was  $D_0$ , its dividend in any future Year  $t$  may be forecasted as  $D_t = D_0 (1 + g)^t$ , where  $g$  is constant expected rate of growth. Then, the

intrinsic value of the stock is equal to the present value of its expected future dividends (Brigham and Houston, 1998:320).

$$\begin{aligned}
 P_0 &= \frac{D_0(1+g)^1}{(1+k_s)^1} + \frac{D_0(1+g)^2}{(1+k_s)^2} + \dots + \frac{D_0(1+g)^x}{(1+k_s)^x} \\
 &= \frac{D_0(1+g)}{k_s - g} = \frac{D_1}{k_s - g}
 \end{aligned}$$

The expected dividends are growing, but the present value of each successive dividend is declining, because the dividend growth rate is less than the rate used for discounting the dividends to present (Brigham and Houston, 1998:320).

Growth in dividends occurs primarily as a result of growth in *earning per share (EPS)*. Earning growth, in turn, result from a number of factors, including (1) inflation, (2) the amount of earning the company retains and reinvest, and (3) the rate of return the company earns on its equity (ROE). Regarding inflation, if output (in units) is stable, but both sales prices and input costs rise at the inflation rate, then EPS will also grow at the inflation rate. Even without inflation, EPS will also grow as a result of the reinvestment, or plowback, of earnings. If the firm's earnings are not all paid out as dividends (that is, if some fraction of earning is retained), the dollar of investment behind each share will rise over time, which should lead to growth in earnings and dividends.

Even though a stock value is derived from expected dividends, this does not necessarily mean that corporation can increase their stock prices by raising the current dividend. Shareholders care about *all* dividends, both current and those expected in the future. Moreover, there is a trade-off between current dividends and future dividends. Companies that pay high current dividends necessarily

retain and reinvest less of their earnings in the business, and that reduces future earnings and dividends. Shareholders prefer to have the company retain earnings, hence pay less current dividends, if it has highly profitable investment opportunities, but they want the company to pay earnings out if investment opportunities are poor. Taxes also play a role, as dividends and capital gains are taxed differently, so dividend policy affects investors' taxes (Brigham and Houston, 1998:321).

$$\begin{aligned} \text{Expected rate of return} &= \text{Expected dividend yield} + \text{Expected growth rate, or capital gains yield} \\ k_s &= \frac{D_1}{P_0} + g \end{aligned}$$

Where,

$$\text{Capital gain yield} = \frac{\text{Capital gain}}{\text{Beginning price}}$$

Thus, for a constant growth, the following conditions must hold (Brigham and Houston, 1998:322-323):

1. The dividend is expected to grow forever at a constant rate,  $g$ .
2. The stock price is expected to grow at this same rate.
3. The expected dividend yield is a constant.
4. The expected capital gains yield is also a constant, and it is equal to  $g$ .
5. The expected total rate of return,  $k_s$ , is equal to the expected dividend yield plus the expected growth rate:  $k_s = \text{dividend yield} + g$ .

### c. Supernormal or Nonconstant Growth

Supernormal or nonconstant growth is the part of the life cycle of a firm in which it grows much faster than the economy as a whole. Firms typically go

through life cycle. During the early part of their lives, their growth is much faster than that of the economy as a whole; then they match the economy's growth; and finally their growth is slower than that the economy (Brigham and Houston, 1998:323).

To find the value of a stock, or of any nonconstant growth stock when the growth rate will eventually stabilize, we proceed in three steps (Brigham and Houston, 1998:323):

1. Find the PV of the dividends during the period of nonconstant growth.
2. Find the price of the stock at the end of the nonconstant growth period, at which point it has become a constant growth, and discount this price back to the present.
3. Add these two components to find the intrinsic value of the stock,  $P_0$ .

## 2.9. Signaling Theory

There are 2 kinds of information about a firm's prospects, they are symmetric information and asymmetric information. Symmetric information is the situation in which investors and managers have identical information about firm's prospects. However, in fact managers often have better information than outside investors. Whereas asymmetric information is the situation in which managers have different (better) information about firm's prospects than do investors (Brigham and Houston, 1998:518).

A signal here means an action taken by a firm's management which provides clues to investors about how management views the firm's prospects

(Brigham and Houston, 1998:519). Suppose, firm A's R&D labs have discovered a nonpatenable cure for the common cold. They want to keep the new product a secret as long as possible to delay competitor's entry into market. New plants must be built to make the new product, so capital must be raised. In this case, the company should sell stocks to increase its capital. If the firm sells stock, then, when profits from new product start flowing in, the price of the stock would rise sharply, and the purchasers of the new stock would like a bonanza. The current stockholders (including the managers) would also do well, but not as well as they would have done if the company had not sold stock before the price increase, because then they would not have had to share the benefits of the new product with the new stockholders.

Another situation, suppose firm B. Its managers have information that new orders are off sharply because a competitor has installed new technology which has improved its products' quality. Firm B must upgrade its own facilities, at a high cost, just to maintain its current sales. As a result, its return on investment will fall (but not as much as if it took no action, which would lead to 100 percent loss through bankruptcy). Here the situation is just the reverse of that facing by firm A, which did not want to sell stock so as to avoid having to share the benefits of future development. A firm with unfavorable prospects would want to sell stock, which would mean bringing in new investors to share the losses (Brigham and Houston, 1998:518).

From two conditions mentioned above, we can conclude that firms with extremely bright prospects prefer not to finance through new stock offerings.

whereas firms with poor prospects do like to finance with outside equity. In a nutshell, the announcement of a stock offering is generally taken as a signal that the firm's prospects as seen by its management are not bright.

The implication of signaling theory for capital structure decisions is that firms should, in normal times, maintain a reverse borrowing capital which can be used in the event that some especially good investment opportunity come along. This means that firms should, in normal times, use less debt than is suggested by tax benefits/bankruptcy cost trade-off model (Brigham, Gapenski, and Daves, 1999:379).

#### **2.10. Market Reaction to Return on Equity and Its Components**

Even though a stock value is derived from expected dividends, this does not necessarily mean that corporation can increase their stock prices by raising the current dividend. Shareholders care about all dividends, both current and those expected in the future. Moreover, there is a trade-off between current dividends and future dividends. Companies that pay high current dividends necessarily retain and reinvest less of their earnings in the business, and that reduces future earnings and dividends. Shareholders prefer to have the company retain earnings, hence pay less current dividends, if it has highly profitable investment opportunities, but they want the company to pay earnings out if investment opportunities are poor. Taxes also play a role, as dividends and capital gains are taxed differently, so dividend policy affects investors' taxes (Brigham and Houston, 1998:321).

In this case, the stockholders will prefer the company pay less dividend and have company retained earning to finance the company's investment, if it is having high opportunities. But if the company has poor investment opportunities, then the stockholders will prefer to have more dividend to retained earning.

Financial signaling occurs when capital structure changes convey information to security holders. Management behavior results in new debt issues being regarded as "good news" by investors, whereas new stock issues regarded as "bad news" (Van Horne and Wachowicz, 1995: 485).

As stated in the signaling theory above, the company that has high opportunities investment will not want to sell stocks to increase its capital to finance the investment. In this case, the company should, in normal times, maintain a reverse borrowing capital which can be used in the event that some especially good investment come along. Succeeded in the investment will result in increasing in the profit of the company. If the company maintain borrowing capital from its stockholders in the form of retained earning, then the stockholders will get higher return on equity as the result. This causes the higher expectation of the stockholders to the company's benefit in the future. Since the performance of the company is getting better and better, then it will result in higher stock price offered in the market.

In other word, the higher the return on equity offers by a company, the higher the willingness of the investors to hunt the stock. This situation makes the price of the stock increasing because more investors want to have the stock but the number of the stock itself does not increase. As stated in the law of diminishing



return, to keep the price in equilibrium, when the demand increase then the supply should follow in increasing. But when the demand increases while the supply remains constant, then the price will be increase and vice versa.

### 2.11. Hypothesis

Return on Equity is constructed from two summary measures: the numerator measures net profits available to common stockholders and the denominator measures common stockholders equity or net assets. Companies generate net profits conducting three basic activities – operating, investing, and financing. Thus, to identify the source of net profitability, financial statement users normally decompose ROE into three components – Net Profit Margin (NPM), Total Assets Turnover (ATO), and Leverage (LEV) – aimed at capturing the three basic activities:  $ROE = NPM \times ATO \times LEV$ . This is the Du Pont decomposition, perhaps the most popular analysis regularly conducted by financial statements users. Therefore, in this research, the expected hypothesis would be:

$H_A$  : There is a positive relationship between ROE and its components to stock price in the Jakarta Stock Exchange.

Since an increase in ROE components increases ROE, one would also expect higher ROE components (NPM, ATO, and LEV) to yield higher abnormal stock returns as well. However, it is possible that the market reacts differently to each component. For instance, ATO and LEV are controlled by the company's actions. NPM, however, is more sensitive to economic changes, such as product

changes, changes in cost structures and changes in interest rates, variables on which the company has little control. Therefore, for minor hypothesis, there would also be stated as follow.

**a. Return on Equity (ROE)**

This ratio measures the average return on the firm's capital contributions from its owners (for a corporation, that means the contributions of common stockholders) (Gallagher and Andrew, 2000:89). It indicates how many dollars of income were produced for each dollar invested by the common stockholders. A high return on equity often reflects the firm's acceptance of strong investment opportunities and effective expense management. General rule stated that a company has ROE above 15% indicates that the company is in a good condition, on the other hand, a company has ROE below 15% indicates that the company is in a bad condition. That is why investors want to invest their money in a company that has a high ROE. Since many investors are willing to search for the stocks that will give them high return, the price of the stock will be increase because the company does not issue new stocks. Therefore, the hypothesis would be:

$H_{A1}$  : There is a positive relationship between ROE and stock price in the Jakarta Stock Exchange.

**b. Net Profit Margin (NPM)**

NPM, measured as net income minus preferred stock dividends divided by net sales, provides information about the sensitivity of net income to product price

and cost structure charges. Although companies should strive to maximize the net profit margin, neither higher nor low profit margins alone necessarily translate into high ROE and positive stock returns. Since we expect to have a positive relationship, the hypothesis would be:

H<sub>A2</sub> : There is positive relationship between NPM and stock price in the Jakarta Stock Exchange.

#### **c. Total Assets Turnover (ATO)**

ATO, measured as net sales divided by total assets, captures efficiency in using the firm's total investment in assets. Good investors are having the willingness to invest their money to a company that can manage the assets well. Since ROE is decomposed from Net Profit Margin, Total Assets Turnover, and Financial Leverage, a high level of ATO will also contribute to a high level of ROE. Therefore the hypothesis would be:

H<sub>A3</sub> : There is positive relationship between ATO and stock price in the Jakarta Stock Exchange.

#### **d. Financial Leverage (LEV)**

LEV, measured as total assets divided by common stockholders' equity, captures the firm's ability to leverage up its operations. LEV is positively correlated with expected financial distress cost and financial risk. Hence, higher LEV increases the return required by stockholders. As stated in the signaling theory that mentioned above, new debt issued being regarded as "good news" by

## **Chapter III**

### **Research Method**

Descriptive comparative method has been selected as the research method used in this thesis. A descriptive research has a purpose to describe phenomenon or characteristics of population by finding the interaction between variables (Zikmund, 2000:50). In order to do this, the writer used both the quantitative analysis and qualitative analysis for the research methods in this thesis. The quantitative analysis is an analysis based on the data analysis stated on the numerical data. The data analyzed was the company's annual report and its relation to the company financial condition. The quantitative analysis was used to measure the company's condition using formula calculation. The qualitative analysis is an analysis that gives balance to the quantitative analysis. The qualitative analysis describes an analysis through reading tables, graphics, or available numbers. This will give further explanation to the quantitative analysis results.

#### **3.1. Research Subject**

The research subject was taken from Jakarta Stock Exchange database. The target population observed in this research is the public companies listed in Jakarta Stock Exchange during the years 2001-2003. Since there are large number of companies listed in Jakarta Stock Exchange, the researcher excluded financial institutions and public utilities because the structure of their financial statement is

incompatible with those of other companies. Observations with missing data needed to calculate abnormal stock returns around earning announcements, ROE, NPM, ATO, and LEV were deleted from the research.

### 3.2 Research Setting

The yearly earning announcement data was obtained at the Jakarta Stock Exchange in Jalan Jenderal Sudirman Kav. 52-53 Jakarta. Stock price data was obtained at Jakarta Stock Exchange Corner at the Islamic University of Indonesia (UII) in Jogjakarta because it was easier for the researcher to access data downloading facilities. The activity of the Jakarta Stock Exchange Corner includes serving trading transaction and also giving all the information needed during the research time. While the data of ROE, NPM, and LEV was obtained from the related websites, such as [www.jsx.com](http://www.jsx.com) and [www.e-bursa.com](http://www.e-bursa.com).

### 3.3. Research Data

There are two research data obtained by the researcher, they are common data and special data. Common data consists of all data related to Return on Equity of the public companies that are obtained from Jakarta Stock Exchange, while special data is used in calculating data analysis. Special data include ROE, NPM, ATO, LEV, adjusted returns, and market returns.

Kinds of data used are:

1. Secondary data: taken from journals published by the Jakarta Stock Exchange.

2. Library research: related to the theory, reference, and other thesis which present ROE and other financial ratios analysis.

### **3.4. Research Variables**

There are two main variables in this research namely independent and dependent variables. According to Brown (1988 : 10), the independent variable is the factor manipulated by the researcher to determine the changes or the effect on the dependent variable. That is why in any research the dependent variable always serves as the research instrument (Sellinger, et.al, 1089:89 and Try, et.al, 1979:24). Here, the independent variable was Return on Equity and its components and the dependent variable was the market reaction.

#### **3.4.1. Independent Variables**

Return on Equity measures the average return on the firm's capital contribution from its owners (for a corporation, that means the contribution of common stockholders) (Gallagher and Andrew, 2000:89). It indicates how many dollars are invested by the common stockholders. A high return on equity often reflects the firm's acceptance of strong investment opportunities and effective expense management. Return on Equity can be obtained by dividing net income by common equity (shareholder's equity). While through Du Pont formula, we can obtain Return on Equity by multiplying net profit margin, total asset turn over, and equity leverage. Net profit margin measures how much profit out of

each dollar sales is left after all expenses are subtracted; that is, after all operating, interest, and tax expenses are subtracted (Gallagher and Andrew, 2000:89). Net profit margin can be obtained by dividing net income by sales. The total asset turnover ratio measures how efficiently a firm utilizes its assets. Stockholders, bondholders, and managers know that the more efficiently the firm operates, the better the returns. Total asset turnover can be obtained by dividing sales by total assets. The equity leverage or equity multiplier is yet another measure of financial leverage. Since it is equivalent to  $(1 + \text{debt-to-equity ratio})$ , the higher the debt-to-equity ratio, the higher the multiplier. It can be obtained by dividing total assets to common equity (shareholder's equity). In this research, the data of return on equity ratio, net profit margin ratio, and assets turnover ratio can be obtained directly from the financial highlight of the Indonesian Capital Market Directory (ICMD) that issued by the Jakarta Stock Exchange yearly.

### **3.4.2. Dependent Variable**

The market reaction to earning is measured using size-adjusted stock returns around the announcement of yearly earnings. Size-adjusted returns are calculated as raw returns minus the return on the portfolio of all companies in the same size deciles. The researcher also uses market-adjusted returns as an alternative measure of abnormal returns. Market-adjusted returns are calculated as raw returns minus the return on the value-weighted JSX index.

The data of public companies obtained from Jakarta Stock Exchange that listed during year 2001-2003. This research will only examine one return window, which is a short window. The Short window will consists of 21 days starting from day -10 through to day +10, where day 0 represents the earning announcement date, as stated in the Jakarta Stock Exchange.

### **3.5. Research Procedures**

Initial research involved obtaining literatures related to the study and reading the previous studies in the same field about the ROE and its reaction to the market. Then observing the public companies to obtain the main data about ROE and other components used in the research. In conducting the examination, the researcher used two empirical methodologies. First, forming portfolio according to levels of ROE components. Second, using linear regressions to confirm the portfolio result.

### **3.6. Technique of Data Analysis**

#### **3.6.1. Du pont Analysis**

The writer used financial ratio analysis and Du Pont formula to analyze the data. Financial ratio analysis was able to help to analyze the company financial data by comparing every year of financial ratio to measure the company performance. While Du Pont formula is a system to analyze what drives the return



on Investment (ROI) and the interrelationship between assets turnover and profit margin. (Keown, Petty J., Scott, and Martin, 1998:92).

The Du Pont decomposition is interesting and popular because it captures the three main activities of a company – net profitability, efficiency in investing, and financing. In addition, the ratios identified by Du Pont decomposition are tied together in a structured way that explains how they “sum up” as building blocks of net income. The Du Pont decomposition also establishes a hierarchy where one ratio, net profit margin, is identified as the primary one and the others, that is, asset turnover and leverage, provide further and finer information.

The writer also use large sample of yearly earnings announcements, using two empirical methodologies. First, form portfolio according to levels ROE components. Second, use linear regressions to confirm the portfolio results. The data of public companies obtained from Jakarta Stock Exchange that was listed during the years 2001-2003. This research will only use one short return window. The window will contain 21 days starting from day -10 through day +10, where day 0 represents the earning announcement date, as stated in Jakarta Stock Exchange.

### **3.6.2. Statistical Test**

#### **3.6.2.1. Correlation Analysis**

Spearman and Pearson correlation is used to see the correlation between ROE and its components. The correlation between dependent and independent variables can be viewed from the result. The positive sign indicates that dependent

and independent variables have a positive relationship, while negative sign indicates that dependent and independent variables have a negative relationship. Actually there is no exact rule to indicate whether the dependent and independent variables have significant correlation or not. But there is a common guidance that a number of correlation above 0.5 shows significant correlation while a number of correlation below 0.5 shows weak correlation.

### 3.6.2.2. Regression Analysis

The research also uses a regression analysis to examine the market reaction to return on equity and its components. Here, the market adjusted stock return (MAR) around the announcement of yearly earning is used to measure market reaction to earning. This equation below includes return on equity and its components.

$$MAR_{i,t} = \beta_0 + \beta_1 ROE_{i,t-1} + \beta_2 NPM_{i,t-1} + \beta_3 ATO_{i,t-1} + \beta_4 LEV_{i,t-1} + \varepsilon_{it} \dots (3.1)$$

in which:

$MAR_{it}$	= Market adjusted return on stock i at year t
$\beta_0$	= Intercept
$ROE_{i,t-1}$	= Return on Equity of company i at year t
$NPM_{i,t-1}$	= Net Profit Margin of company i at year t
$ATO_{i,t-1}$	= Asset Turn Over of company i at year t
$LEV_{i,t-1}$	= Financial Leverage of company i at year t
$\beta_1, \beta_2, \beta_3, \beta_4$	= Coefficient of independent variable
$\varepsilon_{it}$	= Disturbance error at year t

### 3.6.2.3. Operational Hypothesis

The hypothesis of this research is:

$$H_0 : \beta_1 = \beta_2 = \beta_3 = \beta_4 \leq 0$$

There is no positive relationship between ROE and its components to stock price in the Jakarta Stock Exchange.

$$H_A : \beta_1 = \beta_2 = \beta_3 = \beta_4 > 0$$

There is a positive relationship between ROE and its components to stock price in the Jakarta Stock Exchange.

Since an increase in ROE components increases ROE, one would also expect higher ROE components (NPM, ATO, LEV) to yield higher abnormal stock returns as well. However, it is possible that the market reacts differently to each component. For instance, ATO and LEV are controlled by the company's actions. NPM, however, is more sensitive to economic changes, such as product changes, changes in cost structures and changes in interest rates, variables over which the company has little control. Therefore, according to the minor hypothesis, there would also be stated as follow:

#### **Return on Equity (ROE)**

$$H_{01} : \beta_1 \leq 0$$

There is no positive relationship between ROE and stock price in the Jakarta Stock Exchange.

$$H_{02} : \beta_1 > 0$$

There is a positive relationship between ROE and stock price in the Jakarta Stock Exchange.

**Net Profit Margin (NPM)**

$$H_{02} : \beta_2 \leq 0$$

There is no positive relationship between NPM and stock price in the Jakarta Stock Exchange.

$$H_{A2} : \beta_2 > 0$$

There is positive relationship between NPM and stock price in the Jakarta Stock Exchange.

**Assets Turn Over (ATO)**

$$H_{03} : \beta_3 \leq 0$$

There is no positive relationship between ATO and stock price in the Jakarta Stock Exchange.

$$H_{A3} : \beta_3 > 0$$

There is a positive relationship between ATO and stock price in the Jakarta Stock Exchange.

**Financial Leverage (LEV)**

$$H_{04} : \beta_4 \leq 0$$

There is no positive relationship between LEV and stock price in the Jakarta Stock Exchange.

$$H_{A4} : \beta_4 > 0$$

There is a positive relationship between LEV and stock price in the Jakarta Stock Exchange.

ROE tells us the earning power on shareholders' book value investment and is frequently used comparing two or more firms in an industry. A high return on equity often reflects the firm's acceptance of strong investment opportunities and effective expense management. However, if the firm has chosen to employ a level of debt that is high by industry standards, a high ROE might simply be result of assuming financial risk (Van Horne and Wachowicz, 1995:142). Usually, investors are willing to invest their money in the company that gives high return, in this case ROE.

The market reaction to ROE and its components in this research is represented by the stock price in the Jakarta Stock Exchange. Here it is expected that the changes in stock prices are affected by ROE and its components resulting in a positive relationship between market reaction to ROE and its components. It is expected that the announcement of the yearly earning will affect the stock price in the Jakarta Stock Exchange, resulting in an abnormal return.

From equation 3.1 we can see the relationship among ROE and its components to SAR. In this case, MAR represents the market reaction that is also represented in the stock price. This research expects the relationship between ROE and its components and stock price will be positive. It is expected that increasing ROE and its components would also improve the stock price. Because the return that is offered would be increasing too, investors would be eager to invest in that stock.

By using the regression analysis of the short return window (day -10 to +10, where 0 means the day of the announcement date), we will see the relationship

## **Chapter IV**

### **Research Findings, Discussion, and Implications**

This chapter further explains the steps taken in producing the thesis. It details research description, research findings, and implications. In research findings, some formulas are used in order to test the data, and the result of the findings is explained further in the research implications.

As previously mentioned, this study attempts to analyze the relationship between ROE and its components and stock price as the representation of market reaction. Therefore, ROE and its components play the role of independent variables and stock price plays the role of a dependent variable. The sample is analyzed all companies listed in the Jakarta Stock Exchange in year 2001-2003 except financial institutions. Any company missing data required calculate its abnormal return and ROE and its components was deleted. This simplified the analysis of the data due to the huge number of samples.

This research only used one short return window. This short window contains 21 days, starting from day -10 through to day +10, where day 0 represents the earning announcement date as stated in the Jakarta Stock Exchange. Besides analyzing 21 days of observation, this research also analyzed the 10 days of observation, which starting from day 0, representing the earning announcement as stated in the Jakarta Stock Exchange, through day +10.

## 4.1. Research Findings

### 4.1.1. Statistics Descriptive

**Table 4.1 : Descriptive Statistics for Sum21**

	Mean	Std. Deviation	N
<b>SUM21</b>	-3,282950E-02	,155708	556
<b>ROE</b>	25,6999	957,1549	556
<b>NPM</b>	-,2761	5,7843	556
<b>ATO</b>	,9137	,8510	556
<b>LEV</b>	8,0950	90,7799	556

Sum21 is the result for cumulative abnormal return with the range of the 21 research days (day -10 to day +10). After deleting some extreme data the number of companies listed came to 556. The mean for market adjusted return is -0,0328 with the standard deviation of 0.155708, the mean for ROE is 25.6999 with the standard deviation of 957.1549, the mean for NPM is -0.2761 with the standard deviation of 5.7843, the mean for ATO is 0.9137 with the standard deviation of 0.8510, and the mean for LEV is 8.0950 with the standard deviation of 90.7799.

**Table 4.2 : Descriptive Statistics for Sum11**

	Mean	Std. Deviation	N
<b>SUM11</b>	-4,6501455E-02	,1096424	550
<b>ROE</b>	26,3258	962,4055	550
<b>NPM</b>	-,2825	5,8190	550
<b>ATO</b>	,9282	,8863	550
<b>LEV</b>	8,1817	91,2721	550

While Sum11 is the result for cumulative abnormal return with the range of 11 research days (day 0 to day +10). After deleting some extreme data the number

of companies listed came to 550. The mean for market adjusted return is  $-0.0465$  with the standard deviation of  $0.1096424$ , the mean for ROE is  $26.3258$  with the standard deviation of  $962.4055$ , the mean for NPM is  $-0.2825$  with the standard deviation of  $5.8190$ , the mean for ATO is  $0.9282$  with the standard deviation of  $0.8863$ , and the mean for LEV is  $0.1817$  with the standard deviation of  $91.2721$ .

#### 4.1.2. Model Summary

The Table of variables entered shows that there is no variable that is removed or in other word all the variables are included in the computation of regression, except the extreme data that was deleted.

Table 4.3 : Model Summary<sup>b</sup> for Sum21

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,155 <sup>a</sup>	,024	,017	,154395	,024	3,369	4	551	,010	1,916

a Predictors: (Constant), LEV, NPM, ATO, ROE

b Dependent Variable: SUM21

For sum21, the number of adjusted R square is  $0.017$ . This means that  $1.7\%$  of market adjusted return for the companies that were listed in Jakarta Stock Exchange from the year 2001-2003 (excluding the financial institutions) can be explained by the variables of ROE, NPM, ATO, and LEV. While the remaining  $98.3\%$  ( $100\% - 1.7\%$ ) can be explained by other factors.



**Table 4.4 : Model Summary<sup>b</sup> for Sum11**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,160 <sup>a</sup>	,026	,019	,1086174	,026	3,602	4	545	,007	1,988

a Predictors: (Constant), LEV, NPM, ATO, ROE

b Dependent Variable: SUM11

For sum11, the number of adjusted R square is 0.019. This means that 1.9% of market adjusted return for the companies that were listed in Jakarta Stock Exchange from the year 2001-2003 (excluded the financial institutions) can be explained by the variables of ROE, NPM, ATO, and LEV. While the remaining 98.1% (100% - 1.9%) can be explained by other factors.

#### 4.1.3. ANOVA and Coefficients

##### 4.1.3.1. For the Result of Sum21

From ANOVA table of F test (table 4.3), we find that F value is 3.369 with the significance level of 0.010. Because the probability (0.010) is smaller than 0.05, it can be said that the regression model can be used to predict the abnormal return. In this case, ROE, NPM, ATO, and LEV can have a positive influence (relationship) on market adjusted return.

Table 4.5 : Coefficients<sup>a</sup> for Sum21

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations			Collinearity Statistics		
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	-3,851E-02	,010		-3,963	,000					
	ROE	8,679E-07	,000	,005	,108	,914	-,007	,005	,005	,727	1,376
	NPM	3,931E-03	,001	,146	3,463	,001	,148	,146	,146	,996	1,004
	ATO	7,588E-03	,008	,041	,973	,331	,050	,041	,041	,976	1,025
	LEV	-2,399E-05	,000	-,014	-,286	,775	-,012	-,012	-,012	,740	1,352

a Dependent Variable: SUM21

Table 4.5 (Coefficient Table) shows us the equation derived from the equation (3.1):

$$MAR_{i,t} = \beta_0 + \beta_1 ROE_{i,t-1} + \beta_2 NPM_{i,t-1} + \beta_3 ATO_{i,t-1} + \beta_4 LEV_{i,t-1} + \varepsilon_{it} \dots (3.1)$$

Becomes

$$MAR = -0.03851 + 0.0000008679ROE + 0.003931NPM + 0.007588ATO - 0.00002.399LEV + \varepsilon_{it}$$

The results presented above equation [derived from equation (3.1)] shows that  $MAR_{i,t}$  or Market Adjusted Return of a stock at the year t is the function of Return on Equity at the year t-1, Net Profit Margin (NPM) at the year t-1, Asset Turnover (ATO) at the year t-1, and Financial Leverage (LEV) at the year t-1.

The explanation of each variable coefficient is as follows:

#### a. Constant

$\beta_0 = -0.03851$ , shows that there are other variables outside of the model used that affected market adjusted return beside ROE, NPM, ATO, and LEV

which affect market adjusted return as much as -0.03851. In other words, if ROE, NPM, ATO, and LEV are equal to zero (0), then the market adjusted return would be equal to -0.03851.

**b. Return on Equity (ROE)**

$\beta_1 = 0.0000008679$ , shows that there is a positive relationship between ROE and market adjusted return. It shows that a one percent (1%) increase in market adjusted return will make the ROE increase by 0.0000008679, and vice versa, assuming other variables remain constant.

**c. Net Profit Margin (NPM)**

$\beta_2 = 0.003931$ , shows that there is a positive relationship between NPM and market adjusted return. It shows that a one percent (1%) increase in market adjusted return will make the NPM increase by 0.003931, and vice versa, assuming other variables remain constant.

**d. Total Assets Turnover (ATO)**

$\beta_3 = 0.007588$ , shows that there is a positive relationship between ATO and market adjusted return. It shows that a one percent (1%) increase in market adjusted return will make the ATO increase by 0.007588, and vice versa, assuming other variables remain constant.

**e. Financial Leverage (LEV)**

$\beta_4 = -0.00002399$ , shows that there is a negative relationship between LEV and market adjusted return. It shows that a one percent (1%) increase in market adjusted return will make the ROE increase by -0.00002399, and vice versa, assuming other variables remain constant.

From the Table 4.5 (coefficients), we can also see that the standardized coefficients for beta ( $\beta$ ) of each component is different. ROE has standardized coefficients for beta of 0.005, NPM has standardized coefficients for beta of 0.146, ATO has standardized coefficients for beta of 0.041, and LEV has standardized coefficients for beta of  $-0.014$ . Thus it can be seen that the NPM has the significant role in the equation.

#### 4.1.3.2. For the Result of Sum11

From ANOVA table of F test (table 4.4), we find that F value is 3.602 with the significance level of 0.007. Because the probability (0.007) is less than 0.05, it can be conclude that the regression model can be used to predict the abnormal return. In this case, ROE, NPM, ATO, and LEV combine together can give a positive influence (relationship) to market adjusted return.

Table 4.6 : Coefficients<sup>a</sup> for Sum11

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-4,845E-02	,007		-7,148	,000					
	ROE	-4,784E-06	,000	-,042	-,847	,397	-,051	-,036	-,036	,728	1,374
	NPM	2,796E-03	,001	,148	3,504	,000	,150	,148	,148	,996	1,004
	ATO	3,204E-03	,005	,026	,606	,545	,041	,026	,026	,978	1,023
	LEV	-1,284E-05	,000	-,011	-,217	,828	-,032	-,009	-,009	,740	1,352

a Dependent Variable: SUM11

Table 4.6 shows us the equation derived from the equation (3.1):

$$MAR_{i,t} = \beta_0 + \beta_1 ROE_{i,t-1} + \beta_2 NPM_{i,t-1} + \beta_3 ATO_{i,t-1} + \beta_4 LEV_{i,t-1} + \varepsilon_{it} \dots (3.1)$$

Becomes

$$MAR = -0.04845 - 0.000004784ROE + 0.002796NPM + 0.003204ATO - 0.00001284LEV + \varepsilon_{it}$$

The results presented in the above equation derived from equation (3.1), shows that  $MAR_{i,t}$  or Market Adjusted Return of a stock at the year  $t$  is the function of Return on Equity at the year  $t-1$ , Net Profit Margin (NPM) at the year  $t-1$ , Asset Turnover (ATO) at the year  $t-1$ , and Financial Leverage (LEV) at the year  $t-1$ .

The explanation of each variable coefficient is as follows:

**a. Constant**

$\beta_0 = -0.04845$ , shows that there are other variables outside of the model used that affected market adjusted return beside ROE, NPM, ATO, and LEV; affecting market adjusted return as much as  $-0.04845$ . In other words, if ROE, NPM, ATO, and LEV were equal to zero (0), then the market adjusted return would be equal to  $-0.04845$ .

**b. Return on Equity (ROE)**

$\beta_1 = -0.000004784$ , shows that there is a negative relationship between ROE and market adjusted return. It shows that a one percent (1%) increase in market adjusted return will make the ROE decrease by  $-0.000004784$ , and vice versa, assuming other variables remain constant.

**c. Net Profit Margin (NPM)**

$\beta_2 = 0.002796$ , shows that there is a positive relationship between NPM and market adjusted return. It shows that a one percent (1%) increase in market adjusted return will make the NPM increase by 0.002796, and vice versa, assuming other variables remain constant.

**d. Total Assets Turnover (ATO)**

$\beta_3 = 0.003204$ , shows that there is a positive relationship between ATO and market adjusted return. It shows that a one percent (1%) increase in market adjusted return will make the ATO increase by 0.003204, and vice versa, assuming other variables remain constant.

**e. Financial Leverage (LEV)**

$\beta_4 = -0.00001284$ , shows that there is a negative relationship between LEV and market adjusted return. It shows that a one percent (1%) increase in market adjusted return will make the LEV increase by -0.00001284, and vice versa, assuming other variables remain constant

From the table of coefficient, we can also see that the standardized coefficients for beta ( $\beta$ ) of each component is different. ROE has standardized coefficients for beta of  $-0.042$ , NPM has standardized coefficients for beta of  $0.148$ , ATO has standardized coefficients for beta  $0.026$ , and LEV has standardized coefficients for beta of  $-0.011$ . Here we can see that the NPM has the significant role in the equation.

## 4.2. Discussions

From the hypothesis mentioned in chapter 3, we expect to see a positive relationship between ROE and its components and stock price. But in fact, not all components have a positive relationship to stock price as stated in the Jakarta Stock Exchange (presented by market adjusted return). This is possibly due to a number of other factors affecting the stock price at that time. This matter will be further discussed below.

### 4.2.1. For the Result of Sum21

From Table 4.8 (Coefficients for Sum21), we get the following result as follow:

$$\text{MAR} = -0.03851 + 0.0000008679\text{ROE} + 0.003931\text{NPM} + 0.007588\text{ATO} - 0.00002.399\text{LEV} + \varepsilon_{it}$$

The result that is presented in the above equation is derived from equation (3.1).

We can see from Table 4.3 in the adjusted R square of the analysis, that only 1.7% of the market adjusted return of the companies listed in the Jakarta Stock Exchange from the year 2001-2003 (excluding financial institutions) can be explained by the variables ROE, NPM, ATO, and LEV, while the other 98.3% can be explained by other factors. Though ROE and its components do influence the stock market, it is a small influence as showed by the percentage of 1.7%.

If we look at table 4.3, the Standard Error of Estimate for sum21 is 0.154395. This number is smaller than the standard deviation for sum21 in table 4.1 that is 0.155708. Though the difference is not significant, it means that

regression model is a better role indicator of the stock price than the mean of stock price itself.

From ANOVA test or F test in Table 4.3, it can be seen that F value is 3.369 with the significant level of 0.010. The probability (0.010) is less than 0.05, which means that regression model can be used to predict the abnormal return. In this case, ROE, NPM, ATO, and LEV combined together can affect the stock price. Further explanation, can be found in Table 4.5. ROE has the significant level of 0.914, NPM has the significant level of 0.001, ATO has the significant level of 0.331, and LEV has the significant level of 0.775. Thus, for the year 2001-2003, NPM had the most significant role in affecting stock price compared to other components (ROE, ATO, and LEV). NPM has the significant level of 0.001 which is less than 0.05, whereas the other components have the significant levels higher than 0.05, meaning that their affect on stock price during the years 2001-2003 was less significant.

#### 4.2.2. For the Result of Sum11

From Table 4.10 (Coefficients for Sum11), we get the result as follows:

$$\text{MAR} = -004845 - 0.000004784\text{ROE} + 0.002796\text{NPM} + 0.003204\text{ATO} - 0.00001284\text{LEV} + \varepsilon_{it}$$

The result presented in the above equation is derived from equation (3.1).

We can see from Table 4.4 in the adjusted R square of the analysis that only 1.9% of the Market Adjusted Return of the companies listed in the Jakarta Stock Exchange from the year 2001-2003 (excluding financial institutions) can be



explained by the variables of ROE, NPM, ATO, and LEV. ROE and its components influenced the stock market, although it is a minor influence, representing only 1.9%.

If we look at Table 4.4, the Standard Error of Estimate for sum11 is 0.1086174. This number is smaller than the standard deviation for sum11 in Table 4.2; which is 0.1096424. Although this difference is not significant, it means that regression model is a better indicator of stock price than the mean of stock price itself.

From ANOVA test or F test in Table 4.4, it shows that F value is 3.602 with the significant level of 0.007. The probability (0.007) is less than 0.05, which means that regression model can be used to predict the abnormal return. In this case, ROE, NPM, ATO, and LEV combined together can affect the stock price. Further explanation, can be found in Table 4.6. ROE has the significant level of 0.397, NPM has the significant level of 0.000, ATO has the significant level of 0.545, and LEV has the significant level of 0.828. Thus, for the year 2001-2003, NPM had the most significant role in affecting stock price compared to other components (ROE, ATO, and LEV). NPM had the significant level of 0.000 which is less than 0.05, whereas other components had the significant levels higher than 0.05, meaning that they were insignificant in affecting the stock price during the years 2001-2003.

#### **4.2.3. Analyzing Hypothesis**

From the explanation above, we can analyze the hypothesis as follow:

**a. Return on Equity**

$$H_{01} : \beta_1 \leq 0$$

There is no positive relationship between ROE and stock price in the Jakarta Stock Exchange.

$$H_{A1} : \beta_1 > 0$$

There is a positive relationship between ROE and stock price in the Jakarta Stock Exchange.

From table 4.5 and 4.6, we can see that the t-value for ROE on sum21 is 0.108 with the significant level of 0.914 and t-value for ROE on sum11 is -0.847 with the significant level of 0.397. From this result we found that ROE did not significantly affecting the stock price because both analyses showed us the significant level of t-value that is bigger than 0.05. It means that  $H_{01}$  is accepted, whereas  $H_{A1}$  is rejected. Thus, there is no positive relationship between ROE and stock price in the Jakarta Stock Exchange. In other words, it can be concluded that ROE is not a suitable tool for analyzing stock price in the Jakarta Stock Exchange from the year 2001-2003. This could be happen because of the inflation happened caused by the Indonesian economy that has not stable yet after hit by the crisis. Investors were not willing to have an investment in a certain stock because of the high risk that may be occurred. Part of the increase in ROE occurred because the economy was relatively strong for the number of years. Once the economy turns down, the average ROE will probably decline as well. Finally, high rates of return will attract new capital, rising capacity will lead to price-cutting, and eventually rates of return will fall to a level more consistent with "normal" profits.

### b. Net Profit Margin

$$H_{02} : \beta_2 \leq 0$$

There is no positive relationship between NPM and stock price in the Jakarta Stock Exchange.

$$H_{A2} : \beta_2 > 0$$

There is a positive relationship between NPM and stock price in the Jakarta Stock Exchange.

From table 4.5 and 4.6, we can see that the t-value for NPM on sum21 is 3.463 with the significant level of 0.001 and t-value for NPM on sum11 is 3.504 with the significant level of 0.000. This means that  $H_{02}$  is rejected, whereas  $H_{A2}$  is accepted. Thus, there is a positive relationship between NPM and stock price in the Jakarta Stock Exchange. In other words, it can be concluded that NPM is a suitable tool for analyzing stock price in the Jakarta Stock Exchange from the year 2001-2003.

### c. Total Assets Turnover

$$H_{03} : \beta_3 \leq 0$$

There is no positive relationship between ATO and stock price in the Jakarta Stock Exchange.

$$H_{A3} : \beta_3 > 0$$

There is a positive relationship between ATO and stock price in the Jakarta Stock Exchange.

From table 4.5 and 4.6, we can see that the t-value for ATO on sum21 is 0.973 with the significant level of 0.331 and t-value from ROE on sum11 is 0.606 with the significant level of 0.545. From this result we found that ATO did not significantly affecting the stock price because both analyses showed us the significant level of t-value that is bigger than 0.05. This means that  $H_{03}$  is accepted, whereas  $H_{A3}$  is rejected. Thus, there is no positive relationship between ATO and stock price in the Jakarta Stock Exchange. In other words, it can be concluded that ATO is not a suitable tool for analyzing stock price in the Jakarta Stock Exchange for the year 2001-2003. This might happen because of the recession in Indonesia for the last few years that made the economy is not stable. This bad condition makes many companies difficult to utilize their assets efficiently.

#### **d. Financial Leverage**

$$H_{04} : \beta_4 \leq 0$$

There is no positive relationship between LEV and stock price in the Jakarta Stock Exchange.

$$H_{A4} : \beta_4 > 0$$

There is a positive relationship between LEV and stock price in the Jakarta Stock Exchange.

From table 4.5 and 4.6, we can see that the t-value for LEV on sum21 is -0.286 with the significant level of 0.775 and t-value from LEV on sum11 is -0.217 with the significant level of 0.828. From this result we found that LEV did

not significantly affecting the stock price because both analyses showed us the significant level of t-value that is bigger than 0.05. This means that  $H_{04}$  is accepted, whereas  $H_{A4}$  is rejected. Thus, there is no positive relationship between LEV and stock price in the Jakarta Stock Exchange. In other words, it can be concluded that LEV is not suitable for analyzing stock price in the Jakarta Stock Exchange from the year 2001-2003. This might happened because of the Indonesian economy that is not stable after hit by the crisis. Firms with relatively high debt ratios have higher expected returns when the economy is normal, but they are exposed to risk of loss when the economy goes into a recession.

#### **4.3. Implications**

Both the results obtained from sum21 and sum11 show ROE and its components to have a low number of percentages of influencing the stock price during the years 2001-2003. These percentages resulting in the negative relationship occurred in several components. In sum21, a negative relationship occurred in financial leverage (LEV) with the  $\beta$  of -0.00002399, affecting each percent increase/decrease in stock price assuming other variables remain constant. While in sum11, there are two variables that have a negative relationship to the stock price. These two variables are Return on Equity (ROE) and Financial Leverage (LEV). The  $\beta$  for ROE is -0.000004784 and the  $\beta$  for LEV is -0.00001284, each affecting every percent increase/decrease in each component of the stock price.

## Chapter V

### Conclusions and Recommendations

#### 5.1. Conclusions

From the research findings and discussions in the previous chapter, this research can be concluded as follows:

1. ROE and its components did influence the market reaction - represented by the stock price around yearly earning announcement. The regression analysis on the previous chapter shows us that the role of ROE and its components did not significantly influencing the stock market. Rather, they only affected about 1.7-1.9% and the remaining 98.1-98.3% could have been affected by the other factors, such as the condition of Indonesian economy that is not stable yet after hit by the crisis.
2. From the regression analysis, we found that NPM is the dominant component of ROE in affecting stock price. ROE itself and the other components (ATO and LEV) also influenced the stock price, although it is not as much as NPM did. LEV did not have a positive relationship with the stock price around the yearly earning announcement for the companies listed in the Jakarta Stock Exchange for the years of 2001-2003.
3. ROE can also be influenced by other components in the independent variables (NPM, ATO, and LEV) as stated in the Du Pont decomposition that ROE is decomposed into Net Profit Margin (NPM), Total Assets Turnover (ATO), and Financial Leverage (LEV). That is why ROE might give a different role in

affecting the stock price. We expect to get higher abnormal return when we have higher ROE. In order to have higher ROE, we should also consider the components of ROE itself; they are NPM, ATO, and LEV.

4. The role of ROE and its components depend on the value of each other s. We find that NPM is the most dominant component, low (high) NPM yielding a negative (positive) abnormal return, regardless of the value of the other components. In addition, an increase in NPM leads to a stronger effect on market reaction when other components (ROE, ATO, and LEV) are relatively high. Further, increases in other components (ROE, ATO, and LEV) do not lead to an increase in the abnormal return when NPM is relatively low.

Ratio analysis has limitations, but used with care and judgment, it can be very helpful.

## **5.2. Recommendations**

There are so many companies listed in the Jakarta Stock Exchange that need to be gathered, in order to have enough data in supporting the calculation of ROE and its components. It is best to download the data from websites such as [www.e-bursa.com](http://www.e-bursa.com) since not all of the information mentioned in the annual report is needed in order to calculate ROE and its components.

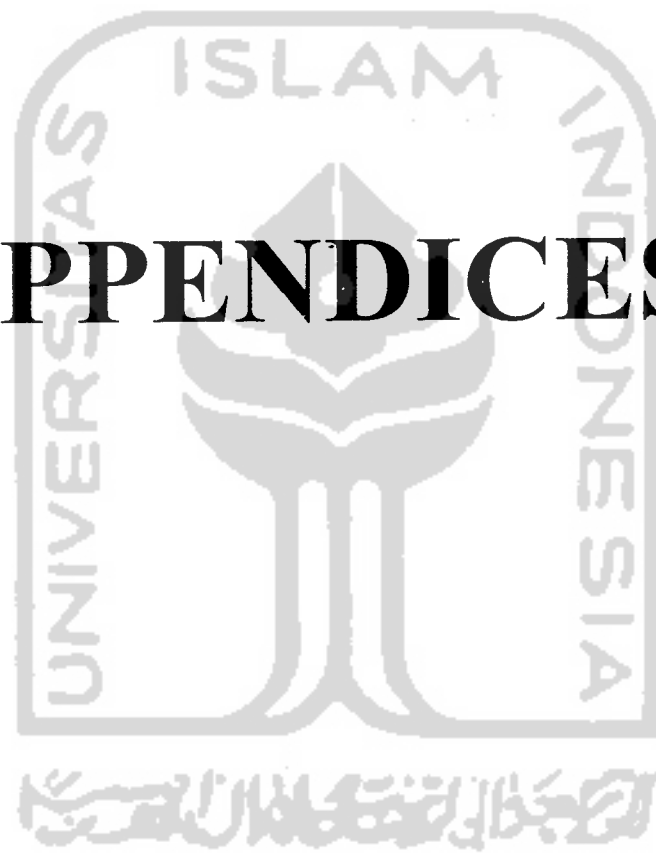
If future researchers have more range of days for observation it would be much better. Some dates that cannot be obtained from the Jakarta Stock Exchange, could be obtained from news papers that announced the issuance dates of some companies listed in the Jakarta Stock Exchange.

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# APPENDICES



**Appendix 1.**  
**List of Annual Report Issuance date**  
**Companies Listed in the Jakarta Stock Exchange**  
**Year 2002**

Code	Date	Code	Date	Code	Date
AALI	25/04/2002	CNTX	27/06/2002	INAI	30/04/2002
ACAP	25/04/2002	CPIN	30/04/2002	INCI	30/04/2002
ADES	30/04/2002	CPPR	30/04/2002	INCO	01/04/2002
AISA	24/06/2002	CTBN	26/04/2002	INDF	29/04/2002
AKPI	30/04/2002	CTRA	30/04/2002	INDR	30/04/2002
AKRA	30/04/2002	CTRS	30/04/2002	INDS	29/04/2002
ALDI	30/04/2002	CTTH	26/04/2002	INTD	24/04/2002
ALFA	24/04/2002	DART	04/06/2002	INTP	26/04/2002
ALKA	01/05/2002	DAVO	18/04/2002	ISAT	30/04/2002
ALMI	25/04/2002	DILD	30/04/2002	JECC	17/04/2002
AMFG	26/04/2002	DLTA	30/04/2002	JIHD	25/03/2002
ANTM	09/04/2002	DNET	25/04/2002	JKSW	30/04/2002
APLI	29/04/2002	DNKS	23/04/2002	JPRS	29/04/2002
AQUA	23/04/2002	DPNS	26/04/2002	JRPT	30/04/2002
ARNA	03/04/2002	DSFI	26/04/2002	JSPT	30/04/2002
ASGR	19/04/2002	DSUC	30/04/2002	KAEF	26/04/2002
ASII	30/04/2002	DUTI	30/04/2002	KARK	03/05/2002
AUTO	29/04/2002	DVLA	17/04/2002	KARW	01/05/2002
BASS	02/04/2002	DYNA	30/04/2002	KBLI	30/04/2004
BATA	26/04/2002	EKAD	30/04/2002	KBLM	30/04/2002
BATI	25/04/2002	ERTX	26/04/2002	KDSI	30/04/2002
BAYU	30/04/2002	ESTI	24/04/2002	KIAS	30/04/2002
BIMA	30/04/2002	ETWA	06/06/2002	KICI	29/04/2002
BIPP	09/07/2002	FAST	30/04/2002	KIJA	04/05/2002
BKSL	25/04/2002	FASW	01/04/2002	KKGI	30/04/2002
BLTA	30/04/2002	FMI	03/04/2002	KLBF	29/04/2002
BMSR	30/04/2002	GDWU	30/04/2002	LAPD	29/04/2002
BMTR	15/04/2002	GDYR	25/04/2002	LION	30/04/2002
BRAM	01/05/2002	GGRM	28/03/2002	LMPI	29/04/2002
BRNA	06/05/2002	GMTD	01/05/2002	LMSH	30/04/2002
BRPT	23/05/2002	GRIV	14/05/2002	LPCK	29/04/2002
BTON	29/04/2002	HDTX	30/04/2002	LPIN	10/05/2002
BUDI	30/04/2002	HEXA	25/04/2002	LPKR	24/04/2002
BUMI	15/05/2002	HMSP	22/04/2002	LSIP	31/05/2002
CEKA	30/04/2002	IATG	24/04/2002	LTLS	30/04/2002
CKRA	30/04/2002	IDSR	29/04/2002	MBAI	28/06/2002
CMPP	30/04/2002	IGAR	30/04/2002	MDLN	30/04/2002
CNKO	26/04/2002	IKAI	30/04/2002	MDRN	30/04/2002
		IMAS	03/05/2002	MEDC	29/04/2002
		INAF	11/04/2002	MERK	05/04/2002

META	01/05/2002
MIRA	29/04/2002
MLBI	08/04/2002
MLIA	29/04/2002
MLND	30/04/2002
MLPL	30/04/2002
MPPA	01/05/2002
MRAT	14/05/2002
MTDL	22/05/2002
MTSM	30/04/2002
NIPS	29/04/2002
PBRX	26/04/2002
PICO	30/04/2002
PLAS	29/04/2004
PLIN	30/04/2002
PNSE	09/04/2002
POLY	10/05/2002
PRAS	29/04/2002
PSDN	30/04/2004
PTRO	24/04/2002
PUDP	29/04/2002
PWON	26/04/2002
PWSI	27/03/2002
PYFA	26/04/2002
RALS	25/04/2002
RDTX	30/04/2002
RICY	30/04/2002
RIGS	25/04/2002
RIMO	30/04/2002
RMBA	30/04/2002
RYAN	30/04/2002
SAFE	03/05/2002
SAIP	04/04/2002
SCCO	30/04/2002
SCPI	23/04/2002
SHDA	26/04/2002
SHID	23/04/2002
SHSA	30/04/2002
SIIP	30/04/2002
SIMA	22/05/2002
SIMM	30/04/2002
SIPD	30/04/2002
SKLT	30/04/2002
SMAR	30/04/2002
SMCB	01/04/2002
SMDM	27/03/2002
SMDR	30/04/2002
SMGR	24/04/2002

SMPL	30/04/2002
SMRA	03/05/2002
SMSM	25/04/2002
SOBI	15/05/2002
SONA	09/04/2002
SPMA	09/04/2002
SRSN	30/04/2002
SSIA	30/04/2002
STTP	02/05/2002
SUBA	30/04/2002
SUDI	30/04/2002
SULI	29/04/2002
TBLA	30/04/2002
TBMS	30/04/2002
TEJA	10/05/2002
TFCO	23/04/2002
TGKA	18/04/2002
TIRA	30/04/2002
TIRT	30/04/2002
TKGA	02/05/2002
TKIM	10/07/2002
TLKM	25/04/2002
TMPI	06/05/2002
TOTO	03/05/2002
TRPK	30/04/2002
TRST	30/04/2002
TSPC	29/04/2002
TURI	30/04/2002
UGAR	22/05/2002
UNIC	17/04/2002
UNSP	30/04/2002
UNTR	30/04/2002
UNVR	29/04/2002
ZBRA	30/04/2002

**Appendix 2.**  
**List of Annual Report Issuance Date**  
**Companies Listed in the Jakarta Stock Exchange**  
**Year 2003**

Code	A/R Date
AALI	27/03/2003
ACAP	31/03/2003
ADES	31/03/2003
AISA	29/04/2003
AKPI	04/04/2003
AKRA	31/03/2003
ALDI	31/03/2003
ALFA	28/03/2003
ALKA	31/03/2003
ALMI	31/03/2003
AMFG	27/03/2003
ANTA	01/04/2003
ANTM	31/03/2003
APLI	24/03/2003
AQUA	26/03/2003
ARGO	31/03/2003
ARNA	28/03/2003
ASGR	27/03/2003
ASII	28/03/2003
AUTO	21/03/2003
BASS	31/03/2003
BATA	31/03/2003
BATI	19/03/2003
BAYU	31/03/2003
BIMA	25/04/2003
BIPP	31/03/2003
BKSL	31/03/2003
BLTA	31/03/2003
BMSR	31/03/2003
BMTR	28/03/2003
BRAM	31/03/2003
BRNA	03/04/2003
BRPT	06/05/2003
BTON	31/03/2003
BUDI	31/03/2003
BUMI	31/03/2003
CKRA	31/03/2003
CLPI	27/03/2003

CMNP	31/03/2003
CMPP	01/05/2003
CNKO	31/03/2003
CNTX	31/03/2003
CPIN	31/03/2003
CPPR	31/03/2003
CTBN	31/03/2003
CTRA	03/04/2003
CTRS	03/04/2003
CTTH	01/04/2003
DART	31/03/2003
DAVO	27/03/2003
DILD	31/03/2003
DLTA	31/03/2003
DNET	28/03/2003
DNKS	31/03/2003
DPNS	28/03/2003
DSFI	31/03/2003
DSUC	31/03/2003
DUTI	31/03/2003
DVLA	27/03/2003
DYNA	31/03/2003
EKAD	31/03/2003
ERTX	31/03/2003
ESTI	31/03/2003
ETWA	31/03/2003
FAST	31/03/2003
FASW	27/03/2003
FMII	31/03/2003
GDWU	09/04/2003
GDYR	31/03/2003
GGRM	28/03/2003
GMTD	31/03/2003
GRIV	31/03/2003
HDTX	31/03/2003
HEXA	31/03/2003
HMSP	31/03/2003
IATG	31/03/2003
IDSR	30/04/2003
IGAR	31/03/2003

IKAI	31/03/2003
IMAS	31/03/2003
INAF	31/03/2003
INAI	31/03/2003
INCI	31/03/2003
INCO	18/03/2003
INDF	31/03/2003
INDR	31/03/2003
INDS	31/03/2003
INTA	31/03/2003
INTD	31/03/2003
INTP	24/03/2003
ISAT	31/03/2003
JECC	28/03/2003
JIHD	31/03/2003
JKSW	31/03/2003
JPRS	31/03/2003
JRPT	31/03/2003
JSPT	31/03/2003
KAEF	04/04/2003
KARK	03/04/2003
KARW	31/03/2003
KBLI	31/03/2003
KBLM	31/03/2003
KDSI	31/03/2003
KIAS	31/03/2003
KICI	31/03/2003
KIJA	31/03/2003
KKGI	31/03/2003
KLBF	31/03/2003
LAPD	31/03/2003
LION	31/03/2003
LMAS	31/03/2003
LMPI	31/03/2003
LMSH	31/03/2003
LPCK	31/03/2002
LPIN	31/03/2003
LPKR	31/03/2002
LSIP	04/04/2003
LTLS	31/03/2003

MBAI	10/04/2003
MDLN	31/03/2003
MDRN	22/04/2003
MEDC	08/04/2003
MERK	31/03/2003
META	31/03/2003
MIRA	31/03/2003
MLBI	28/03/2003
MLIA	28/03/2003
MLND	31/03/2003
MLPL	08/05/2003
MPPA	31/03/2003
MRAT	31/03/2003
MTDL	01/04/2003
MTSM	01/04/2003
NIPS	31/03/2003
PBRX	27/03/2003
PICO	31/03/2003
PLAS	31/03/2003
PLIN	28/03/2003
PNSE	31/03/2003
POLY	17/04/2003
PRAS	28/03/2003
PSDN	31/03/2003
PTRO	31/03/2003
PUDP	31/03/2003
PWON	31/03/2003
PWSI	31/03/2003
PYFA	24/03/2003
RALS	31/03/2003
RBMS	31/03/2003
RDTX	31/03/2003
RICY	31/03/2003
RIGS	31/03/2003
RIMO	31/03/2003
RYAN	31/03/2003
SAFE	31/03/2003
SAIP	31/03/2003
SCCO	31/03/2003
SCPI	26/03/2003
SHDA	31/03/2003
SHID	31/03/2003
SHSA	31/03/2003
SIIP	31/03/2003
SIMA	31/03/2003
SIMM	31/03/2003
SIPD	31/03/2003
SKLT	07/04/2003

SMAR	01/04/2003
SMCB	13/03/2003
SMDM	16/04/2003
SMDR	03/04/2003
SMGR	12/05/2003
SMPL	31/03/2003
SMRA	31/03/2003
SMSM	31/03/2003
SOBI	31/03/2003
SONA	31/03/2003
SPMA	31/03/2003
SRSN	31/03/2003
SSIA	31/03/2003
STTP	31/03/2003
SUBA	31/03/2003
SUDI	02/05/2003
SULI	16/04/2003
TBLA	31/03/2003
TBMS	31/03/2003
TCID	10/03/2003
TEJA	31/03/2003
TFCO	28/03/2003
TGKA	31/03/2003
TINS	31/03/2003
TIRA	31/03/2003
TIRT	31/03/2003
TKGA	31/03/2003
TKIM	25/04/2003
TLKM	01/04/2003
TMPI	01/04/2003
TOTO	09/04/2003
TRPK	31/03/2003
TRST	31/03/2003
TSPC	31/03/2003
TURI	26/03/2003
UGAR	31/03/2003
UNIC	31/03/2003
UNSP	31/03/2003
UNTR	28/03/2003
UNVR	31/03/2003
ZBRA	31/03/2003

**Appendix 3.**  
**List of Annual Report Dates**  
**Companies Listed in the Jakarta Stock Exchange**  
**Year 2004**

Code	A/R Date
AALI	24/04/2004
ACAP	24/04/2004
ADES	24/04/2004
AISA	24/04/2004
AKPI	20/06/2004
AKRA	06/03/2004
ALDI	24/04/2004
ALFA	24/04/2004
ALKA	24/04/2004
ALMI	24/04/2004
AMFG	24/04/2004
ANTA	24/04/2004
ANTM	24/04/2004
AQIJA	24/04/2004
ARGO	24/04/2004
ARNA	24/04/2004
ASGR	24/04/2004
ASII	24/04/2004
AUTO	24/04/2004
BASS	20/06/2004
BATA	24/04/2004
BATI	24/04/2004
BAYU	24/03/2004
BIMA	20/06/2004
BIPP	07/08/2004
BKSL	20/06/2004
BLTA	20/06/2004
BMSR	24/04/2004
BMTR	24/04/2004
BRAM	06/03/2004
BRNA	24/04/2004
BRPT	24/04/2004
BTON	24/04/2004
BUDI	24/04/2004
BUMI	07/08/2004
CEKA	24/04/2004
CKRA	24/04/2004
CLPI	24/04/2004

CMNP	24/04/2004
CMPP	20/06/2004
CNKO	24/04/2004
CPIN	24/04/2004
CPPR	24/04/2004
CTBN	24/04/2004
CTRA	24/04/2004
CTRS	24/04/2004
CTTH	24/04/2004
DART	20/06/2004
DAVO	24/04/2004
DILD	24/04/2004
DNET	24/04/2004
DNKS	24/04/2004
DPNS	24/04/2004
DSFI	24/04/2004
DSUC	24/04/2004
DUTI	24/04/2004
DVLA	24/04/2004
DYNA	24/04/2004
EKAD	24/04/2004
ERTX	24/04/2004
ESTI	24/04/2004
ETWA	24/04/2004
FAST	24/04/2004
FASW	24/04/2004
GDWU	20/06/2004
GDYR	20/06/2004
GGRM	24/04/2004
GMTD	24/04/2004
GRIV	24/04/2004
HDTX	24/04/2004
HERO	06/04/2004
HEXA	24/04/2004
HMSP	24/04/2004
IATG	24/04/2004
IDSR	24/04/2004
IGAR	24/04/2004
IKAI	24/04/2004
IMAS	20/06/2004

INAF	24/04/2004
INAI	24/04/2004
INCI	24/04/2004
INCO	24/04/2004
INDF	24/04/2004
INDR	24/04/2004
INDS	24/04/2004
INKP	20/06/2004
INTA	24/04/2004
INTD	24/04/2004
INTP	24/04/2004
ISAT	24/04/2004
JECC	24/04/2004
JHHD	24/04/2004
JKSW	24/04/2004
JPRS	20/06/2004
JRPT	24/04/2004
JSPT	24/04/2004
KAEF	24/04/2004
KARK	20/06/2004
KARW	24/04/2004
KBLI	24/04/2004
KBLM	24/04/2004
KDSI	20/06/2004
KIAS	24/04/2004
KICI	24/04/2004
KIJA	24/04/2004
KKGI	24/04/2004
KLBF	24/04/2004
LION	24/04/2004
LMAS	24/04/2004
LMPI	24/04/2004
LMSH	24/04/2004
LPCK	24/04/2004
LPIN	24/04/2004
LPKR	24/04/2004
LSIP	24/04/2004
LTLS	24/04/2004
MBAI	24/04/2004
MDLN	20/06/2004

MDRN	20/06/2004
MEDC	24/04/2004
MERK	24/04/2004
META	24/04/2004
MIRA	24/04/2004
MLBI	24/04/2004
MLIA	24/04/2004
MLND	24/04/2004
MLPL	24/04/2004
MPPA	24/04/2004
MRAT	20/06/2004
MTDL	24/04/2004
MTSM	24/04/2004
NIPS	24/04/2004
PBRX	24/04/2004
PICO	24/04/2004
PLAS	24/04/2004
PLIN	24/04/2004
PNSE	24/04/2004
POLY	24/04/2004
PRAS	24/04/2004
PSDN	24/04/2004
PTRO	24/04/2004
PUDP	24/04/2004
PWON	24/04/2004
PWSI	24/04/2004
PYFA	24/04/2004
RALS	24/04/2004
RBMS	24/04/2004
RDTX	20/06/2004
RICY	24/04/2004
RIGS	24/04/2004
RIMO	24/04/2004
RYAN	24/04/2004
SAFE	24/04/2004
SAIP	20/06/2004
SCCO	24/04/2004
SCPI	24/04/2004
SHDA	20/06/2004
SHID	24/04/2004
SHSA	20/06/2004
SIIP	20/06/2004
SIMA	07/08/2004
SIMM	24/04/2004
SIPD	24/04/2004
SKLT	05/10/2004
SMAR	20/06/2004
SMCB	24/03/2004

SMDM	20/06/2004
SMDR	24/04/2004
SMPL	20/06/2004
SMRA	20/06/2004
SMSM	20/06/2004
SOBI	06/03/2004
SONA	24/04/2004
SPMA	24/04/2004
SRSN	24/04/2004
SSIA	20/06/2004
STTP	24/04/2004
SUBA	24/04/2004
SUDI	20/06/2004
SULI	24/04/2004
TBLA	24/04/2004
TBMS	24/04/2004
TCID	24/04/2004
TEJA	24/04/2004
TFCO	24/04/2004
TGKA	24/04/2004
TINS	24/04/2004
TIRA	24/04/2004
TIRT	20/06/2004
TKGA	24/04/2004
TKIM	20/06/2004
TLKM	10/07/2004
TMPI	24/04/2004
TOTO	24/04/2004
TRPK	24/04/2004
TSPC	24/04/2004
TURI	24/04/2004
UGAR	24/04/2004
UNIC	24/04/2004
UNSP	20/06/2004
UNTR	22/06/2004
UNVR	23/04/2004
ZBRA	20/06/2004

**Appendix 4.**  
**List of ROE and Its Components**  
**Companies Listed in the Jakarta Stock Exchange**  
**Year 2001**

Code	Companies	ROE	NPM	ATO	LEV
AALI	Astra Argo Lestari	5.88	0.04	0.59	2.3
ACAP	Andi Chandra Automotive Products	12.83	0.1	1.12	1.13
ADES	Ades Alfindo Putrasetia	-12.88	-0.08	0.59	2.61
AISA	Asia Intiselera	27.27	-0.71	0.51	-0.76
AKPI	Argha Karya Prima Industri	31.35	-0.19	0.52	-3.12
AKRA	Aneka Kimia Raya	297.14	0.78	2.33	1.63
ALDI	Alter Abadi	95.84	-6.95	0.08	-1.81
ALFA	Alfa Retailindo	9.1	0.01	4.59	2.03
ALKA	Alakasa Industrindo	28.02	-0.11	3.07	-0.86
ALMI	Alumindo Light Metal Industry	9.3	0.03	1.1	2.91
AMFG	Asahimas Flat Glass	23.41	0.1	0.68	3.35
ANTM	Aneka Tambang	18.66	0.21	0.68	1.33
APIC	Artha Pacific Securities	4.7	0.61	0.06	1.32
AQUA	Aqua Golden Misissippi	29.12	0.06	1.55	3.11
ARNA	Arwana Citramulia	16.06	0.09	0.52	3.33
ASGR	Astra Graphia	10.93	0.04	1.72	1.7
ASII	Astra Internasional	32.9	0.03	1.13	10.35
AUTO	Astra Otoparts	30.83	0.12	1.19	2.13
BASS	Bahtera Adimina Samudra	13	0.17	0.38	1.94
BATA	Sepatu Bata	44.78	0.16	1.83	1.57
BATI	BAT Indonesia	28.13	0.16	0.98	1.81
BAYU	Bayu Buana	23.67	0.02	3.39	3.03
BIMA	Primarindo Asia Infrastructur	67.85	-0.09	1.97	-3.88
BIPP	Bhuwanatala Indah Permai	65.09	-0.83	0.12	-6.68
BKSL	Bukit Sentul	0.11	0.01	0.12	1.5
BLTA	Berlian Laju Tanker	10.43	0.13	0.27	3.04
BMSR	Bintang Mitra Semesta Raya	4.16	2.34	0.01	1.24
BMTR	Bimantara Citra	24.54	0.21	0.37	3.2
BRAM	Branta Mulia	14.94	0.05	0.74	3.8
BRNA	Berlina	32.14	0.17	1	1.88
BRPT	Barito Pacific Timber	134.54	-0.94	0.25	-5.81
BTON	Betonjaya Manunggal	6.22	0.07	0.56	1.66
BUDI	Budi Acid Jaya	-12.7	-0.02	0.82	7.53
BUMI	Bumi Resources	14.32	0.15	0.13	7.59
CEKA	Cahaya Kalbar	-2.21	-0.03	0.49	1.4
CKRA	Ciptojaya Kontrindoreksa	0.21	0.04	0.04	1.07
CMNP	Citra Marga Nusapala Persada	-108.66	-1.17	0.26	3.55
CNKO	Central Korporindo Internasional	0.2	0.01	0.23	1.04
CNTX	Centex	10.4	0.07	1.06	1.49



CPIN	Charoen Phokphan Indonesia	15,45	0,03	1,72	2,63
CPPR	Central Proteina Prima	39,46	0,01	1,46	39,3
CTBN	Citra Tubindo	2,57	0,04	0,57	1,14
CTRA	Ciputra Development	57,77	-1,79	0,07	-4,92
CTRS	Ciputra Surya	2,02	0,13	0,08	1,8
CTTH	Citatah Industri Marmor	92,84	-1,33	0,38	-1,83
DART	Duta Anggada Realty	4,49	-0,28	0,14	-1,16
DAVO	Davomas Abadi	1,32	0,01	0,66	1,64
DILD	Dharmala Intiland	87,74	-0,43	0,12	-16,64
DLTA	Delta Djakarta	17,38	0,15	0,88	1,35
DNET	Diviacom Intrabumi	-26,99	-0,65	0,34	1,22
DNKS	Dankos Laboratories	29,3	0,08	1,34	2,82
DPNS	Duta Pertiwi Nusantara	9,78	0,14	0,6	1,19
DSFI	Dharma Samudra Fishing Industries	11,87	0,07	1,13	1,57
DSUC	Daya Sakti Unggul Corporation	-44,12	-0,06	1,55	4,73
DUTI	Duta Pertiwi	3,32	0,03	0,32	2,98
DVLA	Darya Varia Laboratories	-1,12	0	1,7	1,84
DYNA	Dynaplast	13,2	0,09	0,8	1,91
EKAD	Ekadharna Tape Industry	12,85	0,07	1,35	1,28
ERTX	Eratex Djaya Limited	9,4	0,01	1,09	6,57
ESTI	Ever Shine Textile Industry	7,68	0,06	0,71	1,89
ETWA	Eterindo Wahanatama	92,37	-0,24	0,37	-10,25
FAST	Fast Food Indonesia	24,9	0,04	2,82	2,02
FASW	Fajar Surya Wisesa	21,79	0,15	0,42	3,37
FMII	Fortune Mate Indonesia	3,59	0,02	1,67	1,13
GDWU	Kasogi International	17,85	-1,21	0,47	-0,31
GDYR	Goodyear Indonesia	4,53	0,02	1,52	1,51
GGRM	Gudang Garam	25,46	0,12	1,34	1,64
GMTD	Gowa Makasar Tourism Development	9,42	0,08	0,31	3,64
GRIV	Great River International	74,7	-0,58	0,52	-2,48
HDTX	Panasia Indosyntec	-24,59	-0,03	1,95	4
HEXA	Hexindo Adiperkasa	28,09	0,09	0,86	3,7
HMSP	HM Sampoerna	22,96	0,07	1,49	2,28
IATG	Infoasia Teknologi Global	2,38	0,02	0,78	1,27
IDSR	Indosiar Visual Mandiri	69,71	0,38	0,87	2,11
IGAR	Kageo Igar Jaya	7,65	0,02	1,32	2,39
IKAI	Inti Keramik Alamasri Industri	22,41	-0,19	0,2	-6,04
IMAS	Indomobil Sukses Internasional	8,08	-0,01	2,9	-4,04
INAF	Indofarma	23,99	0,2	0,76	1,59
INAI	Indal Aluminium Industry	1,38	0	1,31	2,72
INCI	Intan Wijaya Chemical	15,81	0,22	0,62	1,16
INCO	International Nickel Ind.	1,26	0,03	0,24	1,67
INDF	Indofood Sukses Makmur	20,96	0,05	1,13	3,64
INDR	Indorama Syntetics	-15,82	-0,11	0,58	2,46
INDS	Indospring	16,87	0,03	0,69	7,4
INTD	Inter Delta	-9,06	0,04	1,78	-1,21
INTP	Indocement Tunggul Prakarsa	-2,28	-0,02	0,29	4,32
ISAT	Indosat	13,53	0,28	0,23	2,08

JECC	Jembo Cable Company	1,67	0	0,97	4,95
JHHD	Jakarta International Hotel & Dev.	26,54	2,08	0,03	5,01
JKSW	Jakarta Kyoei Steel Works	13,29	-1,69	0,07	-1,21
JFRS	Jaya Pari Steel Corp.	19,22	0,1	1,01	1,82
JRPT	Jaya Real Property	2,03	0,09	0,11	2,03
JSPT	Jakarta Setiabudi Internasional	19,94	-0,19	0,37	-2,81
KAEF	Kimia Farma	14,2	0,07	1,22	1,64
KARK	Karka Yasa Profilia	4,79	0,2	0,22	1,09
KARW	Karwell Indonesia	-88,48	-0,08	1,7	6,68
KBLI	GT Kabel Indonesia	32,98	-0,77	0,35	-1,21
KBLM	Kabelindo Murni	-32	-1,14	0,23	1,2
KDSI	Kedaung Setia Industrial	-13,92	-0,04	1,06	3,23
KIAS	Keramika Indonesia Asosiasi	21,44	-1,38	0,16	-0,96
KICI	Kedaung Indah Can	6,51	0,07	0,54	1,63
KIJA	Kawasan Industri Jababeka	-0,9	0,06	0,11	-1,4
KKGI	Kurnia Kapuas Utama	3,32	0,03	0,66	1,97
KLBF	Kalbe Farma	14,8	0,02	1,09	8,5
LAPD	Lapindo International	5,02	0,05	0,64	1,45
LION	Lion Metal Works	13,68	0,18	0,67	1,17
LMPI	Langgeng Makmur Plastic	-9,88	-0,03	0,4	7,42
LMSH	Lion Mesh Prima	9,82	0,02	1,29	4,02
LPCK	Lippo Cikarang	16,94	0,71	0,11	2,09
LPIN	Multi Prima Sejahtera	78,68	0,27	0,57	4,99
LPKR	Lippo Karawaci	38,65	0,22	0,18	10,16
LSIP	PP London Sumatra	25,09	-0,3	0,42	-1,96
LTLS	Lautan Luas	12,56	0,05	1,36	1,96
MBAI	Multibreeder Adirama	17,47	-0,12	0,59	-2,4
MDLN	Modernland Realty	76,04	-2,78	0,03	-9,74
MDRN	Modern Photo Film Company	0,77	0	2	4,82
MEDC	Medco Energi International	17,61	0,2	0,7	1,24
MERK	Merck Indonesia	44,24	0,25	1,38	1,28
META	Metamedia Technologies	-31,82	-0,48	0,61	1,07
MIRA	Mitra Rajasa	4,66	0,02	0,77	3,72
MLBI	Multi Bintang Indonesia	195,23	1	1,1	1,77
MLIA	Mulia Industrindo	32,56	-0,21	0,47	-3,33
MLND	Mulialand	110,42	-0,31	0,23	-15,4
MLPL	Multipolar	15,38	0,27	0,36	1,57
MPPA	Matahari Putra Prima	5,92	0,02	1,99	1,6
MRAT	Mustika Ratu	14,6	0,16	0,77	1,18
MTDL	Metrodata Electronic	39,08	0,09	2,12	1,97
MTSM	Metro Supermarket Realty	12	0,1	0,46	2,67
NIPS	Nipress	-78,04	-0,03	0,91	26,65
PBRX	Pan Brothers Tex	29,62	0,06	1,82	2,59
PICO	Pelangi Indah Canindo	-0,7	0,01	0,53	-1,56
PLAS	Palm Asia Corpora	7,27	0,04	1,32	1,32
PLIN	Plaza Indonesia Realty	2,77	0,07	0,15	2,51
PNSE	Pudjiadi & Son Estate	-6,62	-0,04	0,37	4,67
POLY	Polysindo Eka Perkasa	-3,84	0,08	0,42	-1,18

PRAS	Prima Alloy Steel	3,61	0,01	0,34	19,34
PSDN	Prasidha Aneka Niaga	23,03	-0,75	0,69	-0,45
PTRO	Petrosea	21,71	0,14	1,26	1,27
PUDP	Pudjadi Prestige Limited	10,91	0,32	0,15	2,3
PWON	Pakuwon Jati	33,72	-1,91	0,1	-1,75
PWSI	Panca Wiratama Sakti	17,48	-133,42	0	-2,71
PYFA	Prydam Farma	7,76	0,16	0,38	1,27
RALS	Ramayana Lestari Sentosa	27,23	0,11	1,29	1,9
RDTX	Roda Vivatex	2,65	0,03	1,69	0,49
RICY	Ricky Putra Globalindo	-294,84	-0,16	0,94	20,22
RIGS	Rigs Tender	22,46	0,43	0,5	1,04
RIMO	Rimo Catur Lestari	4,32	0,03	1,09	1,55
RMBA	Bentoel International Investama	23,74	0,06	1,94	2,01
RYAN	Ryane Adibusana	9,41	0,14	0,61	1,13
SAFE	Steady Safe	1,94	-1,15	0,07	-0,23
SAIP	Surabaya Agung Industry Pulp	51,32	-1,1	0,24	-1,97
SCCO	Sucaco	6,77	0,02	1,35	2,41
SCPI	Shering Plought Indonesia	-227,68	-0,09	1,63	14,71
SHDA	Sari Husada	33,06	0,24	1,17	1,17
SHID	Hotel Sahid Jaya	-96,02	-0,99	0,09	10,33
SHSA	Surya Hidup Satwa	42,23	0,02	1,55	17,94
SIIP	Surya Inti Permata	-1,6	-1,42	0,01	1,32
SIMA	Siwani Makmur	4,63	0,04	0,97	1,19
SIMM	Surya Intrindo Makmur	3,84	0,02	0,83	2,11
SIPD	Sierad Poduce	-775,96	-0,23	0,99	33,91
SKLT	Sekar Laut	19,93	-0,44	1,37	-0,33
SMAR	SMART	100,15	-0,26	0,59	-6,5
SMCB	Semen Cibinong	20242,26	0,64	0,3	1038,98
SMDM	Surya Mas Duta Makmur	6,55	-0,72	0,01	-6,42
SMDR	Samudra Indonesia	8,91	0,03	1,39	2,48
SMGR	Semen Gresik	10,04	0,07	0,53	2,77
SMPL	Sumitplast Interbenua	7,76	0,06	0,73	1,81
SMRA	Sumarecon Agung	59,23	0,75	0,4	2
SMSM	Selamat Sempurna	16,5	0,1	1	1,71
SOBI	Sorini Corporation	404,56	1,68	0,89	2,71
SONA	Sona Topas Tourism Industry	6,6	0,02	0,78	3,81
SPMA	Suparma	-22,73	-0,13	0,44	3,88
SRSN	Sarasa Nugraha	15,55	0,05	1,76	1,91
SSIA	Surya Semesta Internusa	-30,23	-0,23	0,24	5,33
STTP	Siantar TOP	9,32	0,04	1,28	1,69
SUBA	Suba Indah	0,76	0,03	0,19	1,41
SUDI	Surya Dumai Industri	51,21	-0,55	0,34	-2,73
SULI	Sumalindo Lestari Jaya	262,83	-0,4	0,55	-12
TBLA	Tunas Baru Lampung	-1,8	-0,01	0,66	2,33
TBMS	Tembaga Mulia Semanan	21,67	0,02	1,68	6,92
TEJA	Texmaco Jaya	40,77	-0,3	0,73	-1,85
TFCO	TIFICO	1,34	0,01	0,68	2,5
TGKA	Tiga Raksa Satria	14,55	0,03	2,23	2

TIRA	Tira Austenite	11,15	0,06	1,54	1,12
TIRT	Tirta Mahakam Plywood Industry	8,81	0,03	1,14	2,82
TKGA	Toko Gunung Agung	1,39	0	3,91	7,23
TKIM	Pabrik Kertas Tjiwi Kimia	-10,21	-0,07	0,33	4,38
TLKM	Telekomunikasi Indonesia	43,64	0,25	0,5	3,48
TMPI	AGIS	0,29	0	1,18	0,75
TOTO	Surya TOTO Indonesia	40,01	0,04	0,79	13,62
TRPK	Multi Agro Perkasa	15,53	0,05	2,32	1,48
TRST	Trias Sentosa	74,53	0,39	0,5	3,84
TSPC	Tempo Scan Pacific	24,94	0,18	1,07	1,31
TURI	Tunas Ridean	21,89	0,03	2,11	3,07
UGAR	Wahana Jaya Perkasa	-180	-1,05	0,11	16,29
UNIC	Unggul Indah Cahaya	11,46	0,05	0,85	2,75
UNGP	Bakrie Sumatra Plantation	123,76	-0,25	0,3	-15,96
UNTR	United Tractor	29,2	0,03	1,09	7,93
UNVR	Unilever Indonesia	51,32	0,15	2,24	1,55
ZBRA	Zebra Nusantara	6,46	0,06	0,62	1,79



**Appendix 5.**  
**List of ROE and Its Components**  
**Companies Listed in the Jakarta Stock Exchange**  
**Year 2002**

<b>Code</b>	<b>Companies</b>	<b>ROE</b>	<b>NPM</b>	<b>ATO</b>	<b>LEV</b>
AALI	Astra Argo Lestari	17,56	0,11	0,73	2
ACAP	Andi Chandra Automotive Products	9,75	0,09	0,93	1,16
ADES	Ades Alfindo Putrasetia	8,51	0,05	0,72	2,38
AISA	Asia Intiselera	-243,42	0,55	0,39	-11,22
AKPI	Argha Karya Prima Industri	-94,55	0,32	0,58	-5,09
AKRA	Aneka Kimia Raya	11,19	0,04	2,1	1,45
ALDI	Alter Abadi	85,21	-13,26	0,05	-1,24
ALFA	Alfa Retailindo	9,64	0,01	5,18	1,99
ALKA	Alakasa Industrindo	-8461,74	0,35	7,15	-33,81
ALMI	Alumindo Light Metal Industry	-4,19	-0,02	0,99	2,82
AMFG	Asahimas Flat Glass	28,48	0,16	0,94	1,9
ANTA	Anta Express Tour & Travel Srevic	3,14	0	6,29	2,47
ANTM	Aneka Tambang	10,59	0,1	0,68	1,51
APLI	Asiaplast Industries	-8,02	-0,07	0,63	1,93
AQUA	Aqua Golden Misissippi	29,95	0,06	1,9	2,43
ARGO	Argo Pantas	-4428,5	0,53	0,46	-183,79
ARNA	Arwana Citramulia	13,4	0,09	0,67	2,2
ASGR	Astra Graphia	22,49	0,09	1,15	2,27
ASII	Astra Internasional	55,96	0,12	1,17	4,03
AUTO	Astra Otoparts	24,58	0,12	1,13	1,75
BASS	Bahtera Adimina Samudra	8,21	0,13	0,37	1,72
BATA	Sepatu Bata	32,43	0,12	1,96	1,41
BATI	BAT Indonesia	29,21	0,16	1,07	1,72
BAYU	Bayu Buana	-19,12	-0,02	5,15	1,71
BIMA	Primarindo Asia Infrastructur	62,75	-0,56	1,44	-0,78
BIPP	Bhuanatala Indah Permai	-18,15	-0,48	0,09	4,25
BKSL	Bukit Sentul	-2,38	-0,18	0,09	1,54
BLTA	Berlian Laju Tanker	10,67	0,12	0,35	2,6
BMSR	Bintang Mitra Semesta Raya	0,44	0,74	0	1,23
BMTR	Bimantara Citra	20,75	0,18	0,47	2,39
BRAM	Branta Mulia	19,43	0,08	0,79	2,91
BRNA	Berlina	20,97	0,13	0,87	1,82
BRPT	Barito Pacific Timber	13,92	0,11	0,33	5,53
BTON	Betonjaya Manunggal	10,9	0,12	0,81	1,15
BUDI	Budi Acid Jaya	4,29	0,01	0,83	6,69
BUMI	Bumi Resources	12,04	0,04	0,64	5
CKRA	Ciptojaya Kontrindoreksa	0,15	0,02	0,06	1,02
CLPI	Colorpak Indonesia	18,97	0,17	0,94	1,19
CMNP	Citra Marga Nusapala Persada	20,62	0,28	0,28	2,62

CMPP	Centris Multi Persada Pratama	2,31	0,04	0,28	2
CNKO	Central Korporindo Internasional	0,36	0,01	0,26	1,07
CNTX	Centex	-6,32	-0,04	0,81	1,81
CPIN	Charoen Phokphan Indonesia	15,6	0,03	1,87	2,48
CPPR	Central Proteina Prima	55,31	0,05	1,56	6,52
CTBN	Citra Tubindo	2,36	0,03	0,56	1,25
CTRA	Ciputra Development	1128,55	1,82	0,09	65,76
CTRS	Ciputra Surya	15,88	0,89	0,12	1,5
CTTH	Citatah Industri Mamer	63,89	-1,69	0,36	-1,04
DART	Duta Anggada Realty	-21,82	1,14	0,17	-1,14
DAVO	Davomas Abadi	4,44	0,04	0,76	1,59
DILD	Dharmala Intiland	-1201,85	0,67	0,09	-195
DLTA	Delta Djakarta	15,2	0,16	0,75	1,25
DNET	Diviacom Intrabumi	-13,84	-0,28	0,38	1,27
DNKS	Dankos Laboratories	33,55	0,09	1,61	2,38
DPNS	Duta Pertiwi Nusantara	2,41	0,05	0,46	1,14
DSFI	Dharma Samudra Fishing Industries	-7,34	-0,04	1,24	1,63
DSUC	Daya Sakti Unggul Corporation	25,49	0,05	1,38	3,56
DUTI	Duta Pertiwi	18,2	0,17	0,44	2,4
DVLA	Darya Varia Laboratories	27,98	0,12	1,7	1,42
DYNA	Dynaplast	14,71	0,11	0,85	1,65
EKAD	Ekadharmata Tape Industry	12,86	0,08	1,29	1,2
ERTX	Eratex Djaya Limited	5,87	0,01	0,87	5,73
ESTI	Ever Shine Textile Industry	0,38	0	0,63	1,71
ETWA	Eterindo Wahanatama	7,8	-0,02	0,45	-8,62
FAST	Fast Food Indonesia	27,53	0,05	2,93	1,79
FASW	Fajar Surya Wisesa	17,5	0,15	0,43	2,68
FMII	Fortune Mate Indonesia	-5,44	-0,03	1,67	1,14
GDWU	Kasogi International	1,89	-0,14	0,55	-0,24
GDYR	Goodyear Indonesia	5,66	0,03	1,46	1,43
GGRM	Gudang Garam	21,49	0,1	1,36	1,59
GMFD	Gowa Makasar Tourism Development	5,43	0,09	0,18	3,51
GRIV	Great River International	217,44	2,18	0,43	2,32
HDTX	Panasia Indosyntec	36,84	0,09	0,58	7,27
HEXA	Hexindo Adiperkasa	21,93	0,08	0,8	3,59
HMSP	HM Sampoerna	32,13	0,11	1,54	1,89
IATG	Infoasia Teknologi Global	4,55	0,04	0,98	1,18
IDSR	Indosiar Visual Mandiri	30,64	0,21	0,84	1,74
IGAR	Kageo Igar Jaya	15,18	0,05	1,64	1,95
IKAI	Inti Keramik Alamasri Industri	22,15	0,15	0,23	6,16
IMAS	Indomobil Sukses Internasional	323,21	0,11	3,99	7,67
INAF	Indofarma	-15,32	-0,09	0,85	2,07
INAI	Indal Aluminium Industry	0,38	0	0,96	3,05
INCI	Intan Wijaya Chemical	3,58	0,06	0,52	1,18
INCO	International Nickel Ind.	3,93	0,09	0,26	1,58
INDF	Indofood Sukses Makmur	21,91	0,05	1,08	4,16
INDR	Indorama Syntetics	1,65	0,01	0,59	2,4
INDS	Indospring	45,17	0,14	0,76	4,13

INTA	Intraco Penta	12,3	0,03	0,74	5,25
INTD	Inter Delta	28,86	-0,27	1,76	-0,62
INTP	Indocement Tunggai Prakarsa	27,34	0,26	0,35	3
ISAT	Indosat	3,17	0,05	0,31	2,08
JECC	Jembo Cable Company	7,61	0,02	0,85	4,68
JIHD	Jakarta International Hotel & Dev.	9,48	0,66	0,03	4,44
JKSW	Jakarta Kyoei Steel Works	-6,48	0,12	0,35	-1,48
JPRS	Jaya Pari Steel Corp.	23,46	0,06	1,99	1,88
JRPT	Jaya Real Property	3,85	0,17	0,12	1,96
JSPT	Jakarta Setiabudi Internasional	45,2	0,57	0,28	2,79
KAEF	Kimia Farma	5,23	0,02	1,48	1,53
KARK	Karka Yasa Profilia	1,32	0,05	0,2	1,36
KARW	Karwell Indonesia	-2,82	0	1,1	6,76
KBLI	GT Kabel Indonesia	384,67	1,21	0,79	4
KBLM	Kabelindo Murni	-23,54	-0,49	0,39	1,23
KDSI	Kedaung Setia Industrial	-2,62	-0,01	1,25	3,31
KIAS	Keramika Indonesia Asosiasi	1,71	-0,11	0,2	-0,82
KICI	Kedaung Indah Can	-2,48	-0,03	0,52	1,6
KIJA	Kawasan Industri Jababeka	86,05	1,91	0,2	2,22
KKGI	Kurnia Kapuas Utama	-1,27	-0,01	0,64	1,93
KLBF	Kalbe Farma	54,49	0,1	1,27	4,11
LAPD	Lapindo International	7,64	0,08	0,7	1,45
LION	Lion Metal Works	12,57	0,14	0,77	1,15
LMAS	Limas Stokhomindo	-16,5	-1,11	0,14	1,05
LMPI	Langgeng Makmur Plastic	-126,29	-0,3	0,44	9,54
LMSH	Lion Mesh Prima	13,15	0,03	1,65	3,1
LPCK	Lippo Cikarang	0,43	0,01	0,14	2,65
LPIN	Multi Prima Sejahtera	8,24	0,19	0,28	1,59
LPKR	Lippo Karawaci	37,16	0,31	0,15	8,15
LSIP	PP London Sumatra	-236,97	0,46	0,65	-7,98
LTLS	Lautan Luas	4,9	0,02	1,23	2,27
MBAI	Multibreeder Adirama	-511,85	0,41	0,92	-13,68
MDLN	Modernland Realty	38,24	-1,83	0,03	-6,02
MDRN	Modern Photo Film Company	10,35	0,01	1,82	4,59
MEDC	Medco Energi International	17,45	0,2	0,56	1,59
MERK	Merck Indonesia	25,08	0,17	1,28	1,15
META	Metamedia Technologies	-64,39	-1,22	0,52	1,02
MIRA	Mitra Rajasa	22,24	0,11	0,79	2,58
MLBI	Multi Bintang Indonesia	191,7	1	1,14	1,68
MLIA	Mulia Industrindo	-29,44	0,14	0,51	-4,05
MLND	Mulialand	185,29	0,6	0,24	12,72
MLPL	Multipolar	3,03	0,06	0,28	1,69
MPPA	Matahari Putra Prima	6,3	0,02	1,58	1,97
MRAT	Mustika Ratu	8,52	0,08	0,87	1,21
MTDL	Metrodata Electronic	-17,51	-0,04	2,2	2,09
MTSM	Metro Supermarket Realty	9,82	0,12	0,37	2,3
NIPS	Nipress	65,87	0,06	1,17	8,68
PBRX	Pan Brothers Tex	21,99	0,05	2,13	1,92

PICO	Pelanggi Indah Canindo	-17,64	0,17	0,58	-1,75
PLAS	Palm Asia Corpora	4,09	0,02	0,88	2,23
PLIN	Plaza Indonesia Realty	19,14	0,47	0,19	2,13
PNSE	Pudjiadi & Son Estate	15,55	0,11	0,41	3,37
POLY	Polysindo Eka Perkasa	-6,24	0,13	0,45	-1,11
PRAS	Prima Alloy Steel	45,58	0,12	0,64	6,04
PSDN	Prasidha Aneka Niaga	26,59	-1,01	1,11	-0,24
PTRO	Petrosea	4,18	0,03	1,22	1,24
PUDP	Pudjiadi Prestige Limited	3,89	0,13	0,16	1,88
PWON	Pakuwon Jati	-17,49	0,62	0,13	-2,13
PWSI	Panca Wiratama Sakti	14,65	-18,86	0	-2,37
PYFA	Prydam Farma	0,73	0,02	0,35	1,16
RALS	Ramayana Lestari Sentosa	22,38	0,09	1,42	1,71
RBMS	Ristia Bintang Mahkotasejati	-0,17	-0,03	0,04	1,3
RDTX	Roda Vivatex	-3,6	-0,05	0,65	1,19
RICY	Ricky Putra Globalindo	-49,22	-0,02	0,9	26,85
RIGS	Rigs Tender	2,62	0,05	0,49	1,05
RIMO	Rimo Catur Lestari	-11,64	-0,05	1,32	1,61
RYAN	Ryane Adibusana	2,36	0,04	0,53	1,22
SAFE	Steady Safe	133,41	0,4	0,15	22,67
SAIP	Surabaya Agung Industry Pulp	-1,87	0,05	0,2	-1,85
SCCO	Sucaco	24,11	0,11	1,25	1,71
SCPI	Shering Plought Indonesia	-32,87	-0,01	1,79	19,22
SHDA	Sari Husada	21,17	0,17	1,09	1,12
SHID	Hotel Sahid Jaya	49,51	0,81	0,12	5,19
SHSA	Surya Hidup Satwa	56,64	0,03	1,6	10,38
SIIP	Surya Inti Permata	0	0	0,04	1,31
SIMA	Siwani Makmur	1,59	0,02	0,87	1,19
SIMM	Surya Intrindo Makmur	-6,31	-0,05	0,59	2,01
SIPD	Sierad Poduce	-99,45	-0,06	1,14	15,37
SKLT	Sekar Laut	-12,16	0,27	1,31	-0,35
SMAR	SMART	-84,1	0,09	0,86	-10,67
SMCB	Semen Cibinong	20,03	0,25	0,26	3,08
SMDM	Surya Mas Duta Makmur	-9,81	0,67	0,02	-6,29
SMDR	Samudra Indonesia	9,21	0,03	1,42	2,33
SMGR	Semen Gresik	6,17	0,04	0,75	2,16
SMPL	Sumitplast Interbenua	-2,43	-0,02	0,75	1,47
SMRA	Sumarecon Agung	19,54	0,29	0,31	2,18
SMSM	Selamat Sempurna	11,55	0,07	1,03	1,68
SOBI	Sorini Corporation	10,49	0,05	0,95	2,26
SONA	Sona Topas Tourism Industry	15,97	0,08	0,65	2,96
SPMA	Suparna	-27,27	-0,14	0,39	4,95
SRSN	Sarasa Nugraha	-21,08	-0,06	1,62	2,12
SSIA	Surya Semesta Internusa	18,14	0,15	0,28	4,34
STTP	Siantar TOP	11,24	0,05	1,33	1,75
SUBA	Suba Indah	-4,43	-0,2	0,13	1,76
SUDI	Surya Dumai Industri	43,43	-0,63	0,4	-1,74
SULI	Sumalindo Lestari Jaya	51,7	-0,18	0,56	-5,2



TBLA	Tunas Baru Lampung	8,67	0,07	0,61	2,13
TBMS	Tembaga Mulia Semanan	19,37	0,02	1,67	5,23
TCID	Mandom Indonesia	19,15	0,1	1,64	1,17
TEJA	Texmaco Jaya	21,16	-0,25	0,64	-1,36
TFCO	TIFICO	-5,55	-0,03	0,69	2,67
TGKA	Tiga Raksa Satria	9,11	0,02	2,17	2,15
TINS	Tambang Timah	1,02	0,01	0,85	1,49
TIRA	Tira Austenite	5,59	0,04	0,49	3,14
TIRT	Tirta Mahakam Plywood Industry	8,46	0,03	0,86	3,32
TKGA	Toko Gunung Agung	-136,59	-0,01	5,42	17,84
TKIM	Pabrik Kertas Tjiwi Kimia	-10,56	-0,06	0,37	4,73
TLKM	Telekomunikasi Indonesia	55,02	0,39	0,47	3,03
TMPI	AGIS	1,03	0,01	0,8	1,35
TOTO	Surya TOTO Indonesia	64,09	0,17	0,75	5,13
TRPK	Multi Agro Perkasa	13,23	0,04	1,95	1,58
TRST	Trias Sentosa	33,08	0,28	0,51	2,29
TSFC	Tempo Scan Pacific	22,22	0,16	1,08	1,28
TURI	Tunas Ridean	17,47	0,03	2,2	2,64
UGAR	Wahana Jaya Perkasa	-15,97	-0,47	0,13	2,63
UNIC	Unggul Indah Cahaya	10,26	0,05	0,83	2,36
UNSP	Bakrie Sumatra Plantation	400,73	0,21	0,42	45,23
UNTR	United Tractor	27,38	0,04	1,16	5,41
UNVR	Unilever Indonesia	48,43	0,14	2,27	1,53
ZBRA	Zebra Nusantara	2,79	0,03	0,58	1,9

**Appendix 6.**  
**List of ROE and Its Components**  
**Companies Listed in the Jakarta Stock Exchange**  
**Year 2003**

<b>Code</b>	<b>Companies</b>	<b>ROE</b>	<b>NPM</b>	<b>ATO</b>	<b>LEV</b>
AALI	Astra Argo Lestari	18,52	0,11	0,89	1,88
ACAP	Andi Chandra Automotive Products	11,35	0,1	0,96	1,2
ADES	Ades Alfindo Putrasetia	3,9	0,02	0,88	2,13
AISA	Asia Intiselera	-8,68	-0,05	0,49	3,48
AKPI	Argha Karya Prima Industri	73,26	0,49	0,62	2,4
AKRA	Aneka Kimia Raya	11,43	0,04	2	1,47
ALDI	Alter Abadi	26,35	-6,07	0,07	-0,61
ALFA	Alfa Retailindo	2,34	0	5,45	2,08
ALKA	Alakasa Industrindo	437,84	0,02	5	39,38
ALMI	Alumindo Light Metal Industry	-11,74	-0,03	1,07	3,2
AMFG	Asahimas Flat Glass	19,03	0,12	1,13	1,4
ANTA	Anta Express Tour & Travel Srevic	0,67	0	5,4	2,72
ANTM	Aneka Tambang	12,7	0,11	0,49	2,43
AQUA	Aqua Golden Misissippi	22,92	0,06	2,06	1,93
ARGO	Argo Pantas	1122,17	0,01	0,48	1745,46
ARNA	Arwana Citramulia	16,1	0,11	0,78	1,94
ASGR	Astra Graphia	6,44	0,03	1,14	2,12
ASII	Astra Internasional	37,76	0,14	1,15	2,34
AUTO	Astra Otoparts	17,28	0,1	1,1	1,64
BASS	Bahtera Adimina Samudra	2,62	0,05	0,33	1,74
BATA	Sepatu Bata	22,68	0,09	1,76	1,47
BATI	BAT Indonesia	11,8	0,08	0,91	1,55
BAYU	Bayu Buana	-1,22	0	4,54	1,86
BIMA	Primarindo Asia Infrastructur	23,86	-2,12	0,22	-0,5
BIPP	Bhuanatala Indah Permai	-16,78	-0,35	0,17	2,76
BKSL	Bukit Sentul	0,59	0,09	0,05	1,51
BLTA	Berlian Laju Tanker	13,79	0,15	0,32	2,78
BMSR	Bintang Mitra Semesta Raya	-0,18	-0,21	0,01	1,17
BMTR	Bimantara Citra	12,96	0,15	0,27	3,18
BRAM	Branta Mulia	11,64	0,06	0,8	2,43
BRNA	Berlina	6,45	0,04	0,8	1,93
BRPT	Barito Pacific Timber	-53,38	0,12	0,56	-7,71
BTON	Betonjaya Manunggal	0,49	0,01	0,79	1,07
BUDI	Budi Acid Jaya	2,84	0,01	0,68	6,47
BUMI	Bumi Resources	13,42	0,03	0,32	14,68
CEKA	Cahaya Kalbar	1,39	0,02	0,61	1,29
CKRA	Ciptojaya Kontrindoreksa	-0,25	-0,08	0,03	1,02
CLPI	Colorpak Indonesia	9,62	0,03	0,95	1,25
CMNP	Citra Marga Nusapala Persada	20,54	0,35	0,3	2,01

CMPP	Centris Multi Persada Pratama	2,28	0,03	0,39	1,9
CNKO	Central Korporindo Internasional	9,13	0,01	0,09	1,02
CPIN	Charoen Phokphan Indonesia	-2,73	-0,01	1,71	3,13
CPPR	Central Proteina Prima	4,48	0,01	1,48	6
CTBN	Citra Tubindo	2,87	0,02	0,94	1,31
CTRA	Ciputra Development	222,27	0,21	0,12	84,06
CTRS	Ciputra Surya	5,8	0,18	0,21	1,54
CTTH	Citatah Industri Mamer	56,35	0,53	0,34	3,11
DART	Duta Anggada Realty	-16,75	0,8	0,16	-1,29
DAVO	Davomas Abadi	15,58	0,11	0,96	1,51
DILD	Dharmala Intiland	405,95	0,05	0,12	615,25
DNET	Diviacom Intrabumi	-12,02	-0,2	0,43	1,38
DNKS	Dankos Laboratories	31,82	0,11	1,44	2,1
DPNS	Duta Pertiwi Nusantara	-1,55	-0,02	0,51	1,28
DSFI	Dharma Samudra Fishing Industries	-2,79	-0,01	1,25	1,7
DSUC	Daya Sakti Unggul Corporation	-30,03	-0,05	1,22	4,89
DUTI	Duta Pertiwi	6	0,08	0,34	2,23
DVLA	Darya Varia Laboratories	16,96	0,12	1,04	1,37
DYNA	Dynaplast	15,01	0,09	0,77	2,11
EKAD	Ekadharna Tape Industry	8,72	0,05	1,35	1,22
ERTX	Eratex Djaya Limited	-196,36	-0,12	1,35	12,1
ESTI	Ever Shine Textile Industry	-8,25	-0,08	0,66	1,6
ETWA	Eterindo Wahanatama	-7,92	-0,06	1,24	1,12
FAST	Fast Food Indonesia	21,87	0,05	2,83	1,69
FASW	Fajar Surya Wisesa	4,96	0,04	0,46	2,46
GDWU	Kasogi International	0,47	-0,05	0,68	-0,13
GDYR	Goodyear Indonesia	5,37	0,03	1,52	1,4
GGRM	Gudang Garam	16,76	0,08	1,33	1,58
GMTD	Gowa Makasar Tourism Development	8,72	0,1	0,24	3,63
GRIV	Great River International	3,64	0,03	0,45	2,54
HDTX	Panasia Indosyntec	-11,84	-0,03	0,53	7,54
HERO	Hero Supermarket	0,43	0	2,65	2,49
HEXA	Hexindo Adiperkasa	20,56	0,06	1,13	2,83
HMSP	HM Sampoerna	24,39	0,1	1,44	1,77
IATG	Infoasia Teknologi Global	13,84	0,1	1,17	1,18
IDSR	Indosiar Visual Mandiri	13,62	0,1	0,67	2,04
IGAR	Kageo Igar Jaya	11,69	0,04	1,55	1,72
IKAI	Inti Keramik Alamasri Industri	-42,66	-0,21	0,25	8,02
IMAS	Indomobil Sukses Internasional	28,59	0,02	0,96	12,81
INAF	Indofarma	-49,67	-0,26	0,78	2,44
INAI	Indal Aluminium Industry	-67,38	-0,13	0,99	5,38
INCI	Intan Wijaya Chemical	5,52	0,05	0,87	1,17
INCO	International Nickel Ind.	12,1	0,2	0,39	1,5
INDF	Indofood Sukses Makmur	14,74	0,03	1,17	3,74
INDR	Indorama Syntetics	2,1	0,01	0,66	2,33
INDS	Indospring	6,22	0,02	0,79	3,8
INKP	Indah Kiat Pulp & Paper	-17,47	-0,21	0,25	3,32
INTA	Intraco Penta	2,03	0,01	0,72	5

INTD	Inter Delta	-99,25	0,46	2,06	-1,06
INTP	Indocement Tunggal Prakarsa	14,79	0,16	0,41	2,24
ISAT	Indosat	12,87	0,19	0,31	2,14
JECC	Jembo Cable Company	0,52	0	1,02	4,23
JIHD	Jakarta International Hotel & Dev.	-7,72	-0,48	0,04	4,33
JKSW	Jakarta Kyoei Steel Works	-11,76	0,36	0,28	-1,16
JPRS	Jaya Pari Steel Corp.	14,45	0,05	2,16	1,45
JRPT	Jaya Real Property	4,72	0,18	0,14	1,85
JSPT	Jakarta Setiabudi Internasional	2,5	0,07	0,19	1,97
KAEF	Kimia Farma	5,69	0,02	1,33	1,81
KARK	Karka Yasa Profilia	1,41	0,03	0,34	1,44
KARW	Karwell Indonesia	-49,55	-0,05	1,27	8,48
KBLI	GT Kabel Indonesia	-33,42	-0,08	0,81	4,86
KBLM	Kabelindo Murni	-33,47	-0,5	0,45	1,51
KDSI	Kedaung Setia Industrial	-18,27	-0,04	1,34	3,55
KIAS	Keramika Indonesia Asosiasi	13,79	-1,13	0,21	-0,58
KICI	Kedaung Indah Can	-11,85	-0,16	0,47	1,59
KIJA	Kawasan Industri Jababeka	21,28	0,73	0,17	1,72
KKGI	Kurnia Kapuas Utama	-0,89	-0,01	0,68	1,63
KLBF	Kalbe Farma	38,95	0,11	1,18	2,95
LION	Lion Metal Works	12,14	0,14	0,73	1,16
LMAS	Limas Stokhomindo	20,81	0,34	0,56	1,08
LMPI	Langgeng Makmur Plastic	-316,59	-0,16	0,49	39,52
LMSH	Lion Mesh Prima	13,44	0,03	1,91	2,69
LPCK	Lippo Cikarang	2,64	0,07	0,15	2,5
LPIN	Multi Prima Sejahtera	-21,89	-0,59	0,23	1,59
LPKR	Lippo Karawaci	44,25	0,3	0,3	4,95
LSIP	PP London Sumatra	299,14	0,25	0,62	19,43
LTLS	Lautan Luas	1,91	0,01	1,02	3,08
MBAI	Multibreeder Adirama	-97,49	0,04	0,88	-27,98
MDLN	Modernland Realty	-171,31	1,42	0,07	-16,04
MDRN	Modern Photo Film Company	4,75	0,01	1,63	4,46
MEDC	Medco Energi International	10,97	0,12	0,47	2,01
MERK	Merck Indonesia	31,71	0,17	1,48	1,26
META	Metamedia Technologies	26,5	3,77	0,02	4,29
MIRA	Mitra Rajasa	-158,15	-0,41	0,8	4,82
MLBI	Multi Bintang Indonesia	209,79	1	1,17	1,8
MLIA	Mulia Industrindo	13,67	-0,08	0,52	-3,39
MLND	Mulialand	221,64	-0,67	0,41	-8,09
MLPL	Multipolar	2,87	0,05	0,34	1,62
MPPA	Matahari Putra Prima	6,6	0,02	1,48	1,96
MRAT	Mustika Ratu	4,6	0,05	0,84	1,17
MTDL	Metrodata Electronic	0,38	0	2,09	2,07
MTSM	Metro Supermarket Realty	6,84	0,09	0,37	2,02
NIPS	Nipress	2,87	0,02	0,71	2,06
PBRX	Pan Brothers Tex	7,93	0,02	2,35	1,53
PICO	Pelangi Indah Canindo	-5,5	-0,01	0,62	6,37
PLAS	Palm Asia Corpora	-4,37	-0,03	0,65	2,3

PLIN	Plaza Indonesia Realty	10,65	0,37	0,17	1,69
PNSE	Pudjiadi & Son Estate	11,04	0,09	0,39	3,11
POLY	Polysindo Eka Perkasa	13,03	-0,6	0,26	-0,82
PRAS	Prima Alloy Steel	10,46	0,03	1,06	3,23
PSDN	Prasidha Aneka Niaga	-822,06	9,1	0,51	-1,75
PTRO	Petrosea	4,2	0,04	0,98	1,16
PUDP	Pudjiadi Prestige Limited	5,15	0,14	0,21	1,77
PWON	Pakuwon Jati	-46,5	0,92	0,16	-3,07
PWSI	Panca Wiratama Sakti	13,04	-19,38	0	-2,11
PYFA	Prydam Farma	1,02	0,02	0,4	1,12
RALS	Ramayana Lestari Sentosa	19,83	0,09	1,41	1,65
RBMS	Ristia Bintang Mahkotasejati	-1,18	-0,17	0,05	1,29
RDTX	Roda Vivatex	2,58	0,04	0,58	1,2
RICY	Ricky Putra Globalindo	27,1	0,02	0,79	19,8
RIGS	Rigs Tender	6,6	0,17	0,38	1,04
RIMO	Rimo Catur Lestari	-16,54	-0,08	1,27	1,72
RYAN	Ryane Adibusana	-47,95	-0,76	0,49	1,3
SAFE	Steady Safe	20,03	0,08	0,14	17,54
SAIP	Surabaya Agung Industry Pulp	3,88	-0,15	0,15	-1,67
SCCO	Sucaco	5,85	0,02	1,16	2,16
SCPI	Shering Plought Indonesia	42,88	0,02	2,03	10,35
SHDA	Sari Husada	22,57	0,2	0,98	1,15
SHID	Hotel Sahid Jaya	6,83	0,11	0,12	4,79
SHSA	Surya Hidup Satwa	12,88	0,01	1,53	9,38
SIIP	Surya Inti Permata	2,86	0,19	0,11	1,32
SIMA	Siwani Makmur	-78,31	-0,44	1,25	1,42
SIMM	Surya Intrindo Makmur	-45,11	-0,33	0,62	2,2
SIPD	Sierad Poduce	-51,99	-0,09	0,89	6,17
SKLT	Sekar Laut	-3,18	0,07	1,36	-0,33
SMAR	SMART	-27,51	0,02	0,92	-14,33
SMCB	Semen Cibinong	6,55	0,08	0,29	2,88
SMDM	Surya Mas Duta Makmur	-2,85	0,19	0,02	-6,42
SMDR	Samudra Indonesia	4,9	0,02	1,38	2,33
SMPL	Sumitplast Interbenua	1,31	0,01	0,83	1,67
SMRA	Sumarecon Agung	22,54	0,25	0,34	2,68
SMSM	Selamat Sempurna	13,4	0,08	1,01	1,77
SOBI	Sorini Corporation	11,7	0,07	0,92	1,88
SONA	Sona Topas Tourism Industry	8,06	0,07	0,44	2,84
SPMA	Suparma	5,06	0,02	0,46	4,65
SRSN	Sarasa Nugraha	-69,9	-0,18	1,59	2,38
SSIA	Surya Semesta Internusa	-3,15	-0,02	0,52	4,04
STTP	Siantar TOP	10,38	0,04	1,39	1,68
SUBA	Suba Indah	-37,44	-0,31	0,39	3,08
SUDI	Surya Dumai Industri	-68,47	0,55	0,38	-3,27
SULI	Sumalindo Lestari Jaya	-35,98	0,23	0,53	-2,98
TBLA	Tunas Baru Lampung	5,01	0,04	0,62	2,28
TBMS	Tembaga Mulia Semanan	6,88	0,01	1,83	4,83
TCID	Mandom Indonesia	18,24	0,1	1,65	1,13

TEJA	Texmaco Jaya	18,27	-0,42	0,44	-0,98
TFCO	TIFICO	9,85	0,04	0,92	2,88
TGKA	Tiga Raksa Satria	20,4	0,03	2,39	2,49
TINS	Tambang Timah	5,48	0,04	0,99	1,42
TIRA	Tira Austenite	4,07	0,01	0,79	4,29
TIRT	Tirta Mahakam Plywood Industry	4,18	0,02	0,77	3,51
TKGA	Toko Gunung Agung	7,95	0	8,26	9,77
TKIM	Pabrik Kertas Tjiwi Kimia	-7,23	-0,03	0,41	5,06
TLKM	Telekomunikasi Indonesia	35,16	0,22	0,54	2,9
TMPI	AGIS	3,44	0,03	0,76	1,44
TOTO	Surya TOTO Indonesia	24,51	0,07	0,85	4,29
TRPK	Multi Agro Perkasa	15,37	0,03	2,28	2,31
TSPC	Tempo Scan Pacific	20,72	0,15	1,09	1,25
TURI	Tunas Ridean	17,46	0,03	1,82	3,16
UGAR	Wahana Jaya Perkasa	-5,52	-0,33	0,06	2,74
UNIC	Unggul Indah Cahaya	7,45	0,03	0,94	2,68
UNSP	Bakrie Sumatra Plantation	80,86	0,18	0,54	8,53
UNTR	United Tractor	-23,01	0,05	1,13	4,07
UNVR	Unilever Indonesia	61,88	0,16	2,38	1,63
ZBRA	Zebra Nusantara	2,8	0,03	0,42	2,27

Appendix 7.  
List of Abnormal Return No. 38  
Companies Listed in the Jakarta Stock Exchange  
Year 2002

Code	Abnormal Return (day ...)																				
	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
AALI	0,00654	-0,00542	0,00384	0,03217	-0,06050	-0,03040	-0,04677	0,02296	-0,01401	0,02767	-0,03190	-0,00868	-0,01542	0,01230	-0,03562	0,01295	0,00084	0,00235	-0,01623	-0,01868	0,00011
ACAP	0,01157	0,02434	-0,04875	-0,00801	0,02765	0,03397	-0,01837	-0,01276	-0,03376	-0,01950	-0,00051	0,02244	0,09712	-0,03834	-0,03252	-0,02257	-0,01956	0,02090	0,00747	-0,04168	0,01872
ADES	-0,04545	0,00530	-0,00344	0,01099	0,04901	-0,03408	-0,00554	0,01810	0,02139	0,02791	-0,01939	0,01651	-0,04268	-0,02045	0,00019	-0,02370	-0,01320	0,01763	0,03131	-0,00695	-0,04121
AISA	0,01530	-0,03458	-0,14689	-0,09640	0,25233	0,00110	0,02760	0,03164	0,02700	0,02479	0,04321	0,00928	0,08662	-0,02595	0,00956	-0,11390	0,03058	0,11971	-0,07509	-0,03047	0,00191
AKPI	-0,01408	0,03633	0,02832	-0,22098	-0,01855	-0,04077	-0,00989	0,02091	0,07172	0,22124	-0,00610	-0,02648	-0,02348	-0,01946	0,17961	-0,02673	0,06378	0,07021	0,02835	0,04267	-0,00421
AKRA	0,03593	0,02799	0,00356	-0,02000	-0,03986	0,33572	0,28381	0,29407	-0,07828	-0,25950	0,27301	-0,13826	-0,03503	-0,01946	-0,06710	0,00219	0,09170	0,12598	-0,02049	-0,08573	0,00742
ALDI	0,09383	-0,22228	0,04181	0,01534	-0,00966	-0,03200	-0,00096	0,25136	0,12542	0,07394	-0,03928	-0,00034	-0,02322	-0,02000	0,02329	-0,11440	-0,01220	0,02096	-0,02096	-0,00548	0,00169
ALFA	-0,03798	-0,01771	-0,03717	-0,01866	-0,00670	0,01615	0,03878	0,01233	0,01898	0,02764	-0,00465	-0,00054	-0,00665	0,06787	-0,03890	-0,00215	-0,05316	0,04269	-0,00826	-0,02312	-0,01243
ALKA	0,03617	0,02874	0,00592	-0,01562	-0,03491	-0,00810	0,05275	0,01671	0,05717	-0,04064	0,05717	-0,04064	-0,00689	0,09556	-0,02612	-0,01632	0,01246	0,02522	-0,01049	-0,00217	0,04021
ALMI	0,04688	-0,00666	-0,05619	-0,04530	0,04424	-0,03480	0,00956	-0,01595	-0,03876	-0,00707	0,03580	-0,01468	0,07109	-0,04402	-0,00439	-0,02666	0,05354	0,02066	-0,02693	-0,01544	-0,01742
AMFG	0,07414	0,03335	-0,08664	0,05538	-0,03339	0,00834	-0,03179	-0,01655	0,01017	-0,00346	0,00237	0,06221	-0,00326	-0,01988	-0,02220	-0,00212	0,01874	-0,03938	-0,01249	-0,00055	0,01209
ANIM	0,02614	-0,01214	0,00287	0,02137	-0,04753	0,05956	0,00460	-0,02631	0,03093	-0,02947	-0,04332	-0,10494	0,05315	0,04413	-0,05006	-0,02789	0,00225	0,01384	0,00951	0,04703	-0,03432
APLI	-0,05329	-0,00791	-0,06448	0,16165	0,01023	-0,01455	-0,14725	-0,00571	0,12439	-0,08749	0,07124	-0,03934	-0,00125	0,10159	-0,02029	-0,08950	0,10133	-0,1385	0,01935	0,03359	-0,00624
AQUA	-0,00688	-0,05619	0,00622	-0,04738	-0,06131	-0,01508	0,04156	0,15625	0,07025	0,03979	0,01386	-0,01391	-0,00960	0,01469	-0,02883	-0,04939	-0,01035	-0,03230	-0,02907	0,01436	-0,03258
ARNA	0,10187	-0,02266	-0,01046	0,01411	0,03417	-0,00562	0,00998	0,00447	-0,01824	-0,00535	-0,03588	0,03402	-0,02527	-0,02297	0,02692	-0,06226	0,01710	-0,03166	-0,04461	-0,00234	0,04981
ASGR	-0,01415	-0,03618	-0,04156	0,03305	-0,03732	0,13670	-0,00141	-0,01471	-0,05216	0,03028	0,05407	-0,06829	0,00863	-0,01258	-0,00753	-0,07861	0,05196	-0,02383	-0,00816	-0,03935	-0,03640
ASII	0,06248	0,12314	-0,03040	0,01291	-0,03366	-0,04502	0,00155	-0,01316	0,00793	0,03425	0,01187	-0,02039	-0,04405	0,00529	0,00611	-0,02490	0,00641	0,06635	0,03213	-0,00607	-0,02314
AUTO	0,02657	0,05174	0,06774	0,00106	0,00855	-0,01650	-0,02669	0,00388	-0,01523	0,00886	0,06761	-0,03153	-0,00527	-0,03849	-0,01167	0,00712	-0,00318	-0,02755	0,01659	0,01925	-0,00933
BASS	0,01123	-0,00898	0,00470	-0,01781	-0,00445	0,03287	0,02214	0,05539	-0,01675	-0,02667	-0,01203	0,00828	-0,07891	-0,03272	-0,03017	-0,02343	-0,03876	0,01498	-0,00759	-0,05284	-0,00701
BATA	-0,04729	0,03040	-0,01314	0,05011	-0,00233	0,01011	-0,01913	-0,04527	-0,00897	-0,00389	0,02375	0,10280	-0,06449	0,07424	-0,03205	-0,02833	0,02152	0,00514	-0,01935	0,01884	0,07996
BATI	0,01612	-0,04073	-0,05857	0,00205	0,04599	0,02658	0,02025	-0,02015	-0,03740	0,00473	-0,00163	0,00181	0,08189	0,00028	0,00602	0,02014	-0,00799	0,01992	-0,03086	-0,02461	0,03226
BAYU	-0,08670	0,03890	0,03114	0,00732	-0,01519	-0,03534	0,04727	-0,00347	0,01872	0,06181	0,01324	-0,10499	0,00320	-0,02169	0,01706	-0,05185	-0,01471	0,01498	0,00036	-0,00869	-0,00316
BIMA	-0,09667	0,04274	0,01504	0,01126	-0,01124	-0,03145	0,03742	-0,03868	0,02270	0,04532	-0,03610	-0,00100	-0,02069	-0,01779	0,00032	-0,02093	-0,01077	0,01906	0,03229	-0,04728	-0,04261
BIPP	0,00477	0,05380	-0,01862	0,00404	0,05148	0,03386	0,01918	-0,05195	-0,02264	-0,13275	0,21582	0,01054	0,02678	-0,04592	0,00712	-0,01613	0,03060	-0,19673	0,02544	-0,01369	0,00683
BKSL	0,04777	-0,07510	-0,08971	0,02809	0,04695	0,03805	0,01068	-0,01511	-0,00232	-0,00701	-0,00163	0,02311	0,03696	-0,04267	-0,00336	-0,02543	-0,02218	0,02147	-0,02570	-0,01431	0,01912
BLTA	0,02444	0,04113	0,03256	0,07650	0,04769	-0,00899	-0,04092	-0,00653	-0,04593	0,02933	0,02514	-0,00806	-0,06051	-0,02528	-0,01870	-0,06298	0,01763	0,01248	0,02604	-0,01189	-0,00620
BMSR	-0,00675	0,10229	-0,04585	0,01478	-0,01397	-0,03835	-0,00379	0,00117	0,02889	0,09207	-0,04499	-0,00170	0,02406	-0,02237	-0,02203	-0,02624	-0,06373	0,07564	0,03930	-0,00628	-0,05043
BMTR	-0,03586	-0,03333	0,01545	-0,04234	-0,02287	-0,04008	-0,01401	0,04263	0,13560	-0,00939	-0,07693	-0,04239	0,06705	0,00170	-0,02513	-0,01629	-0,06405	0,05403	0,14537	0,02729	0,01181
BRAM	0,03940	0,06373	-0,20873	0,26494	-0,03502	-0,00660	-0,00254	0,02072	0,06584	-0,04092	0,02712	-0,02472	-0,02169	0,01903	-0,23710	-0,01435	0,01684	0,03067	-0,04649	0,07678	0,04230

BRNA	-0,00235	-0,03961	0,00605	0,01011	0,00512	0,03749	-0,01401	-0,04938	-0,01128	-0,03866	0,00344	0,08245	-0,02996	0,00225	0,03093	0,01968	-0,00327	0,04437	-0,02537	0,02147	0,00614
BRPT	-0,01378	0,01607	0,02932	-0,00773	-0,00118	0,04159	-0,00849	0,02159	0,00748	0,06442	0,03850	-0,01616	-0,02844	-0,00380	-0,03417	-0,00881	-0,03894	0,03218	0,02325	-0,00779	0,03197
BTON	0,06434	-0,00997	0,04609	0,03715	-0,06048	-0,01547	-0,03907	-0,00627	-0,00170	0,06160	0,07326	-0,04530	-0,04055	0,01101	0,08704	0,05466	-0,02773	-0,08041	0,01889	0,03431	-0,00884
BUDI	0,02377	0,02570	0,13277	0,09523	0,01235	0,08486	-0,00425	-0,04317	0,04863	0,09764	-0,06392	-0,02371	-0,04714	-0,11406	-0,05262	0,05863	-0,01287	0,07314	0,01287	-0,03033	-0,07628
BUMI	0,08054	-0,11457	-0,02620	0,22715	-0,07788	-0,13759	-0,01475	0,01970	0,03498	-0,00777	-0,00234	0,04795	-0,01081	0,02444	0,13227	-0,03908	0,04307	-0,01799	-0,03263	-0,00523	-0,03898
CEKA	0,03478	0,06762	-0,00146	0,01154	-0,01454	-0,03672	0,01498	-0,04240	0,04374	0,04857	-0,04146	-0,00327	-0,04603	0,02190	0,02089	-0,04584	-0,03521	-0,00313	0,01082	0,01539	0,02194
CKRA	-0,00952	0,05000	0,04051	-0,03747	-0,01509	-0,04062	-0,00554	-0,00079	0,02641	0,07928	0,00777	-0,00261	-0,07640	-0,02290	0,07676	-0,02669	-0,01442	-0,02840	0,03758	0,04551	-0,00041
CMPP	-0,06713	0,07252	0,03760	0,01343	-0,03577	-0,01639	0,02520	-0,01048	0,02503	0,09373	-0,03547	0,01177	-0,02103	-0,01809	0,02145	-0,02128	-0,01096	0,01932	0,03275	-0,00483	0,00081
CNKO	-0,08623	-0,04882	-0,21382	0,04212	-0,02389	-0,04623	-0,07677	-0,10815	0,09986	-0,14958	0,04596	-0,08180	0,09720	0,01346	-0,12051	-0,25590	-0,29220	0,49031	0,00258	0,03860	-0,11209
CNTX	-0,07984	-0,02438	0,00131	0,02112	0,02414	0,02066	0,01902	0,03340	-0,04584	0,07590	-0,01737	0,08278	0,06382	-0,03184	0,02831	-0,05559	-0,22256	0,04203	0,02208	0,01487	0,03466
CPIN	0,00187	0,04997	-0,03994	0,03410	-0,01459	-0,00698	0,00509	-0,01102	0,03569	0,03441	0,02098	-0,00343	0,02466	-0,01293	-0,02579	-0,07613	0,00650	0,04006	0,09513	-0,05528	-0,05133
CPPR	0,05844	0,05068	0,06203	0,01784	-0,02467	-0,05014	-0,03597	-0,05429	0,01901	0,05030	0,06902	-0,01062	-0,02354	-0,05242	-0,01683	-0,03470	-0,04516	0,00198	-0,00570	-0,01513	-0,00841
CTBN	-0,03694	-0,04963	-0,00816	0,04284	0,03470	0,00974	-0,01379	-0,03482	-0,00559	-0,00152	0,02150	0,06614	-0,03951	-0,00311	-0,02356	-0,02055	0,01989	-0,02382	-0,01326	0,01772	0,03146
CTRA	0,03462	0,13127	-0,04353	0,00879	-0,01733	-0,04075	-0,00822	-0,00370	0,02210	-0,01307	-0,04551	0,00451	0,01911	-0,02513	-0,02506	0,01882	-0,01692	0,01673	0,03049	0,03368	-0,00223
CTRS	-0,01082	0,08021	-0,00926	0,00648	-0,01645	-0,07781	0,03589	-0,00255	-0,02079	0,02367	0,04966	-0,04579	-0,02458	-0,02157	-0,02457	0,06607	-0,01427	0,01673	0,03049	0,03368	-0,00223
CTTH	-0,11326	-0,06680	-0,18971	0,06005	0,13135	0,01491	-0,01640	-0,04291	-0,03171	-0,00092	0,08093	0,08582	-0,04794	-0,00293	-0,05278	0,06607	-0,01427	0,01673	0,03049	0,03368	-0,00223
DART	0,00905	0,07790	0,04640	-0,01938	-0,08710	-0,00461	0,01397	-0,01072	0,00505	-0,01110	0,08071	0,04025	0,03736	0,09252	-0,15859	0,02029	-0,19037	-0,08982	-0,02661	0,00263	0,02512
DAVO	-0,14136	0,04073	-0,03425	0,01351	-0,01451	-0,02434	0,02455	0,00834	-0,01641	-0,01763	0,00984	0,00080	-0,02144	-0,06453	0,01329	0,06553	0,05937	-0,01987	0,30575	0,05779	-0,03096
DILD	-0,01039	0,04834	0,03895	0,01022	-0,01638	-0,14072	-0,00729	-0,00271	0,02421	0,07353	-0,04382	-0,00345	-0,02611	-0,02277	0,02204	-0,02639	-0,01469	0,13074	0,03485	-0,10774	-0,00134
DLTA	-0,06505	0,04438	0,03596	0,01010	-0,01429	-0,03609	-0,00580	-0,0058	0,02229	0,06882	-0,04098	0,04579	-0,02532	-0,02221	0,01953	-0,02558	-0,00517	0,01728	0,03147	0,04839	0,00668
DNET	0,07213	-0,14683	0,07498	-0,11742	0,10892	-0,02069	0,01216	0,04971	-0,03384	-0,00366	-0,05834	0,02360	0,06845	-0,10001	0,06549	-0,02200	-0,01893	0,02226	-0,08476	-0,01151	0,02005
DNKS	-0,06199	-0,03485	0,08120	-0,04195	-0,12037	0,02598	0,01002	0,00022	0,04630	-0,01633	-0,00238	-0,00784	-0,07156	0,02143	-0,04106	-0,00045	0,03577	-0,02542	0,01616	0,01962	-0,06272
DPNS	-0,01449	0,09289	0,01978	-0,00380	0,03532	0,00920	-0,01608	-0,03757	-0,00774	-0,00256	0,02110	-0,03220	-0,04211	-0,00424	-0,00326	-0,01148	-0,01260	-0,02574	0,01855	0,01740	-0,00058
DSFI	-0,03051	-0,01375	-0,03219	0,04200	0,03462	-0,01659	0,02005	-0,02820	-0,00200	-0,02692	0,02218	0,00418	-0,06461	0,00013	-0,01867	0,01636	0,08380	-0,01891	0,02021	-0,06641	0,03194
DSUC	-0,06282	0,04610	0,03808	0,01356	-0,00953	-0,03016	-0,00155	-0,00249	-0,03620	0,13558	0,02872	-0,05782	-0,01870	-0,01580	0,02316	-0,01894	-0,00878	0,02107	0,03430	-0,00273	0,06533
DUTI	0,00604	0,04748	-0,00236	0,06857	-0,05448	-0,03673	-0,00503	-0,04288	0,02407	0,07197	-0,01146	-0,05946	-0,00897	-0,02091	-0,02257	0,02249	-0,01314	0,03482	0,03454	-0,00645	-0,00030
DVLA	0,00323	-0,09434	-0,06124	-0,03438	-0,02782	-0,08585	0,02213	0,00767	-0,02055	0,01185	0,03334	0,00198	0,00857	-0,00567	-0,04064	-0,01948	-0,01525	0,07890	0,04704	-0,05607	-0,01686
DYNA	0,01001	0,04666	0,03740	0,00907	-0,01798	-0,06175	0,03333	-0,00469	0,02095	0,03047	-0,04727	-0,02678	-0,00670	-0,02506	0,02032	-0,02872	-0,01688	0,03916	-0,02920	0,03460	-0,02464
EKAD	0,03134	-0,03186	0,03799	0,05329	-0,01631	-0,08149	-0,00624	0,04176	0,02331	0,03350	-0,04483	0,03997	-0,02657	-0,06484	0,06591	-0,02686	-0,01495	0,01998	-0,00619	0,03560	-0,00137
ERTX	0,00274	-0,01461	-0,05491	0,00252	0,08519	-0,03522	0,02992	-0,04164	-0,05280	-0,00273	-0,02428	0,07399	-0,04579	-0,00453	-0,02768	-0,07427	0,02153	-0,04902	0,04850	0,01906	-0,05629
ESTI	-0,07225	0,00936	-0,02546	-0,05376	-0,01050	0,02750	0,03402	0,00812	-0,00185	-0,00840	0,02099	-0,00363	0,00695	0,06928	-0,01563	-0,00533	-0,02166	-0,02395	0,01925	-0,02744	-0,01616
ETWA	0,11367	-0,01258	0,03601	-0,05789	-0,03158	-0,00444	-0,03671	0,03948	0,02990	-0,00281	-0,02300	0,06912	0,01761	-0,02398	-0,03226	-0,01409	-0,01960	-0,11043	0,02627	0,02918	0,02581
FAST	-0,19422	0,04157	0,03388	0,01024	-0,01207	-0,03201	-0,00429	-0,00044	0,02136	0,06361	-0,03646	-0,00195	-0,02133	-0,01848	0,01986	-0,02157	-0,01157	0,01779	0,03082	-0,00562	-0,00015
FASW	0,02793	0,05150	-0,04305	-0,02652	-0,01561	-0,04202	0,05985	-0,01121	-0,07781	-0,00225	0,07758	-0,05642	0,00422	-0,01716	-0,05115	-0,09439	-0,01948	-0,05600	-0,06226	0,01896	-0,01880
FMIJ	-0,04416	0,00547	-0,01749	-0,05410	-0,01003	0,09432	0,03405	-0,03462	0,03989	0,01774	0,00345	-0,03999	-0,03091	-0,05733	0,03511	-0,00953	-0,04346	-0,00784	-0,02079	0,01756	0,03973
GDWU	-0,11403	0,03625	0,02823	-0,10614	-0,01914	-0,04073	-0,01072	-0,00655	0,01801	0,06386	-0,04450	-0,00720	-0,02822	-0,02513	-0,10855	0,11438	-0,14263	0,01421	0,17120	-0,01118	0,11975



GDYR	0,01212	-0,03670	-0,06978	-0,00728	0,04448	0,07680	0,00986	-0,01395	-0,03525	0,03431	-0,00155	0,01665	0,06710	-0,04009	0,07687	-0,02366	0,01641	0,01997	-0,02391	-0,01331	0,01779
GGRM	-0,01826	0,03413	-0,02321	-0,01143	-0,03251	-0,00556	-0,03200	0,01618	-0,01379	-0,01044	0,00649	-0,02298	-0,02719	-0,00871	-0,07029	-0,00265	0,01128	-0,03992	-0,03458	-0,01034	-0,02357
GMTD	0,04472	0,03622	0,01016	-0,01439	-0,03635	-0,00584	-0,00159	0,02244	0,06906	-0,04120	-0,00325	-0,02458	-0,02144	0,02075	-0,02484	-0,01383	0,01848	0,03282	-0,00729	-0,00127	0,04477
GRIV	-0,04232	0,05423	-0,08212	-0,01910	0,05847	0,15750	-0,01932	-0,01031	0,01611	0,00743	-0,03621	-0,07531	-0,03087	-0,00552	0,00864	0,02128	0,03419	0,03622	0,01345	-0,02306	-0,01385
HDTX	-0,00607	0,05061	0,04155	0,01380	-0,01228	0,02244	-0,00318	0,11141	0,02610	0,02652	-0,04243	0,10281	-0,02513	-0,02179	0,07068	-0,02541	-0,10462	0,02065	0,03589	-0,00675	-0,00035
HEXA	-0,03300	0,00519	-0,05378	-0,00965	0,02250	0,03562	-0,03505	0,00762	-0,03801	0,01577	0,10747	0,16036	0,12115	-0,12921	-0,06003	0,02942	-0,00673	0,07375	-0,02856	-0,01679	0,08555
HMSPT	-0,03057	-0,01950	-0,07835	-0,01234	-0,02196	-0,04748	-0,03342	0,05581	0,01773	-0,00924	-0,01315	-0,01268	0,03032	0,00033	0,02562	0,04686	-0,04110	0,01104	-0,01704	0,02554	0,00856
IATG	-0,08848	-0,00834	-0,02414	-0,06880	-0,02705	0,02320	0,01521	-0,00697	-0,03077	-0,08413	-0,01923	-0,01469	0,01199	0,06221	-0,05627	-0,01456	-0,03798	-0,03453	0,01178	-0,07160	-0,02619
IDSR	-0,05623	-0,01174	0,01657	0,03495	0,00839	0,01045	-0,06633	-0,06347	0,02677	0,02226	0,04231	-0,07381	-0,00442	0,03385	-0,05204	0,02075	0,00237	-0,01550	0,01837	0,03339	-0,03721
IGAR	0,21030	0,00780	-0,00234	0,04474	-0,02363	-0,08660	-0,01277	0,07212	0,02052	0,00239	-0,01461	-0,04630	-0,03301	-0,02930	0,02049	0,00668	-0,05879	0,01781	-0,00527	-0,01260	0,03716
IKAI	-0,00524	0,01888	0,04303	0,01494	-0,01081	-0,06951	0,03423	0,00324	0,02999	0,08263	-0,07619	-0,03340	-0,02190	-0,01834	0,02956	-0,02220	-0,00970	0,02698	0,04325	-0,00227	0,00554
IMAS	-0,05529	-0,01369	-0,00126	-0,00595	-0,00162	-0,01066	0,07124	-0,04093	-0,00230	-0,02399	-0,02079	0,02210	0,08288	-0,04532	-0,01354	0,03436	-0,00641	-0,00029	0,04652	-0,00829	-0,04433
INAF	0,00054	-0,00416	-0,04433	0,00876	0,00204	-0,04334	-0,00923	-0,00791	-0,04210	-0,05903	0,04745	0,04131	0,02376	-0,06024	0,03504	0,02785	0,04068	0,03593	-0,04931	-0,02285	-0,01914
INAI	0,04014	0,01159	-0,04297	0,01027	-0,01213	-0,03219	-0,00432	-0,00044	0,03594	0,06140	-0,05488	-0,03630	-0,02251	-0,01963	0,08798	-0,00662	0,00320	0,00130	0,12530	-0,00667	-0,04563
INCI	-0,00958	0,05025	-0,00462	0,05894	-0,01603	0,00510	-0,00733	0,04076	-0,01731	0,03177	-0,09099	0,09169	-0,07042	0,02195	-0,02073	0,01822	-0,01516	0,02026	-0,00751	-0,00799	-0,00040
INCO	0,01747	0,01611	-0,02043	-0,03385	-0,01992	-0,02405	0,03957	-0,01437	0,00339	0,00566	-0,02874	-0,01406	-0,00443	-0,12681	-0,04628	-0,01644	-0,02764	-0,00948	0,00948	-0,04090	-0,05408
INDF	-0,00701	-0,00981	0,04519	-0,03057	0,03488	0,00807	0,00845	-0,00909	-0,00392	0,02515	0,00845	-0,00909	-0,02874	0,04509	-0,02258	-0,00392	-0,00162	0,04200	0,00823	-0,00834	
INDR	0,01448	0,02366	-0,04161	0,01027	0,01092	-0,01638	-0,00909	-0,00909	0,02515	0,05335	-0,05200	-0,00594	0,05558	-0,00184	-0,03059	-0,06076	0,00888	0,01930	0,00882	-0,01179	-0,03210
INDS	-0,05045	-0,00748	0,04547	0,03706	0,01114	-0,01333	-0,03516	-0,05355	-0,00058	0,02341	0,16454	-0,03990	-0,00222	-0,06690	-0,02030	0,02162	-0,02368	-0,01274	0,01936	0,03360	-0,06264
INTD	-0,07965	0,00938	-0,04489	-0,05921	-0,01222	0,4531	-0,05355	0,00904	-0,01825	-0,04154	-0,00909	-0,00463	-0,02969	0,06880	-0,04585	0,04627	0,02068	-0,07371	0,01738	-0,02960	-0,01825
INTP	-0,01030	-0,02572	-0,00773	0,02187	0,01266	0,01239	-0,01343	-0,00828	-0,03021	0,00037	-0,00105	0,04668	-0,01069	-0,02812	-0,02223	-0,04758	0,05371	-0,05107	0,01821	-0,00660	0,03669
ISAT	0,00796	-0,00815	0,01917	-0,00736	-0,01658	-0,03084	0,01574	0,00410	0,00279	0,05046	-0,02823	-0,00140	0,00417	-0,03146	0,00009	-0,01179	0,00687	0,01686	0,01651	-0,03225	0,02395
JECC	-0,00112	-0,09746	-0,04556	0,12137	-0,03736	-0,09111	0,00652	-0,05278	-0,06829	-0,01703	0,04555	0,03557	-0,02678	-0,04583	-0,04914	-0,01293	-0,00788	0,02060	0,00257	-0,05525	0,07015
JIHD	0,03858	0,03302	0,00205	-0,03285	0,03806	-0,04035	-0,01447	-0,06784	0,00588	-0,02817	0,03396	-0,04581	0,00284	0,17221	-0,08347	-0,01688	-0,04846	-0,06929	-0,06931	-0,03996	0,05043
JKSW	-0,13280	0,05340	0,04364	0,01367	-0,01508	-0,18194	0,16093	-0,00083	0,02695	-0,05986	-0,04625	-0,00180	-0,02678	-0,02310	0,02630	-0,02709	-0,01420	0,02364	0,04042	-0,00653	-0,16715
JPRS	-0,05082	-0,00587	0,04946	0,19721	0,23713	-0,23499	-0,03525	-0,00400	0,04797	0,02531	0,38664	0,02782	0,05939	0,00471	0,00683	-0,03922	-0,05614	0,01597	0,01574	0,05980	-0,03840
JRPT	-0,00112	0,00195	0,03997	-0,03837	0,14003	-0,13227	-0,10643	0,05280	-0,01732	0,03294	-0,02250	0,00766	-0,02707	-0,04583	0,02286	0,07491	-0,06679	0,03123	0,06841	0,06489	0,01802
JSPT	-0,00907	0,04138	0,03333	0,00864	-0,01465	-0,03547	-0,00653	-0,00250	0,02132	0,06559	-0,03920	-0,00309	-0,02338	-0,02039	0,03861	-0,02363	-0,01316	0,01758	0,03121	-0,00693	-0,00121
KAEF	0,08850	0,01129	0,00385	-0,03403	0,11198	0,10982	-0,07050	-0,09430	-0,00849	-0,06409	0,06634	0,01671	-0,05730	0,11131	-0,02528	-0,00618	0,00179	-0,04166	0,00128	0,01551	0,02909
KARK	0,15553	-0,25736	0,13854	-0,00133	0,00255	0,02448	-0,00077	0,11046	-0,12383	-0,01740	-0,01467	0,02207	-0,01763	-0,00805	0,16295	0,03258	-0,12735	0,00290	0,04294	-0,00396	0,02409
KARW	0,04975	0,04044	0,01205	-0,01466	-0,03857	-0,00550	-0,00077	0,02599	0,07790	-0,04477	-0,00261	-0,02632	-0,01183	0,02406	-0,02661	-0,01437	0,02154	0,03747	-0,00710	-0,00041	0,05078
KBLL	-0,01176	0,04918	0,03945	0,00962	-0,01898	0,06709	-0,05865	-0,05643	0,02341	0,07628	0,00676	-0,00560	-0,08200	0,02969	-0,03152	0,02589	-0,01741	-0,03405	0,03454	0,04545	-0,05604
KBLLM	-0,00986	0,14168	0,03743	-0,03358	-0,01667	-0,03906	-0,00654	-0,00272	0,02444	-0,01566	-0,04482	-0,00353	-0,02674	-0,02332	0,02257	-0,07703	-0,01505	0,02010	0,03570	-0,00793	-0,00137
KDSI	-0,02436	0,04665	0,03798	-0,00552	-0,04837	-0,00079	-0,00507	-0,01689	0,02536	0,05647	-0,04093	-0,03711	-0,04225	-0,02044	0,02373	-0,00514	-0,04952	0,02135	-0,00210	-0,02563	-0,06055
KIAS	-0,00806	0,04235	0,03430	0,00964	-0,01363	-0,03444	-0,00553	-0,00150	0,02124	0,06535	-0,03908	-0,00308	-0,02330	-0,02032	0,01967	-0,02355	-0,01312	0,01752	0,03111	-0,00691	-0,00120
KICI	0,08007	-0,11533	0,05604	0,05834	0,02550	-0,01799	-0,04541	-0,00875	0,09739	0,02451	0,07989	-0,05077	-0,00585	-0,03109	-0,02738	0,02256	-0,11187	-0,01838	0,01988	0,03684	-0,01063

KIJA	-0,02874	-0,02227	-0,04712	-0,01098	0,06716	0,09113	0,01645	-0,05468	-0,04349	-0,03535	-0,03147	0,05633	-0,00120	-0,05541	0,01782	0,00104	-0,01400	-0,00656	0,01570	-0,01530	0,02456
KKGI	0,02990	0,05561	-0,10842	0,04940	-0,01168	-0,06888	-0,00474	-0,00128	0,01815	0,05577	-0,03337	-0,00263	-0,01994	0,22751	0,03323	0,01210	-0,12060	0,01499	0,06172	-0,03981	0,03406
KLBF	-0,02405	0,00018	0,08461	-0,00476	0,02257	-0,01827	-0,06669	-0,00863	-0,00379	0,02337	0,05310	-0,06020	0,00782	-0,02885	-0,01294	0,01031	-0,04150	0,02083	0,01994	0,02413	-0,00926
LAPD	-0,13150	-0,00682	0,12458	-0,01353	0,00631	0,08808	-0,02708	-0,00603	-0,00309	0,01348	0,04570	0,06058	-0,04584	-0,01842	0,07064	0,01187	-0,01860	-0,01124	0,01035	0,01993	-0,08687
LION	-0,00871	0,03944	-0,00147	0,00822	0,05444	-0,03367	0,00707	0,15688	0,01690	0,05762	-0,03836	-0,11501	0,02300	-0,02019	0,01757	-0,02324	-0,01338	0,01554	0,02837	-0,00752	-0,00214
LMPI	-0,12389	-0,00734	0,12560	0,06465	0,01774	0,05065	-0,04347	-0,06780	0,06667	-0,03230	0,08818	0,01895	-0,00192	-0,02762	-0,02383	0,02700	-0,02793	-0,01467	0,02427	-0,02096	-0,00678
LMSH	-0,00963	0,04433	0,03569	0,00929	0,22146	-0,03748	-0,00852	0,14833	0,21686	0,06236	0,06894	-0,04433	0,01690	-0,00399	0,00873	0,03023	-0,02082	0,00679	0,29974	0,20395	-0,01008
LPCK	-0,05421	-0,03838	0,12403	-0,01792	-0,01972	0,00980	-0,03932	0,01649	-0,00650	0,06894	0,06072	0,03678	-0,00450	0,00169	0,04911	0,13974	-0,02863	-0,01816	-0,05409	-0,06903	0,04070
LPIN	0,00136	0,02615	0,07423	-0,03949	-0,00035	-0,02230	-0,01907	0,02436	-0,02258	-0,01124	0,02203	0,03678	-0,00450	0,00169	0,04911	0,00640	0,02673	0,01121	0,07373	0,04511	-0,01461
LPKR	-0,05632	0,00334	-0,03335	-0,04293	-0,01126	0,02791	0,02172	0,00257	-0,01566	-0,03193	-0,00928	-0,09607	0,11258	0,04617	-0,16308	0,03409	-0,02453	-0,02204	0,11149	-0,02474	-0,03599
LSIP	-0,00826	-0,00219	0,00914	0,03026	0,01480	0,01288	-0,02990	-0,00313	-0,03611	0,00569	-0,01335	0,04995	-0,04107	-0,03600	-0,00744	0,00039	-0,01509	-0,02716	0,28667	0,05160	-0,02442
LTLS	-0,03672	0,03059	-0,00629	0,00938	-0,00082	-0,05224	0,00785	0,02639	0,02160	0,05414	-0,05686	-0,00428	0,01127	-0,03688	0,03439	-0,02602	-0,00064	-0,01056	0,03205	-0,02283	0,01343
MBAI	-0,02822	0,00608	0,03245	0,03647	0,03179	0,02956	0,04870	0,01413	0,09042	-0,02064	0,01436	0,08182	0,05584	0,03494	-0,06828	-0,02657	0,05302	0,02843	0,01952	0,04368	-0,06065
MDLN	0,10247	0,04535	0,03673	0,01031	-0,11524	-0,03695	-0,00599	0,10944	0,02368	-0,02534	-0,04298	0,10769	-0,02585	-0,12255	0,02183	-0,02613	-0,01455	0,01944	0,03452	0,10345	-0,20134
MDRN	-0,01071	0,01834	-0,02439	0,01053	0,08533	-0,07259	0,02473	-0,03500	0,02282	0,01143	-0,01281	-0,00457	-0,02801	-0,02456	0,02180	-0,06163	-0,01620	0,01931	0,00058	0,02670	-0,00239
MEDC	0,17310	-0,05336	-0,04535	0,01573	0,00582	0,04306	-0,00998	-0,02450	0,00782	0,00175	0,01757	-0,02904	0,00664	0,00082	-0,02521	0,01456	-0,04250	-0,000375	0,01242	0,01186	-0,01187
MERK	-0,00992	-0,01399	0,02970	0,02225	0,02065	0,04851	0,01307	-0,00568	0,03620	-0,04221	0,06871	-0,00877	0,04158	-0,10425	-0,00615	-0,04462	-0,02256	-0,02230	0,05641	0,09569	0,01567
META	0,03719	0,03034	0,00926	-0,01068	-0,31325	-0,00191	0,00167	0,02187	0,06106	-0,03187	0,00026	0,37995	-0,23178	0,01693	-0,02027	-0,10220	0,01508	0,04677	-0,00595	-0,00103	0,03655
MIRA	0,04576	-0,02100	0,01281	0,05122	0,14456	0,04543	-0,14235	0,07871	0,01530	0,01897	-0,05370	-0,07682	0,04054	0,02163	-0,02151	0,04447	-0,03314	0,03305	-0,00489	0,00080	0,04452
MLBI	0,15558	0,06518	-0,01414	0,00210	-0,00364	-0,02728	-0,01386	0,00395	-0,07712	-0,03454	-0,06809	-0,04847	-0,02699	0,12496	-0,04729	0,02623	-0,07466	-0,03963	0,04786	0,01709	0,01653
MLIA	-0,12343	-0,13112	0,05797	0,00094	0,06238	0,00660	-0,02079	0,01602	-0,04442	-0,01702	0,03924	-0,00528	-0,02681	-0,02364	0,01895	-0,02708	-0,01596	0,01666	0,03113	-0,00936	-0,00328
MLND	-0,00966	0,04446	0,03584	0,04052	-0,01651	-0,03867	-0,00789	-0,00360	0,02062	0,06764	-0,04359	-0,00528	-0,02681	-0,02326	0,01858	-0,04113	-0,00101	0,03082	0,00197	-0,00923	-0,00326
MLPL	-0,07577	-0,01309	0,00413	0,05105	-0,04564	-0,03803	0,02022	-0,01864	0,01917	0,03818	-0,02818	-0,00522	-0,02637	-0,02326	0,01858	-0,04113	-0,00101	0,03082	0,00197	-0,00923	-0,00326
MPPA	0,01164	0,00193	0,00847	-0,01727	-0,02844	-0,02545	-0,01299	-0,02869	-0,02771	0,02225	0,01678	-0,01195	0,00440	0,03918	0,01820	0,00370	0,00719	0,03691	0,07992	-0,03242	0,01038
MRAT	0,04241	-0,05331	-0,01727	-0,02844	-0,02545	-0,01299	-0,02869	-0,02771	0,02225	0,01678	-0,01195	0,00440	0,03918	-0,00329	0,01820	0,00370	0,00719	0,03691	0,07992	-0,03242	0,01038
MTDL	-0,02674	0,00981	0,00012	0,03996	0,08881	0,00053	0,05408	-0,02939	-0,01448	0,03555	0,01628	0,00380	0,00955	-0,03231	-0,02672	-0,03838	-0,00692	-0,01973	0,01875	0,05734	-0,03001
MTSM	-0,00889	0,04042	0,03256	0,00843	-0,01434	-0,03470	-0,00640	-0,00247	0,01976	0,06286	-0,03920	-0,00401	-0,02379	-0,02088	0,01824	-0,02404	-0,01383	0,01614	0,02943	-0,00776	-0,00218
NIPS	-0,05447	-0,00811	0,04880	0,07972	0,01186	-0,01437	-0,03783	-0,00525	-0,00166	0,02349	0,07233	-0,04313	-0,00340	-0,02572	-0,02244	-0,16010	-0,02600	-0,01448	0,01934	0,03434	-0,00763
PBRX	-0,12088	-0,04624	-0,00594	0,04371	0,03580	0,01149	-0,01142	-0,03189	-0,00344	0,00052	0,11734	0,06588	0,09358	0,11152	-0,05615	0,07039	0,00191	0,01142	-0,01220	0,00017	0,02894
PICO	-0,03899	0,05762	0,04616	-0,11285	-0,02179	-0,05194	-0,01007	-0,00420	0,03008	0,09396	-0,05921	-0,00650	0,10607	-0,03247	0,00052	-0,03715	-0,02202	-0,01080	0,02896	0,04212	-0,00375
PLAS	-0,08661	0,00274	0,04832	0,06645	-0,03382	-0,00189	-0,02155	0,00557	0,01049	-0,02231	0,07706	0,03304	-0,04656	0,04826	-0,00767	-0,02452	-0,01080	-0,00070	0,02896	0,04212	-0,00375
PLIN	-0,00701	0,04311	0,03512	0,01059	-0,01257	-0,03326	-0,00450	-0,00050	0,02217	0,10578	-0,03772	-0,00205	-0,02209	-0,01914	0,02049	-0,02234	-0,01200	0,01836	0,03183	-0,00584	-0,00019
PNSE	0,02738	-0,01272	0,00300	-0,00255	-0,02543	-0,01244	0,00478	-0,07360	-0,03236	-0,03095	-0,02489	-0,06640	0,01076	-0,03649	-0,04900	-0,00805	0,04230	0,03428	0,00963	-0,01362	-0,03441
POLY	0,00314	0,02130	0,08574	-0,04299	-0,14070	0,14294	-0,02006	-0,1136C	-0,02404	-0,01117	0,19327	0,04336	0,13934	-0,24649	0,05947	0,16107	0,03110	-0,12825	0,08771	0,05409	-0,01545
PRAS	-0,04863	-0,00716	0,04386	0,03573	0,01075	-0,01279	-0,03384	-0,00460	-0,00052	0,02252	0,06721	-0,03855	-0,24095	-0,02131	0,03058	-0,04625	-0,02157	-0,01068	0,02128	0,03545	-0,00421
PSDN	-0,01225	0,05795	0,04668	0,01232	-0,01991	-0,04878	-0,00871	-0,00502	0,02882	0,08778	-0,05370	-0,00515	-0,03244	-0,02842	0,02554	-0,03278	-0,01870	0,02264	0,04098	-0,01032	-0,00262

PTRO	0,00424	-0,01401	-0,01529	0,01528	-0,02181	-0,01339	-0,02435	0,00769	0,11612	0,05969	0,09665	0,12513	0,00774	0,02712	-0,04292	-0,00799	-0,06806	-0,01643	-0,00248	-0,02798	-0,01780
PUDP	-0,00871	-0,01448	0,07059	-0,01438	0,00642	-0,02018	-0,04486	-0,01056	-0,00578	0,04756	0,07292	-0,05152	-0,03332	0,07264	-0,05290	0,01832	-0,03292	-0,09372	0,01577	0,03188	0,01313
PWON	-0,05487	-0,16133	-0,01238	0,15862	0,04712	0,01179	-0,02153	-0,05130	-0,00896	-0,00317	0,02964	0,09355	-0,05728	-0,00644	-0,03553	-0,03125	0,02631	-0,03589	0,02458	0,02321	0,04277
PWSI	0,02867	-0,04484	0,16475	-0,02199	-0,02444	0,05423	-0,03718	-0,24012	0,03563	-0,02680	-0,00232	0,11403	-0,26881	-0,02637	-0,00052	-0,12293	-0,05798	0,22713	-0,37570	-0,10552	0,17756
PYFA	0,11448	-0,05425	-0,01309	0,02337	0,01578	-0,02177	-0,01809	-0,03953	-0,00970	-0,00555	0,01786	0,05067	-0,04411	-0,00721	-0,04190	-0,00958	0,01761	-0,02767	-0,03123	0,01535	0,02959
RAIS	0,00221	0,01774	-0,00167	-0,00096	0,04441	0,00599	-0,01066	-0,05691	-0,07586	-0,00257	0,02246	-0,00374	0,06016	-0,03320	-0,00554	-0,02881	-0,03219	0,00694	-0,04299	0,02516	0,01140
RDTX	-0,02928	0,04653	0,03770	0,01059	-0,01498	-0,03783	0,11803	-0,00262	0,02195	0,06968	-0,04323	-0,07843	-0,02641	-0,02316	0,02045	-0,02668	-0,01530	0,01810	0,03292	-0,00853	-0,00231
RICY	0,02086	0,01242	0,00327	0,00898	-0,01483	0,03745	0,02621	-0,03288	0,02309	0,07154	-0,07550	-0,00340	-0,02576	-0,02247	0,02175	-0,02604	-0,01450	0,01937	0,06772	-0,03990	-0,00133
RIGS	-0,03058	0,02428	-0,02635	0,01637	0,04414	0,00401	0,00930	0,01730	-0,03734	-0,01949	0,15664	0,04303	0,05856	-0,05416	0,01225	-0,02611	0,01514	0,00973	0,05299	0,07311	-0,00014
RIMO	-0,05976	0,05076	0,04129	-0,01465	-0,01476	-0,01192	0,02149	-0,02709	0,02610	0,05101	-0,04327	-0,02936	0,00356	-0,04934	0,02480	-0,05387	-0,01320	0,05172	0,00949	-0,00601	-0,02880
RIMB	0,04557	0,09218	-0,01742	0,00772	-0,01644	-0,03698	-0,00844	0,04813	0,01937	0,06440	-0,09137	-0,00419	0,00366	-0,03322	0,00302	0,02425	-0,04623	0,06186	-0,00573	-0,00133	0,00390
RYAN	-0,00013	0,05071	0,02358	0,05447	-0,00699	-0,02670	-0,01811	-0,01465	0,00645	0,04922	-0,00994	0,00317	0,00366	-0,03322	0,00302	0,02425	-0,04623	0,06186	-0,00573	-0,00133	0,00390
SAFE	0,00602	-0,06031	-0,00949	-0,05059	-0,04720	0,01769	0,03054	-0,00785	-0,04853	-0,03168	-0,11160	0,10844	-0,03197	0,02165	-0,02494	0,03062	0,02876	-0,00638	-0,03332	-0,01314	0,02263
SAIP	-0,02092	-0,01355	-0,01575	0,01341	0,06081	-0,00120	-0,00453	-0,01824	-0,01046	-0,00014	-0,04695	-0,22251	-0,02163	-0,08336	0,02779	0,00253	-0,02616	-0,03409	0,12308	0,08206	0,01788
SCCO	-0,00607	0,04440	0,03634	0,01163	-0,01163	-0,03241	0,02423	0,05353	0,04816	0,06719	-0,03855	-0,02712	-0,02264	-0,01962	0,02096	-0,02289	-0,01230	-0,00687	0,03256	-0,00601	-0,00022
SCPI	-0,02390	-0,06645	-0,17658	-0,03267	-0,04428	-0,00645	0,04017	0,03274	0,00992	-0,01161	-0,03085	-0,00410	-0,00039	0,02063	0,06134	-0,03511	-0,00185	-0,02053	-0,01778	0,01918	-0,02077
SHDA	-0,04295	-0,04245	-0,01182	0,04324	0,03447	0,00753	0,01410	-0,04130	-0,00998	0,08527	0,01921	0,06757	-0,04678	-0,00737	-0,02953	0,03206	0,06479	-0,01476	-0,00356	0,01519	0,03008
SHID	-0,18565	-0,07931	-0,03868	0,19050	-0,28753	0,08613	-0,04931	0,18158	0,04764	0,06329	-0,04149	-0,01258	-0,00851	0,01214	0,05159	-0,11866	0,07455	-0,02708	-0,02438	0,01180	-0,02730
SHSA	-0,01972	0,04086	0,03125	0,00160	-0,02542	-0,05048	0,12611	-0,13581	0,01655	0,06896	0,05153	-0,01360	-0,03724	-0,03376	0,01300	-0,03753	-0,02533	-0,08629	0,02637	-0,01808	-0,01140
SIIP	-0,01011	0,04685	0,00083	-0,02743	0,02452	-0,07768	-0,00631	-0,00173	0,02446	0,07533	-0,04490	-0,04256	0,01484	-0,02540	0,02265	-0,02712	-0,05510	0,02017	-0,00585	0,03553	-0,00139
SIMA	-0,02782	0,00131	0,00200	0,03443	-0,02611	0,01517	0,03184	-0,02656	0,04494	0,00969	0,04197	0,06460	-0,03453	-0,03090	0,01478	-0,03853	-0,02602	-0,15145	0,16207	-0,04353	-0,00652
SIMM	0,01671	0,02876	0,01862	-0,01144	0,01149	-0,01370	-0,02893	0,02522	0,00278	0,05494	-0,01836	0,02339	-0,07421	-0,04756	-0,00116	-0,05275	0,01434	-0,00441	0,01084	-0,03470	0,02999
SIPD	-0,11184	0,15460	0,03451	-0,09189	-0,01931	-0,15316	0,23877	-0,10570	0,02113	0,07055	-0,04699	-0,00647	-0,02923	-0,02587	0,01914	-0,02951	-0,01776	0,01672	0,03202	-0,01077	-0,00337
SKLT	-0,00247	0,05053	0,04106	0,01511	-0,00931	-0,03112	-0,00082	0,00342	0,02742	0,07388	-0,03604	0,00177	-0,01945	-0,01632	0,02564	-0,01971	-0,00876	0,02338	0,03764	-0,00225	0,00374
SMAR	0,04452	0,03643	-0,01956	0,03381	-0,03848	-0,03091	-0,00276	0,02771	0,02465	-0,00316	-0,01100	-0,08140	-0,02212	-0,01891	0,02421	-0,02239	-0,01114	0,02189	0,03654	-0,00445	0,00171
SMCB	0,01389	-0,02677	0,08054	0,05403	-0,01725	-0,00551	0,01174	-0,01249	-0,01243	-0,00251	-0,02497	0,01222	-0,04217	-0,03954	-0,01702	-0,03054	-0,00908	-0,05178	0,00972	0,00777	-0,03590
SMDM	0,03128	-0,02554	0,04118	-0,00672	0,17335	-0,03169	-0,01701	-0,00796	0,03664	-0,01116	0,00758	0,00096	-0,02632	-0,16468	0,00970	-0,08376	-0,03457	-0,03118	-0,02451	-0,07173	0,01392
SMDR	-0,03100	0,05768	0,02841	0,02212	-0,00994	0,00885	0,05113	0,00422	-0,00880	-0,01920	-0,07220	-0,00863	0,05737	0,04685	-0,05849	-0,02531	0,00410	-0,02251	0,00133	0,01782	-0,02805
SMGR	-0,04696	-0,01597	-0,03723	-0,04335	0,00885	0,05113	0,00422	-0,00880	-0,01920	-0,07220	-0,00863	0,05737	0,04685	-0,05849	-0,02531	0,00410	-0,02251	0,00133	0,01782	-0,02805	0,01062
SMPL	-0,09278	0,06218	0,07889	0,02336	-0,02968	-0,02846	-0,04711	0,06578	0,03717	0,03726	0,07751	0,00749	-0,08965	-0,01124	0,03450	-0,01493	0,06069	-0,00646	0,01215	-0,05030	0,05874
SMRA	0,00750	0,00085	-0,01388	0,03941	-0,05340	0,02118	0,03418	-0,00685	0,01211	-0,00874	-0,03327	0,06125	0,18554	0,03785	-0,08758	0,03275	0,06069	-0,00646	0,01215	-0,05030	0,05874
SMSM	0,01160	-0,03494	-0,08961	-0,00685	0,01211	0,03418	-0,00685	0,01211	-0,00874	-0,03327	0,06125	0,18554	0,03785	-0,08758	0,03275	0,06069	-0,00646	0,01215	-0,05030	0,05874	0,01685
SOBI	-0,12053	0,14365	-0,06839	-0,03708	-0,01826	-0,07032	-0,02854	0,15928	0,07650	0,00381	-0,01442	-0,01166	0,00145	-0,01110	-0,00170	0,01160	0,00729	-0,02718	-0,01321	-0,01327	-0,10122
SONA	-0,04341	-0,00158	-0,02507	-0,00274	0,04338	-0,02536	-0,04960	0,02236	0,01928	0,01320	-0,01826	0,05010	-0,00800	0,00812	0,01077	0,03860	0,04705	-0,01684	0,01068	-0,00242	-0,03775
SPMA	0,02533	-0,01469	-0,05782	-0,00455	0,03512	-0,01442	0,00184	-0,07695	-0,03435	0,02637	-0,08113	-0,06934	0,06914	-0,03940	-0,05609	-0,01069	0,19416	-0,00719	-0,08191	-0,01725	-0,04056
SRSN	-0,05729	0,05692	0,04671	0,01526	-0,01435	-0,09358	-0,00410	0,00106	0,03039	0,08737	0,00911	-0,00089	-0,02642	-0,02266	-0,02479	0,02882	0,14433	-0,02033	0,04228	-0,00572	0,14434

SSIA	0,05276	0,01516	0,03593	0,00938	-0,01489	-0,03761	-0,03633	-0,00163	0,02304	0,07042	-0,04207	-0,06484	-0,02427	-0,02104	0,02233	-0,02454	-0,01322	-0,14667	0,03474	-0,00649	-0,00030
STTP	0,00506	-0,02339	0,06258	0,00284	-0,00995	-0,00562	-0,02297	0,03827	-0,04540	-0,03713	0,00339	-0,02512	-0,02774	0,00363	-0,00164	0,00069	0,01523	0,06885	-0,00430	0,04183	0,00139
SUBA	-0,11058	0,04306	-0,07534	0,00932	-0,01529	-0,03862	-0,00692	-0,00068	0,02483	0,07434	-0,04273	-0,00345	-0,02612	0,10222	-0,08905	0,09860	-0,01470	-0,09147	0,15988	-0,11885	-0,00036
SUDI	-0,00989	0,04563	0,03678	0,00961	-0,01602	-0,03894	-0,00710	-0,00256	0,02242	0,07114	-0,04406	-0,00439	-0,02669	-0,02340	0,02069	-0,02696	-0,01546	-0,12455	0,03329	-0,00861	-0,00232
SULI	0,00233	-0,00625	0,03921	-0,05482	0,00974	-0,01139	-0,03031	-0,00401	0,09486	0,02049	0,01773	-0,03493	-0,00183	-0,06497	-0,01677	0,02016	-0,01975	-0,05773	0,06818	0,03073	-0,05200
TBLA	0,03214	0,08356	0,00967	-0,01613	0,00986	-0,01327	0,00016	0,00346	0,01012	0,05588	-0,08853	0,00170	0,03373	-0,03489	0,02495	-0,00355	-0,02721	0,04020	0,03714	-0,07233	0,03976
TBMS	-0,00854	0,03247	0,02593	0,00587	-0,01315	-0,03017	-0,00649	-0,00322	0,01519	0,05084	-0,03365	-0,00450	-0,02095	-0,01852	0,01400	-0,02115	-0,01266	0,01225	0,02330	-0,00762	-0,00199
TEJA	-0,00150	0,02128	0,06546	-0,03912	-0,00308	-0,02333	-0,02035	0,01970	-0,02358	-0,01313	0,01754	0,03115	-0,00692	-0,00120	0,04250	-0,00867	0,02190	0,00759	0,06538	0,03901	-0,01635
TFCO	0,05488	-0,07891	0,01273	-0,04316	-0,05776	-0,00949	0,04976	0,04032	-0,30786	0,32495	-0,02331	-0,00648	0,06490	0,21187	0,07718	-0,04861	-0,00568	-0,02980	-0,02625	-0,05748	-0,03010
TGKA	-0,07489	-0,03405	-0,03258	-0,02658	-0,06750	0,00861	-0,03796	-0,05027	-0,00993	0,03964	0,03174	0,00749	-0,01541	-0,03587	-0,00743	-0,00347	0,01885	0,06220	0,08545	-0,00588	-0,02481
TIRA	-0,00995	0,03974	0,03182	0,00752	-0,01546	-0,03600	-0,00745	-0,00348	0,01892	0,06241	-0,04055	-0,00504	-0,02501	-0,02206	0,01742	-0,02525	-0,01495	0,01530	0,02871	-0,00882	-0,00319
TIRT	-0,04014	0,07695	0,06708	0,00962	-0,01689	-0,03961	-0,00804	-0,06146	0,02219	0,07026	-0,04357	-0,00335	-0,02637	-0,02313	0,02042	-0,02664	-0,14028	0,05379	0,03287	-0,00852	0,06666
TKGA	0,01967	0,00054	-0,01765	-0,03393	-0,01127	-0,00815	0,00933	0,18009	-0,03113	-0,00707	-0,02065	-0,01865	0,00821	-0,02082	-0,01381	0,00677	0,01589	-0,00964	-0,00581	0,02348	-0,01083
TKIM	0,03088	0,04466	-0,00982	-0,01185	0,04657	0,05076	-0,05689	-0,04342	0,02235	-0,02079	-0,00692	0,03691	-0,00341	-0,03963	-0,00304	-0,01976	-0,10022	0,06404	-0,04610	0,01405	0,01888
TLKM	-0,00729	-0,03558	-0,03742	-0,02068	-0,01167	0,02523	-0,00377	-0,04376	0,01614	0,01145	-0,00819	-0,00427	0,01944	0,00599	0,01399	-0,01684	-0,02573	0,00561	-0,00518	0,00423	-0,00755
TMPI	0,02319	-0,03350	-0,04188	0,10866	-0,04723	0,02655	-0,03871	-0,00398	0,01355	-0,02062	-0,01772	0,01331	-0,01366	0,01591	-0,00668	-0,00767	0,03488	0,03996	-0,00935	-0,01549	-0,02963
TOTO	0,00964	-0,01363	-0,03444	-0,00553	-0,00150	0,02124	0,06535	-0,03908	-0,00308	-0,02330	-0,02032	0,01967	-0,02355	-0,01312	0,01752	0,03111	-0,00691	-0,00120	0,04245	-0,00866	0,02188
TRPK	-0,00615	0,04479	0,03669	0,01174	-0,01176	-0,03274	-0,00358	0,00048	0,02351	0,06816	-0,03759	-0,00112	-0,02157	-0,01856	0,02190	-0,02183	0,25136	0,21972	-0,03320	-0,04499	-0,07065
TRST	0,01740	-0,00948	0,00837	0,07300	-0,01888	-0,07354	0,02098	-0,03502	-0,00999	0,03842	0,08743	-0,06615	-0,02925	0,00523	-0,01298	-0,02952	0,01304	-0,01532	0,02971	-0,01149	-0,00431
TSPC	-0,05831	-0,01208	0,05303	0,02742	-0,01606	-0,01842	-0,02480	-0,01764	-0,02064	0,05547	0,05428	-0,00417	-0,03083	-0,02903	0,02430	0,03485	0,00194	0,00508	0,01657	-0,02010	-0,01072
TURI	0,03657	0,04552	0,15619	0,08186	0,02117	0,01634	0,13376	-0,00057	-0,02987	0,04130	-0,06691	-0,05982	-0,00511	0,01361	0,02347	0,00927	-0,01064	0,02123	0,06522	0,01030	0,01604
UGAR	-0,20945	-0,01583	0,01881	0,03418	-0,00881	-0,00236	0,04700	-0,01179	0,02274	0,00657	0,07178	0,04191	-0,02040	-0,03446	-0,00634	-0,04099	-0,01204	-0,04636	0,03560	-0,15865	-0,00831
UNIC	0,00149	-0,07122	-0,03273	0,02182	-0,02595	-0,06677	0,04138	-0,03856	-0,05073	-0,01084	0,03817	0,03036	0,00638	-0,01692	-0,03663	-0,00840	-0,00447	0,01774	0,06089	-0,04122	-0,08702
UNSP	-0,01134	0,01722	0,05600	-0,01530	-0,01666	-0,03752	-0,00775	-0,02737	0,02009	0,06612	-0,04278	-0,02961	-0,05142	0,00234	0,01862	-0,02668	-0,04074	-0,03492	0,03060	-0,00924	-0,00326
UNTR	0,03235	0,04587	-0,00477	-0,03344	-0,01725	0,00507	0,03433	0,03699	-0,01830	-0,01178	-0,04588	0,04001	-0,07057	0,02170	-0,02246	0,06354	-0,05735	0,01861	0,03383	-0,00873	-0,00334
UNVR	-0,05221	0,05168	0,06391	0,03711	0,03376	0,00664	-0,04806	-0,01549	-0,01541	0,01574	0,05974	-0,03485	-0,00436	-0,01553	0,00911	0,03294	-0,01638	-0,00918	-0,01631	0,03291	-0,01272
ZBRA	-0,00973	0,14483	-0,05376	0,00970	-0,01675	-0,03928	0,04198	-0,00363	-0,02657	0,06879	-0,04264	-0,00428	-0,02585	-0,02267	0,01998	-0,02612	-0,06499	0,01768	0,03218	0,04426	0,04672

Appendix 8.  
List of Abnormal Return No. 38  
Companies Listed in the Jakarta Stock Exchange  
Year 2003

Code	Abnormal Return (day ...)																			
	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9
AALI	0,0099	0,0506	-0,0420	0,0149	0,0152	0,0015	-0,0026	0,0038	-0,0155	-0,0076	-0,0077	-0,0029	-0,0013	0,0124	0,0065	0,0143	-0,0135	-0,0175	0,0062	-0,0162
ACAP	0,0075	-0,0062	-0,0034	-0,0173	0,0182	-0,0017	-0,0121	-0,0025	-0,0070	0,0084	-0,0020	-0,0387	-0,0107	-0,0313	0,0064	-0,0147	-0,0022	-0,0143	0,0055	-0,0064
ADES	0,0214	-0,0080	-0,0020	-0,0318	0,0448	-0,0439	0,0269	-0,0007	-0,0098	0,0232	0,0082	0,1278	-0,0962	0,0248	0,0067	-0,0259	0,0004	0,0929	-0,0560	-0,0127
AISA	-0,0218	-0,0121	-0,0139	-0,0208	-0,0063	-0,0458	0,0034	0,0032	-0,0088	-0,0638	-0,0508	-0,0219	0,0079	-0,0596	0,0471	-0,0203	-0,0507	-0,0164	0,0899	0,0007
AKPI	0,1301	0,0021	-0,0031	-0,0007	-0,0133	-0,0016	-0,0071	-0,0011	0,0805	-0,0107	0,0363	0,0021	-0,0142	-0,0132	-0,0159	0,0073	-0,0079	-0,01	-0,0030	-0,0089
AKRA	-0,0792	-0,0138	-0,0067	-0,0562	-0,0004	-0,0074	-0,0284	0,1103	-0,0157	0,0327	-0,1057	-0,1422	0,1909	0,0989	-0,1462	-0,0352	-0,0036	0,0818	0,0140	-0,1031
ALDI	0,0159	0,0030	0,5026	-0,0109	0,0049	0,0012	-0,0074	0,0024	-0,0021	0,0137	0,0029	-0,0015	-0,0053	-0,0270	-0,3276	0,4795	-0,3316	-0,0193	0,0097	-0,0043
ALFA	-0,0088	0,0012	-0,0005	-0,0001	-0,002	0,0001	-0,0002	0,0003	-0,0014	-0,0007	-0,0071	-0,0001	-0,0006	-0,0013	-0,0027	-0,0354	0,0348	-0,0005	-0,0016	0,0010
ALKA	0,0232	-0,0087	-0,0023	-0,0347	0,0032	-0,0029	-0,0221	-0,0014	-0,0105	0,0247	0,0081	-0,0091	-0,0173	-0,0662	0,0070	-0,0280	0,0004	-0,0272	0,0162	-0,0121
ALMI	0,0162	-0,0042	-0,0012	-0,0208	0,0034	0,0008	-0,0116	0,0345	0,0582	-0,0701	-0,0616	-0,0034	0,0603	-0,0380	0,0069	-0,0152	-0,0296	-0,0135	0,0126	-0,0031
AMFG	0,0057	-0,0047	0,0090	-0,0023	0,0048	-0,0019	-0,0019	0,0018	0,0151	0,0058	0,0417	-0,0148	0,0009	-0,0027	0,0159	0,0611	0,0228	-0,0289	0,0078	0,0108
ANTA	-0,0023	0,2868	0,1385	0,0049	0,0946	0,0051	0,0256	-0,0074	0,0959	0,0028	-0,0061	-0,0318	-0,0390	-0,0456	0,0084	-0,0293	-0,0222	0,0170	-0,0086	-0,0123
ANTM	0,0148	0,0257	-0,0347	-0,0238	0,0052	-0,0358	0,0003	0,0327	0,0245	0,0017	-0,0030	-0,0017	0,0440	-0,0069	0,0069	-0,0011	-0,0003	-0,0189	0,0107	-0,0070
APLI	0,3468	0,0059	-0,0175	0,0059	-0,0093	0,0115	-0,0061	0,0005	0,0062	-0,0162	-0,0071	-0,0130	0,0002	-0,0015	-0,0069	0,1113	-0,0071	-0,2562	-0,0105	0,0021
AQUA	-0,0216	0,0077	-0,0114	0,0136	-0,0074	-0,0031	-0,0245	-0,0006	-0,0078	0,0125	-0,0001	0,0053	-0,0001	0,0147	-0,0013	-0,0071	-0,0131	-0,0453	0,0029	-0,0013
ARGO	0,0116	-0,0051	-0,0017	-0,0187	0,0012	-0,0021	0,0003	-0,0121	-0,0006	0,0078	0,0718	-0,0001	-0,0013	-0,0069	-0,0125	-0,0460	0,0041	-0,0210	-0,0004	-0,0708
ARNA	-0,0107	0,0151	-0,0066	-0,0022	-0,0242	0,0015	-0,0027	0,0003	-0,0159	-0,0078	0,1340	-0,0408	-0,0398	-0,0001	0,0130	0,0083	0,0017	0,0368	-0,0033	-0,0129
ASGR	0,0283	-0,0273	0,0127	-0,0041	0,0028	0,0218	-0,0158	-0,0232	0,0028	-0,0186	0,0182	0,0082	0,0178	0,0082	0,0293	0,0408	-0,0123	0,0151	-0,0229	-0,0040
ASII	-0,0150	0,0187	-0,0096	-0,0146	0,0107	-0,0111	0,0156	-0,0268	0,0180	0,0016	-0,0028	0,0004	-0,0156	-0,0008	-0,0008	-0,0082	0,0025	0,0122	0,0064	-0,0081
AUTO	-0,0273	0,0194	-0,0306	0,0196	0,0029	-0,0111	0,0156	-0,0290	-0,0052	0,0016	-0,0028	0,0004	-0,0184	0,0617	0,0369	0,0042	-0,0088	-0,0047	-0,0047	-0,0003
BASS	0,0729	-0,0605	-0,0617	0,1215	0,0028	-0,0582	-0,0290	-0,0190	0,0284	0,0178	-0,0493	-0,0303	-0,0089	-0,0153	0,0369	0,0042	0,0088	-0,1148	0,0118	-0,0074
BATA	0,0171	-0,0434	-0,0037	-0,0307	-0,0706	-0,0030	0,0379	-0,0389	0,0284	0,0178	0,0358	-0,0089	-0,0069	-0,0153	-0,0176	0,0209	-0,0068	-0,0014	0,0118	-0,0074
BATI	0,0080	-0,0071	-0,0141	0,0146	0,0064	-0,0188	0,0065	-0,0097	-0,0065	-0,0028	0,0126	0,0003	-0,0032	-0,0006	-0,0006	-0,0087	-0,0015	0,0126	-0,0011	-0,0068
BAYU	0,0166	-0,0046	-0,0001	0,2613	0,4443	-0,3874	0,0004	0,1068	0,1027	-0,0095	0,0166	-0,0011	-0,0085	-0,0146	-0,0506	-0,0965	-0,0224	0,0146	-0,0226	0,0151
BIMA	0,0007	-0,0108	0,0070	-0,0058	-0,0076	-0,0019	-0,0068	-0,0083	0,0042	0,0167	0,0071	-0,0231	-0,0052	-0,0113	0,0022	0,0072	-0,0187	-0,0076	0,0032	0,0023
BIPP	-0,0082	-0,0025	-0,0021	0,3275	-0,2519	-0,002	0,3293	-0,0061	-0,2541	-0,0050	-0,0018	-0,0040	-0,0049	-0,339	0,4973	-0,0303	-0,0024	-0,0040	-0,0013	-0,0015
BKSL	-0,0454	-0,0014	0,0015	-0,0132	0,0040	0,0018	0,0032	0,0536	-0,0034	0,0131	0,0019	-0,0027	-0,0066	-0,0302	0,0049	-0,0118	0,0017	-0,0696	0,0089	-0,0037

BLTA	-0,04005	0,03773	-0,00148	-0,01598	0,00103	-0,0018	0,00026	-0,01044	-0,00051	-0,00521	0,01074	-0,01019	-0,00459	-0,0185	-0,04036	0,01312	-0,01296	-0,00028	-0,01257	0,01807	-0,0046
BMSR	0,01569	-0,00403	-0,00004	-0,01999	0,0034	-0,00051	0,00236	0,1286	0,00025	-0,00661	0,0167	0,00087	-0,00571	-0,01113	-0,04165	0,00484	-0,01757	0,0006	0,10543	-0,09965	-0,00767
BMTR	-0,00971	0,01124	-0,04705	0,01992	0,00054	0,00026	-0,00321	-0,00068	-0,01385	-0,00163	-0,00741	0,05389	-0,04111	-0,00665	-0,01121	-0,00659	-0,00779	-0,01703	-0,00133	-0,0038	0,0073
BRAM	0,01448	-0,00538	-0,00216	-0,02228	0,00149	-0,00161	0,00037	-0,01414	0,04788	-0,00655	0,01657	0,00087	-0,00565	-0,01103	0,04809	0,00494	0,10001	0,00063	-0,01616	0,0106	-0,00696
BRNA	-0,00147	-0,01589	0,00102	-0,00176	0,00025	-0,01026	0,03521	-0,00511	0,01055	-0,03457	-0,00451	-0,02601	0,00779	0,00257	0,03952	-0,00029	-0,03011	0,02443	-0,00662	-0,00798	-0,05183
BRPT	0,00721	-0,00497	-0,03946	-0,07796	0,006	0,08595	0,12857	-0,00154	0,00503	-0,01298	0,15274	-0,04784	-0,03427	-0,03624	0,03222	-0,0005	-0,0313	0,00966	0,02883	-0,00118	0,07449
BTON	0,01449	-0,00494	-0,00101	-0,02068	0,00239	-0,00143	0,00135	-0,01307	0,04198	-0,00601	0,01548	0,00088	-0,00519	-0,01019	-0,03973	0,00466	-0,01656	0,00064	-0,01607	0,01018	-0,00844
BUDI	0,01079	-0,00475	-0,0016	-0,01731	0,00111	-0,00298	0,00028	0,04283	-0,00158	-0,00684	-0,04157	-0,0011	-0,06171	-0,01032	0,02384	0,00206	-0,0152	-0,00129	-0,01268	0,00684	-0,05941
BUMI	0,0147	-0,01223	-0,00678	0,21334	-0,20219	-0,00717	-0,00355	-0,02231	-0,0049	0,23688	-0,18517	-0,00415	-0,01205	-0,01855	-0,06254	0,00017	-0,02117	-0,00342	-0,02033	0,00789	-0,01203
CKRA	0,02077	-0,00482	0,00036	-0,02552	0,17062	-0,00141	0,00249	-0,01775	-0,14183	-0,00784	0,02231	0,00183	-0,00668	0,15298	-0,05083	0,00784	0,11945	-0,12249	0,12009	0,01543	-0,00914
CLPI	0,00842	-0,00788	0,0135	0,009	-0,00086	-0,01909	0,00228	-0,00126	0,00132	-0,02542	0,00036	-0,00552	0,00095	0,00089	0,00895	0,00411	-0,03651	0,00437	-0,01392	0,00169	-0,01332
CMNP	-0,00018	0,00573	0,00986	-0,0121	-0,01418	0,00921	-0,00162	-0,00389	-0,00277	0,01726	-0,0386	0,01176	0,00485	-0,0279	-0,00318	0,00289	-0,00793	-0,00032	-0,02818	0,02185	-0,02019
CMPP	-0,00657	0,18075	-0,00526	0,01117	-0,0077	0,00543	0,01955	-0,20426	0,31177	-0,05395	-0,00116	-0,13022	-0,01402	-0,0045	-0,0112	0,00478	0,20049	-0,00398	-0,1019	0,02637	0,01425
CNKO	0,01771	-0,0078	-0,00264	-0,02845	0,00182	-0,00321	0,00046	-0,01856	-0,00091	-0,00925	0,01908	-0,00016	-0,00815	-0,01475	-0,05379	0,00484	-0,02313	-0,00049	-0,02236	0,01235	-0,01208
CNTX	0,0215	-0,00947	-0,0032	-0,03453	0,0022	-0,00385	0,00055	-0,0209	-0,00211	0,07288	0,02218	-0,00119	-0,01091	-0,01892	-0,06677	0,00491	-0,02949	-0,00159	-0,02867	0,01463	-0,01396
CPIN	0,01113	-0,00634	-0,00281	-0,0205	0,04506	-0,00322	0,01361	0,02809	0,01186	0,00577	-0,04009	-0,00111	0,03488	0,00187	-0,01233	0,00238	0,00805	-0,00136	0,01841	0,01986	-0,00831
CPPR	0,01768	-0,00778	-0,00263	-0,02836	0,00181	-0,00317	0,00045	-0,0184	-0,00091	-0,00917	0,01892	0,03433	-0,00809	0,05204	-0,05698	0,00403	-0,02483	-0,0015	-0,02511	0,01257	-0,01226
CTBN	0,01181	-0,0052	-0,00176	-0,01895	0,00121	-0,00212	0,0003	-0,01233	-0,00061	-0,00614	0,01268	-0,0001	-0,00542	-0,0098	-0,03563	0,0032	-0,01539	-0,00032	-0,01498	0,00835	-0,00693
CTRA	0,00041	-0,0152	0,08649	-0,00003	0,00229	-0,00979	-0,0755	-0,00388	0,01412	0,0019	-0,00318	0,07596	-0,02907	0,08171	-0,07967	0,00277	0,14251	-0,05704	0,06711	-0,00635	0,0669
CTRS	-0,00236	-0,02546	0,00162	0,08696	-0,00058	-0,01812	-0,04351	-0,00953	0,01661	-0,04462	-0,00852	0,03084	-0,09438	0,04894	-0,02206	-0,00143	-0,06335	0,05617	-0,05237	-0,01172	-0,00265
CTTH	-0,00688	-0,00299	-0,02245	0,00037	-0,0034	-0,00066	-0,01491	-0,00168	0,14592	0,0133	-0,00112	-0,00711	-0,07872	-0,04137	0,07406	-0,01555	-0,06595	-0,00826	-0,0642	-0,00051	-0,07845
DART	0,01593	0,07631	-0,00237	-0,0256	-0,07533	-0,00278	0,0004	0,14884	-0,00183	-0,00939	0,0163	-0,00114	-0,00839	-0,01437	-0,04973	0,00338	-0,02029	-0,00042	-0,02129	0,01053	-0,08199
DAVO	0,01583	-0,01015	0,02394	-0,00478	0,00103	0,30244	0,25328	-0,00291	-0,03845	-0,02143	-0,0001	-0,09351	-0,06684	0,00081	-0,00886	-0,01683	0,089	-0,0793	-0,02535	0,00145	0,02402
DILD	0,01144	-0,00647	-0,1447	-0,01983	0,00127	0,1645	0,00031	-0,01258	-0,00062	-0,00627	0,01293	-0,14297	-0,00553	0,15667	-0,03648	-0,13958	-0,01584	-0,00036	-0,01513	0,00844	-0,007
DLTA	0,01394	-0,00614	-0,00207	-0,0224	0,00143	-0,00251	0,00036	-0,01454	-0,00072	-0,00725	0,01495	-0,00012	-0,00639	-0,01156	0,01452	0,00369	-0,0177	0,00065	-0,01515	0,06224	-0,02614
DNET	-0,00706	0,00275	-0,00553	-0,00386	-0,01222	-0,07289	-0,004	-0,00286	-0,00889	-0,00329	-0,08285	-0,16362	-0,00305	-0,00559	-0,00768	-0,02017	-0,00146	-0,01305	-0,00419	-0,01285	0,00097
DNKS	-0,00981	0,00876	0,01059	-0,0044	0,08907	-0,05089	0,07496	0,01885	-0,04719	-0,00476	0,01289	-0,0491	0,0696	0,11926	0,01229	0,00389	-0,05349	0,00072	0,07443	-0,0322	0,07869
DPNS	-0,00534	0,01379	-0,02783	0,02656	-0,01698	0,00322	0,0009	0,0033	0,0153	0,00139	-0,00415	0,0147	0,0019	-0,00343	-0,00781	-0,03395	0,00523	-0,01318	0,05167	0,03364	-0,01197
DSFI	0,2803	0,20893	-0,06095	-0,01318	-0,12431	-0,07258	0,00017	-0,08335	0,08301	-0,08012	-0,07672	0,09086	-0,00282	-0,08844	-0,01873	0,09259	-0,00905	-0,00019	-0,00839	-0,07849	0,0869
DSUC	0,01438	-0,00633	-0,00214	0,04716	0,06722	-0,0037	-0,00062	-0,07883	-0,00175	-0,00864	0,01476	-0,00113	-0,00774	-0,01318	0,22132	0,00299	-0,02073	-0,05406	-0,18779	0,01049	-0,0087
DUTI	-0,03858	0,04892	-0,01667	0,0038	0,0019	-0,00061	-0,01516	0,02491	0,00054	-0,01983	0,02708	0,00092	-0,00314	0,05803	0,06638	-0,01059	0,01797	-0,02663	0,01822	-0,00641	0,01151
DVLA	0,00566	-0,01216	0,01089	-0,00768	-0,00392	-0,02269	0,08171	0,03301	-0,0397	0,02134	-0,00369	-0,04708	0,01152	-0,00312	-0,00921	-0,01422	-0,0448	0,00076	-0,02106	-0,04182	0,05803
DYNA	-0,04215	-0,00345	0,02515	-0,01261	-0,02485	0,02493	0,0002	-0,00808	-0,0004	0,04725	-0,01608	-0,02507	0,02209	0,11858	0,04666	-0,01794	0,13614	-0,00126	-0,0128	-0,03139	-0,04498
EKAD	0,01769	-0,00779	-0,00263	-0,02841	0,00181	-0,00312	0,0215	-0,01825	-0,0009	-0,00909	0,01877	0,01016	-0,00802	0,00591	-0,00164	0,00464	-0,02238	-0,00046	0,0253	-0,03288	-0,01042

ERTX	0,02048	-0,00326	0,00155	-0,02248	0,29802	-0,00133	0,00248	-0,01736	-0,08986	-0,00765	0,02191	0,00184	-0,00651	-0,01339	-0,0546	0,00709	-0,02227	0,00151	-0,02098	0,0156	-0,00745
ESTI	-0,06912	-0,00191	-0,0428	-0,01223	0,00291	-0,045	-0,13966	-0,00516	-0,16407	-0,3344	0,01139	0,00293	-0,00059	-0,00348	-0,02034	0,0051	-0,0071	0,00279	-0,20221	-0,17878	0,00191
ETWA	0,007	-0,00596	-0,00334	-0,01644	-0,00107	-0,00246	-0,00079	-0,00947	-0,00142	-0,00522	0,00771	-0,00107	-0,07615	0,06919	-0,09698	0,00121	-0,01168	0,07465	-0,01263	0,0048	-0,00581
FAST	0,00728	-0,00464	-0,00223	-0,01428	-0,00015	-0,00249	-0,00079	-0,00965	-0,00143	-0,00531	0,0079	-0,00107	-0,0048	-0,00788	-0,0259	0,00124	-0,01175	-0,00122	-0,01152	0,00579	-0,0048
FASW	-0,01759	-0,0069	0,01458	-0,03031	0,00113	-0,01719	0,0043	-0,00029	0,00233	-0,01132	-0,02723	-0,00464	0,0157	0,00189	-0,00385	-0,00859	-0,03717	0,00552	-0,01585	0,03103	-0,01592
FMII	-0,00886	0,02816	0,00126	-0,02557	-0,02538	0,03191	0,00348	-0,01645	0,00204	-0,00669	0,02301	-0,02841	0,02671	-0,01246	-0,02231	0,00809	0,00793	-0,0259	0,01155	-0,0123	-0,00688
GDWJ	-0,00149	-0,0228	-0,00302	0,48764	0,01939	-0,00217	-0,01114	-0,35186	-0,06281	0,00347	0,46016	-0,0067	-0,36326	0,0117	-0,01519	-0,01722	-0,00665	0,48402	-0,31993	-0,01881	0,005
G DYR	0,01363	-0,006	-0,00203	-0,0219	0,0014	-0,00245	0,00035	-0,04252	0,21243	-0,00603	0,04051	0,00088	-0,0052	-0,01021	-0,01261	0,00442	-0,01544	0,00066	-0,015	0,00992	-0,0064
GGRM	-0,00103	0,00092	-0,00343	0,00017	0,00153	-0,0044	0,00548	-0,00535	-0,00527	-0,00631	0,00124	0,00102	0,00089	0,00206	0,01753	0,01127	0,01153	0,01131	0,01885	0,00454	-0,00692
GMTD	0,01111	0,3103	-0,00252	-0,01739	0,00005	-0,00284	0,2773	0,2326	-0,00466	-0,01068	0,00978	-0,00411	-0,00989	-0,01465	-0,04294	-0,0005	-0,02079	-0,30223	-0,01271	0,00395	-0,00693
GRIV	0,01365	-0,00889	0,04112	-0,02715	-0,00039	-0,00481	0,04189	-0,01855	-0,00281	-0,05192	0,01502	-0,00214	-0,09623	0,12771	-0,05011	0,00233	-0,06382	-0,00242	-0,06449	0,00884	0,03446
HDTX	0,01516	-0,01099	-0,0057	-0,03214	-0,00114	-0,00626	-0,00254	-0,02183	-0,00393	-0,01239	0,01637	-0,00316	-0,01128	-0,01797	-0,05781	0,00193	-0,02665	0,14546	0,05572	0,0099	-0,09735
HEXA	0,02644	-0,01967	-0,00049	-0,03467	0,10448	-0,00228	0,00261	-0,0228	-0,01058	-0,07933	0,06454	0,04941	-0,0089	0,01638	0,02892	0,00847	-0,07725	0,00238	-0,01594	-0,01248	0,0311
H MSP	0,00246	-0,00337	-0,00903	0,01085	-0,00638	-0,02616	0,00995	0,01657	-0,00791	-0,00413	0,01158	-0,01604	-0,00352	0,01006	0,00584	0,09377	-0,01163	0,00826	0,02536	-0,02764	-0,03493
IATG	0,01559	-0,00686	-0,00232	-0,02503	0,0016	-0,00276	0,00039	-0,01601	-0,00079	0,19202	0,18313	-0,00013	-0,00703	-0,01272	-0,04654	0,00418	-0,02017	-0,00042	-0,15966	-0,15592	-0,00708
IDSR	-0,00522	-0,00717	0,08613	-0,04568	0,00944	-0,00724	0,00514	-0,0238	0,00795	-0,02156	-0,01007	-0,00215	0,00698	0,02495	-0,00755	-0,01536	0,00317	0,04402	-0,00682	0,04878	-0,06301
IGAR	0,00958	-0,00566	0,06309	-0,01908	0,06163	-0,06273	-0,00173	-0,01309	-0,00255	0,05497	-0,10824	0,06458	-0,00688	0,05168	-0,03415	-0,05793	0,04646	-0,00231	-0,01563	0,00624	-0,007
IKAI	0,01088	-0,00046	0,00183	-0,00966	0,00382	0,00157	0,00321	-0,00534	0,00259	-0,00116	-0,09953	0,00293	-0,00067	0,12137	0,03482	-0,0475	0,1033	0,00275	-0,05524	0,00926	0,00147
IMAS	0,01881	0,22254	-0,00395	-0,03283	0,00104	-0,00456	-0,00049	-0,02158	-0,00201	-0,01126	0,02017	-0,00117	-0,01004	-0,01736	-0,06426	0,00469	-0,02767	-0,00155	-0,11848	0,01314	-0,0109
INAF	0,01075	-0,00617	-0,02713	0,0051	0,02462	-0,02692	0,237	-0,01341	-0,00161	-0,00718	-0,01205	-0,02549	0,04355	0,01295	-0,01302	-0,02056	-0,01595	-0,00131	0,00715	0,00658	0,01544
INAI	-0,09832	0,00113	0,00435	-0,01179	0,00714	0,00404	0,00628	-0,00545	0,00544	0,00029	0,01777	0,0059	0,00097	-0,0031	-0,02691	0,00896	-0,00905	0,00569	-0,09457	0,01377	-0,00045
INCI	0,0633	0,01498	-0,00065	-0,02662	-0,0166	-0,00117	0,00245	0,00435	0,10313	-0,00721	0,021	0,00184	-0,02464	-0,06929	0,00924	-0,10647	0,10373	-0,11066	0,06473	0,03419	-0,00843
INCO	-0,00059	-0,02347	-0,0152	0,02439	0,08657	0,02163	-0,0382	-0,00842	-0,03115	-0,0123	-0,01304	0,00644	-0,00209	-0,01471	-0,00202	0,00029	-0,01174	0,00748	0,00215	0,00414	-0,0081
INDF	-0,02924	0,03962	0,0415	-0,02133	-0,04034	0,04117	0,00033	0,02807	-0,08067	0,0367	0,01398	-0,00011	-0,00598	-0,05248	0,17711	-0,06781	0,05874	-0,00138	0,05372	-0,02404	0,02677
INDR	-0,00814	0,00836	-0,01351	-0,02341	0,00363	0,01247	0,01457	-0,01569	0,10408	0,01621	-0,01632	0,00086	0,00557	-0,0005	-0,01245	0,02782	-0,0071	0,00161	0,0072	0,01272	-0,00506
INDS	0,01915	0,15146	-0,00845	-0,04222	-0,00262	-0,00916	-0,00441	-0,02904	-0,00618	-0,01698	0,01972	-0,0052	-0,01557	-0,02411	-0,07511	0,0013	-0,03529	-0,00562	-0,03436	0,0117	-0,01885
INTA	0,01147	-0,00649	-0,00285	-0,02102	0,00028	-0,00323	-0,00068	-0,01399	-0,00164	-0,00748	-0,24646	-0,0646	-0,00671	-0,06218	-0,0382	0,09163	0,03135	-0,06382	-0,01574	0,00704	-0,02433
INTD	0,01094	-0,00481	-0,00163	-0,01755	0,00113	-0,00204	0,00029	-0,01187	-0,00058	-0,00591	0,0122	-0,0001	-0,00521	-0,00943	-0,03425	0,00308	-0,01476	-0,00031	-0,0144	-0,00804	-0,00666
INTP	0,02395	-0,05101	0,00165	0,04274	-0,01694	-0,01135	-0,04246	-0,00411	-0,0013	0,03243	0,02542	-0,00145	0,03618	-0,03167	-0,01318	-0,03775	0,02906	0,01844	-0,01983	-0,00855	0,00388
ISAT	-0,00642	-0,00431	0,01245	0,00116	-0,01058	0,00531	-0,00514	-0,00513	-0,00607	0,0077	-0,01166	0,00747	0,00199	-0,00254	-0,00851	-0,00211	0,00052	-0,00452	0,052	0,02687	-0,03298
JECJ	-0,00193	0,01964	0,00144	0,00512	-0,01331	0,0083	0,00472	0,00633	-0,0073	0,00535	-0,00063	0,01968	0,00589	0,00015	-0,00457	-0,03223	0,00944	-0,00621	0,0077	-0,00693	0,01563
JJHD	0,00155	-0,00141	-0,02175	-0,0131	0,02787	0,00115	0,00326	0,07335	0,08848	0,03709	-0,08088	-0,04972	-0,00185	0,00533	0,04624	-0,03588	0,00887	-0,00768	0,03297	-0,02101	-0,02305
JKSW	-0,24662	-0,00868	0,32506	-0,02075	0,24304	-0,00983	-0,00774	-0,01863	-0,00852	-0,2133	0,00293	-0,00809	-0,01267	0,23355	-0,0393	0,00519	-0,01523	-0,00723	-0,01799	-0,20072	-0,01038
JPRS	0,00498	0,0694	-0,00519	-0,01683	-0,00317	-0,00545	-0,00379	-0,01234	-0,00441	-0,00816	0,00458	-0,00407	-0,00767	-0,01063	-0,02805	-0,00184	-0,01435	-0,00421	0,02138	0,00228	-0,11266

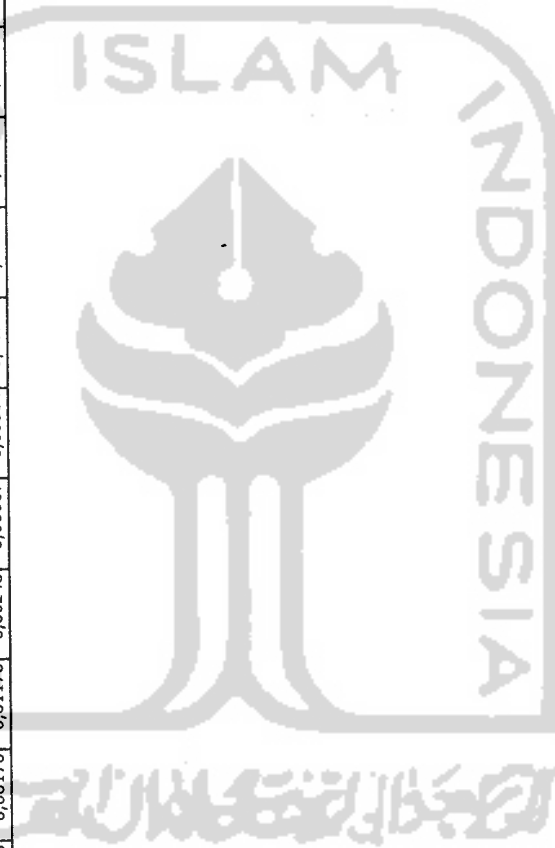
JRPT	0,01516	-0,00092	0,00234	-0,01393	0,00516	0,00198	0,00429	-0,00776	0,00342	-0,00186	0,03147	0,00339	-0,01632	-0,00535	0,04739	0,00702	0,00402	0,0037	-0,02376	0,01127	-0,00203
JSPT	0,01234	-0,00111	0,00161	-0,01201	0,00396	0,00132	0,00324	-0,00684	0,00252	-0,0019	0,01312	0,00292	-0,00133	-0,00482	-0,02521	0,00554	-0,00918	0,00275	-0,00895	0,00956	-0,00244
KAEF	-0,02149	0,0317	-0,00244	-0,02907	0,01618	-0,00069	-0,00704	-0,01489	-0,00012	0,02409	-0,01122	-0,01159	-0,02488	0,01025	-0,00139	0,03787	0,0095	-0,00605	0,04632	0,02471	0,01966
KARK	0,00003	0,01012	-0,00169	0,00022	-0,00117	-0,32393	0,50141	0,00519	-0,00764	0,00107	0,00469	-0,32565	0,02644	0,49871	0,01212	0,00226	0,01476	0,32904	0,00722	0,00912	0,25365
KARW	0,0139	-0,00468	-0,00092	-0,01971	0,00233	-0,00132	0,00133	-0,01249	0,00034	-0,00572	0,01487	0,00089	-0,00493	-0,00972	-0,03794	0,0045	-0,01579	0,00065	-0,01534	0,01012	-0,00656
KBLI	-0,08543	0,10801	-0,09972	0,09428	0,00321	0,09877	0,00132	-0,01198	0,00036	-0,09638	0,11435	-0,09002	0,0953	-0,00932	-0,03332	0,00518	0,07458	-0,08164	0,07636	-0,07363	-0,00621
KBLM	0,14083	-0,02029	-0,01016	-0,06074	-0,00147	-0,11108	-0,00314	-0,03916	-0,00573	0,08958	0,03217	-0,0043	-0,01945	-0,03195	-0,10527	0,00511	0,24463	-0,00699	-0,12897	0,01968	-0,0273
KDSI	-0,01628	0,03061	0,00107	-0,01788	0,00433	0,00067	-0,02893	-0,0104	0,00234	-0,00368	-0,01655	0,00289	-0,00289	-0,00765	-0,03891	0,00568	-0,01573	0,00163	-0,01505	0,01175	-0,00426
KIAS	0,01168	-0,00514	-0,00174	-0,01874	0,0012	-0,0021	0,0003	-0,01219	-0,0006	-0,00608	0,01254	-0,0001	-0,00536	-0,00969	-0,03523	0,00317	-0,01522	-0,00032	-0,01479	0,00826	-0,00685
KICI	0,01292	-0,00713	-0,00307	-0,02335	0,00043	-0,00341	-0,00066	-0,015	-0,00169	-0,00798	0,15186	-0,00112	-0,00715	-0,01213	-0,04137	0,00263	-0,01837	-0,00137	-0,01815	0,00843	-0,00882
KIJA	0,01635	0,00144	0,00446	-0,01065	0,14902	0,00297	-0,11873	-0,00517	0,14831	0,00043	-0,10751	0,00591	0,00109	0,13998	0,09778	0,00899	-0,00791	-0,10539	0,01336	-0,00011	
KKGI	0,01938	-0,00565	-0,00059	-0,02591	0,00377	-0,00118	0,00245	-0,01652	-0,14891	-0,00723	0,07987	0,00184	0,16053	0,13014	-0,0521	0,00686	0,18164	-0,00055	-0,02546	-0,15797	-0,01198
KLBF	-0,02232	0,01156	-0,01976	0,01477	0,05298	-0,02002	0,01629	0,01846	-0,01781	0,02488	-0,0026	-0,01725	0,07487	0,00312	0,04885	-0,05222	0,11196	-0,01541	0,08202	0,0472	0,00384
LAPD	0,01308	-0,00576	-0,00195	-0,07703	0,00134	-0,00234	0,00034	-0,0136	-0,00067	-0,00678	0,01398	-0,00011	-0,00598	-0,01081	-0,03921	0,00353	-0,01688	-0,00035	-0,13301	0,09044	-0,15593
LION	0,01375	-0,0075	-0,0032	0,00648	0,00052	-0,0226	-0,02345	0,00831	-0,04607	0,01479	0,03247	-0,02384	0,0372	-0,01147	-0,0588	0,02184	-0,01793	-0,02358	-0,01976	0,00954	0,05276
LMAS	-0,01356	0,01634	-0,00366	0,02538	-0,0226	0,1716	-0,02345	0,00831	-0,04607	-0,00184	-0,00952	-0,00114	-0,00852	-0,01459	-0,04775	0,29	-0,02077	-0,00043	-0,02021	0,01074	-0,00891
LMPI	0,23817	-0,01135	-0,00582	-0,0334	-0,36296	-0,00394	-0,00058	-0,0181	-0,00184	-0,00168	0,00869	0,00195	-0,00086	-0,03174	0,04209	-0,07965	-0,00622	0,00183	-0,00604	0,00633	-0,00159
LMSH	-0,10493	0,00081	0,00226	0,08569	0,05356	0,00101	0,11327	-0,0045	0,00168	-0,00124	0,00982	0,00185	-0,00601	-0,01249	-0,01496	0,00248	-0,01769	-0,10866	0,03653	0,0173	-0,01069
LPCK	-0,03373	-0,00917	0,06006	-0,03615	0,00336	-0,00208	0,00258	-0,02172	-0,05799	-0,00166	0,02639	0,00185	-0,00687	-0,01161	-0,03967	0,00248	-0,01769	-0,10866	0,03653	0,0173	-0,01069
LPIN	0,01181	-0,00664	-0,00291	-0,02157	0,00032	-0,0033	0,00067	-0,01435	-0,00166	-0,00709	0,02075	-0,00111	-0,00687	-0,01161	-0,03967	0,00248	-0,01769	-0,10866	0,03653	0,0173	-0,01069
LPKR	0,01875	-0,00681	-0,00164	-0,0275	0,00283	-0,00114	0,00245	-0,01623	0,0011	-0,00709	0,02075	-0,00111	-0,00687	-0,01161	-0,03967	0,00248	-0,01769	-0,10866	0,03653	0,0173	-0,01069
LSIP	-0,0042	0,00172	-0,00299	0,00043	-0,01738	-0,00086	-0,03088	-0,02757	0,02366	-0,00764	0,00945	0,04088	-0,01633	-0,02168	-0,00045	-0,00008	0,01161	-0,00963	0,07192	0,03676	0,11974
LTLS	-0,01548	-0,00354	0,00079	0,01352	0,00454	0,06591	0,00239	-0,01404	0,00121	-0,00599	-0,04401	0,00187	0,02828	-0,01075	0,0852	0,00612	0,0104	-0,05296	0,01223	-0,01546	0,02402
MBAI	-0,02194	-0,00108	0,30157	0,02256	-0,00018	-0,00964	-0,01744	-0,06358	0,00572	-0,02125	0,14436	-0,02814	0,0156	-0,01111	-0,01195	-0,04282	-0,31299	0,01544	0,00857	0,02834	
MDLN	0,01309	-0,0072	-0,00309	-0,02361	0,00044	-0,00353	-0,00064	-0,01566	-0,00172	-0,00831	0,01408	-0,00112	-0,00744	-0,01265	-0,04379	0,00285	-0,01962	-0,00138	-0,01901	0,00909	-0,00937
MDRN	-0,02294	0,00544	-0,00105	0,02762	-0,00126	-0,00166	-0,00533	0,00689	0,02604	0,11765	-0,02038	0,00493	-0,00342	0,0216	0,02206	0,00017	-0,01035	0,01036	-0,02129	-0,03946	-0,00529
MEDC	-0,02171	-0,03768	0,02284	-0,00172	-0,000828	-0,00449	-0,01999	-0,00742	0,00661	-0,02402	-0,01575	-0,00054	0,03565	-0,01929	-0,00859	-0,0277	-0,00837	-0,02072	0,01053	0,01053	-0,01038
MERK	0,01768	-0,00778	-0,00263	-0,02838	0,00181	-0,00316	-0,0196	-0,0172	0,0001	-0,00807	0,01972	-0,03141	-0,007	-0,03569	-0,02563	0,00544	-0,01991	0,05613	0,04263	0,00339	-0,0192
META	0,51598	-0,01468	-0,00927	-0,04027	-0,33432	-0,00767	0,24456	0,36751	-0,43777	0,4798	-0,14948	-0,00821	-0,01876	-0,02746	-0,07945	-0,00158	-0,03887	-0,00864	-0,03804	0,20815	-0,02322
MIRA	0,01664	-0,08856	-0,08824	0,05625	-0,00098	-0,00544	-0,00151	-0,10495	-0,00297	-0,01178	0,01818	-0,00217	-0,01062	0,16422	-0,05883	0,08003	-0,16707	-0,08478	0,06759	0,01026	-0,0955
MLBI	-0,0094	0,01326	-0,00583	-0,00197	-0,02128	0,00136	-0,00118	0,00131	-0,01164	0,00038	-0,0053	0,014	0,00089	-0,00455	-0,00905	-0,03553	0,00428	-0,01523	0,00066	-0,01475	0,00979
MLIA	-0,05361	0,01186	-0,00666	-0,04736	0,07339	0,00033	-0,04676	-0,00068	0,03102	-0,04514	-0,00769	0,01281	-0,00111	0,03855	0,07529	-0,0368	0,04331	0,02069	-0,03837	0,0221	0,007
MLND	0,01205	-0,00675	-0,00294	-0,02195	0,00034	-0,0033	-0,00067	-0,01433	-0,00166	-0,00765	0,01271	-0,00111	-0,00686	-0,0116	-0,03635	0,00327	-0,01568	-0,00032	-0,01524	0,00818	-0,00679
MLPL	0,05917	-0,05391	-0,04202	0,06692	0,01949	0,00198	0,03579	-0,01341	0,04431	-0,03514	-0,01778	0,00525	-0,0523	0,02927	0,01139	-0,05873	0,01929	0,00278	0,00476	0,04513	-0,00694



MPPA	-0,02648	-0,00406	-0,00071	0,00951	-0,01098	0,01335	-0,01088	0,00385	0,0146	-0,00372	-0,01216	0,02857	-0,00304	0,00587	0,09842	-0,02923	-0,00011	-0,0099	0,00136	-0,00215	0,00938
MRAT	0,01695	-0,05314	0,0325	-0,00924	0,00443	0,02974	-0,01625	-0,01283	0,05127	-0,00539	0,01725	0,00188	0,0431	-0,0524	0,00801	0,00683	-0,01655	-0,0428	0,08544	-0,03096	-0,00306
MTDL	0,05894	-0,00261	-0,02822	0,06435	-0,06199	0,00145	-0,01735	0,0626	-0,06697	-0,04262	0,06752	-0,00707	-0,01359	0,07409	-0,04989	-0,02126	0,00055	0,04134	0,01275	-0,06248	0,167
MTSM	-0,00514	-0,00174	-0,01874	0,0012	-0,0021	0,0003	-0,01219	-0,0006	-0,00608	0,01254	-0,0001	-0,00536	-0,00969	-0,03523	0,00317	-0,01522	-0,00032	-0,01479	0,00826	-0,00685	-0,00897
NIPS	0,02083	-0,01781	-0,00999	-0,04904	-0,30146	-0,00843	-0,00337	-0,02962	-0,00526	0,26894	0,02235	-0,00422	-0,01526	-0,02436	-0,07858	0,00271	-0,03612	0,16094	-0,08618	0,11332	-0,10927
PBRX	0,00722	-0,00424	0,01087	-0,00191	0,00068	-0,01225	0,00192	-0,00061	0,00123	0,02598	0,0172	-0,02013	-0,02256	0,0354	-0,00318	-0,00655	-0,00947	0,00344	0,00553	-0,01537	0,00602
PICO	0,01291	-0,0028	0,00038	-0,0155	-0,06836	0,00012	0,00227	-0,00892	0,00146	-0,00344	-0,06369	0,00191	-0,0028	-0,00668	-0,02934	0,00482	-0,01148	0,00171	0,23568	0,00916	-0,27244
PLAS	0,01258	-0,00266	0,00042	-0,01501	0,00309	0,00009	-0,1124	-0,11034	0,11155	-0,30465	-0,1302	0,16757	-0,14684	-0,00801	-0,3055	0,00493	-0,01198	0,1663	-0,01666	0,15216	-0,13272
PLIN	-0,01699	-0,01842	-0,01276	-0,00829	-0,03065	-0,00442	-0,00875	-0,00561	-0,0219	-0,03535	-0,01392	0,01035	-0,00613	-0,01299	-0,01864	-0,05214	-0,00185	0,00314	-0,00642	0,00253	0,00536
PNSE	-0,00514	-0,00174	-0,01874	0,0012	-0,0021	0,0003	-0,01219	-0,0006	-0,00608	0,01254	-0,0001	-0,00536	-0,00969	-0,03523	0,00317	-0,01522	-0,00032	-0,01479	0,00826	-0,00685	-0,00897
POLY	-0,0047	0,32403	-0,03611	0,00434	-0,01486	0,00067	0,23037	-0,19052	-0,00969	-0,01236	0,24644	-0,00771	0,00974	-0,00906	0,0061	0,02142	0,00956	-0,0267	-0,0126	-0,00167	0,00858
PRAS	-0,00768	0,01086	-0,00478	-0,00162	-0,08294	-0,02172	-0,00091	0,00127	-0,01009	0,00045	0,01986	0,01241	0,00091	0,01993	-0,00782	-0,03092	0,00387	-0,01275	0,00071	0,2613	0,00843
PSDN	0,01168	-0,00514	-0,00174	-0,01874	0,0012	-0,0021	0,0003	-0,01219	-0,0006	-0,00608	0,01254	-0,0001	-0,00536	-0,00969	-0,03523	0,00317	-0,01522	-0,00032	-0,01479	0,00826	-0,00685
PTRO	-0,00446	0,07488	-0,00152	-0,01636	0,00105	-0,00185	0,08752	-0,01226	0,02548	-0,00661	0,01058	-0,01425	-0,00595	-0,00995	-0,02076	0,00197	-0,0024	-0,0013	-0,013	0,0073	-0,00606
PUDP	0,01803	-0,0065	-0,03183	-0,02631	0,00275	-0,00217	0,00145	-0,0174	0,00009	-0,00817	0,01992	0,00085	-0,00709	-0,01363	-0,05171	0,00574	-0,02182	-0,00048	-0,02249	0,01266	-0,105
PWON	0,01564	-0,00688	-0,00233	-0,0251	0,0016	-0,00397	-0,00058	-0,01823	-0,00185	-0,00959	0,01672	-0,00114	-0,00857	-0,01469	-0,05286	0,00366	-0,02006	-0,00041	-0,0195	0,00993	-0,00824
PWSI	0,00956	-0,00421	-0,00142	-0,01537	0,00099	-0,00396	-0,00072	-0,01232	-0,00156	-0,00664	0,01065	-0,0011	-0,00598	-0,01	-0,03373	-0,37306	-0,01021	-0,00231	-0,01674	0,00957	-0,00645
PYFA	0,01917	0,00907	-0,02175	0,00915	-0,01095	0,01546	-0,0068	-0,0023	-0,02482	0,00159	-0,00276	0,00039	-0,01601	-0,00079	-0,00798	0,01646	-0,00013	-0,00703	-0,01272	-0,04677	0,0042
RALS	-0,00788	0,00664	-0,00127	0,02518	0,04912	-0,0129	-0,02108	0,00786	0,00021	-0,02951	0,01759	0,00063	0,00554	-0,00033	0,00187	0,02675	0,00564	-0,02961	0,05939	0,04169	-0,00604
RBMS	0,01108	-0,00056	0,14364	-0,01116	0,00284	0,0006	0,0022	-0,0062	-0,1234	-0,00209	0,1533	0,00193	-0,00161	-0,00452	-0,02152	0,00411	0,11576	-0,1083	0,23903	0,00762	-0,00449
RDTX	0,01267	-0,00557	-0,00188	-0,02033	0,0013	-0,00227	0,00032	-0,01321	-0,00065	-0,00658	0,01359	-0,00011	-0,00581	-0,0105	-0,03823	0,00344	-0,0165	-0,00034	-0,01539	0,00858	-0,00712
RICY	0,01277	-0,0073	0,09245	-0,09591	-0,08598	0,00237	0,00423	-0,00553	0,00353	-0,00075	0,0138	-0,09608	0,11092	-0,00358	-0,02117	0,10626	-0,09589	0,0048	-0,00433	0,00969	0,00111
RIGS	-0,04009	0,03081	-0,00279	-0,03009	0,00192	-0,00335	-0,02209	-0,0489	0,01593	-0,00853	0,02848	0,00084	0,00034	0,00118	-0,05435	0,00598	-0,00889	-0,01542	0,00719	0,01403	-0,01716
RIMO	0,01401	-0,00473	0,07598	-0,01997	0,00234	-0,00131	-0,06911	-0,01102	0,07828	-0,00449	0,08683	-0,06478	0,06771	-0,07502	0,11021	-0,11988	-0,0126	0,0017	0,05873	0,00978	-0,00446
RYAN	0,04994	-0,00903	0,00291	-0,05679	0,01321	0,00164	0,01005	-0,03367	0,0069	-0,01227	0,05289	0,00864	-0,00975	-0,02492	-0,11813	0,01934	-0,04368	0,00688	-0,04336	0,0377	-0,01663
SAFE	0,02577	-0,00846	-0,00154	-0,03617	0,00444	-0,14396	0,00359	-0,02079	0,00183	-0,00886	0,02747	0,0028	-0,00746	0,15076	-0,06949	0,00843	-0,02889	0,00134	-0,02903	-0,12369	0,07292
SAIP	0,01243	-0,00547	-0,00185	-0,01997	0,00128	-0,00224	0,00032	-0,01299	-0,00064	-0,00648	0,01336	-0,00011	-0,00571	-0,01033	-0,0376	0,00338	-0,01625	-0,00036	-0,01571	0,00878	-0,00728
SCCO	0,012	-0,00528	-0,00178	-0,01926	0,00123	-0,00219	0,00031	-0,01268	-0,00062	-0,00632	0,01305	-0,00011	-0,00557	-0,01008	-0,03671	0,0033	-0,01584	-0,00033	-0,01683	0,00784	-0,00833
SCPI	-0,01007	0,00992	-0,00308	0,01402	-0,00041	0,00251	-0,01213	0,00504	-0,03348	0,00425	-0,00634	0,00349	-0,00115	0,01463	0,00391	-0,00054	-0,00422	-0,02564	0,00667	-0,00882	0,00373
SHDA	0,01212	-0,00534	-0,0018	-0,01948	0,00125	-0,00219	0,00031	-0,01267	-0,00062	-0,00631	0,01303	-0,00011	-0,00557	-0,01007	-0,03653	0,00328	-0,0157	-0,00033	-0,01487	0,0083	-0,00688
SHID	0,01302	-0,01005	-0,00538	-0,02872	-0,00136	0,21026	-0,00355	-0,02208	-0,00489	-0,08444	0,01459	-0,00415	-0,01194	-0,01837	-0,0499	0,00122	-0,02327	-0,00446	-0,02581	0,10701	-0,01243
SHSA	0,0093	-0,00554	-0,00253	-0,01755	0,00006	-0,00285	-0,00074	-0,01175	-0,00153	-0,00636	0,01006	-0,00109	-0,00573	-0,00955	-0,03212	0,0018	-0,01444	-0,0023	-0,01613	0,00589	-0,00854
SIIP	0,01639	-0,0029	0,00101	-0,01852	0,00437	0,00054	0,00335	-0,01128	0,0023	-0,00411	0,01768	0,00288	-0,00327	-0,00835	-0,03845	0,00673	-0,01601	0,08494	-0,0914	0,09606	-0,00507
SIMA	0,0505	-0,00507	-0,00105	-0,05552	0,00241	-0,10749	0,00234	0,067	0,00031	-0,00598	0,12651	0,00088	-0,00515	-0,11013	-0,00202	0,04031	-0,04913	0,00165	0,02122	-0,02346	-0,00548

SIMM	-0,00218	0,01502	0,00303	0,00718	0,00468	0,00285	0,00417	0,01065	0,00366	0,00058	0,01106	0,00394	0,01432	0,01171	-0,00335	0,01865	0,00798	-0,00867	0,00994	-0,01611	-0,01287
SIPD	0,0215	-0,01234	-0,0055	-0,03976	0,0004	-0,00619	-0,0004	0,30361	-0,25527	-0,01682	0,35579	-0,00422	-0,01531	-0,02445	-0,32867	0,00271	-0,03603	-0,00466	-0,03532	0,01342	-0,01662
SKLT	-0,13757	0,00015	0,00227	-0,00878	0,00147	-0,00337	0,01309	0,00191	-0,18456	-0,00657	-0,02903	0,00479	-0,01138	0,00172	-0,01102	0,00921	-0,00398	-0,0058	0,00025	-0,00426	0,0099
SMAR	-0,03558	0,03212	0,04118	0,14966	-0,00182	0,05169	0,03186	0,04568	0,01379	-0,00434	-0,00014	0,01478	0,03003	-0,06992	0,00441	-0,00023	-0,02127	0,00047	0,01116	0,01157	0,00806
SMCB	0,00837	-0,02216	-0,03662	0,00899	-0,01848	0,00856	0,02002	0,00751	-0,04014	-0,02165	0,03193	-0,00061	0,01795	0,00212	-0,00094	0,00128	0,02288	0,00044			
SMDM	0,00193	-0,00166	-0,00462	-0,02205	0,00416	-0,00956	0,00078	-0,00945	0,00773	-0,00409	-0,00409	0,00203	-0,00041	0,00731	0,00508	0,01136	0,00711	0,00804	-0,00118	-0,00247	0,00174
SMDR	0,00075	-0,01149	0,00287	-0,05499	0,0022	-0,0063	0,00159	-0,00213	0,01053	0,00193	-0,00165	-0,01635	-0,02161	0,00412	0,05414	0,0028	-0,0062	0,00804	-0,00919	-0,00196	-0,01931
SMGR	-0,00376	-0,01548	0,01574	-0,01332	0,00197	-0,01095	0,0061	0,0168	-0,00186	0,00355	-0,00639	0,00171	0,01051	0,01606	-0,01118	0,00075	0,003	-0,01091	0,00919	-0,00196	-0,01931
SMPD	0,00403	-0,1801	-0,00189	-0,01062	-0,00038	-0,00208	-0,00085	-0,00727	0,344	-0,00413	0,17786	-0,00105	-0,00376	-0,00599	-0,06716	-0,09278	0,0381	-0,05001	0,03998	0,01313	-0,0054
SMRA	0,0695	-0,10353	0,00079	-0,07624	0,18012	-0,04981	-0,04924	-0,01298	0,11332	-0,05496	0,11123	0,00092	-0,01247	0,08162	-0,08406	-0,03205	-0,033	0,02076	-0,02099	-0,02138	-0,01702
SMSM	0,01047	-0,00317	-0,00041	-0,01422	0,00198	-0,00071	0,00124	-0,00895	-0,01673	0,04867	0,04882	-0,0022	-0,01247	0,08162	-0,08406	-0,03205	-0,033	0,02076	-0,02099	-0,02138	-0,01702
SOBI	0,02023	-0,01323	-0,06795	0,02624	-0,00062	-0,00716	-0,05141	-0,02582	-0,00317	-0,01387	0,04882	-0,0022	-0,01247	0,08162	-0,08406	-0,03205	-0,033	0,02076	-0,02099	-0,02138	-0,01702
SONA	0,01863	-0,00532	-0,00048	-0,02472	0,0037	-0,19871	0,0659	-0,01316	0,00221	0,05377	0,01962	-0,0527	-0,0041	-0,00984	-0,04408	0,06605	-0,071	0,00359	0,04198	0,01389	-0,06159
SPMA	0,08003	-0,01048	-0,00156	-0,04616	0,00048	0,06426	0,00378	0,08079	0,00041	-0,01411	-0,06476	-0,10938	-0,0122	0,10131	-0,09422	0,07031	-0,01663	-0,00036	-0,01707	-0,05354	-0,00743
SRSN	0,03361	-0,00737	0,06351	-0,08663	0,00048	0,063	-0,00062	-0,01648	0,12324	-0,00872	0,01492	-0,05669	-0,0078	-0,0133	0,01275	-0,05251	0,0948	-0,00142	-0,02067	-0,04312	-0,01154
SSIA	0,01347	-0,00454	-0,00154	-0,01658	0,00106	-0,00076	0,00125	0,01443	0,00049	-0,00417	0,01168	0,00091	-0,00356	0,01601	-0,00632	0,0037	-0,01375	-0,04369	0,03513	-0,0148	-0,0025
STTP	-0,01294	-0,00634	-0,00214	-0,02313	0,00147	-0,00246	0,00035	-0,01426	0,16597	0,01467	0,01467	-0,16679	0,19373	-0,178	0,15842	0,00374	-0,02078	-0,00036	-0,01709	-0,15687	0,1937
SUBA	-0,12846	-0,00634	-0,00214	-0,02313	0,00147	-0,00246	0,00035	-0,01426	0,16597	0,01467	0,01467	-0,16679	0,19373	-0,178	0,15842	0,00374	-0,02078	-0,00036	-0,01709	-0,15687	0,1937
SUDI	-0,00203	-0,00725	0,00916	-0,00881	0,00447	0,0179	0,00747	-0,02429	-0,01187	-0,00234	0,00764	-0,0196	-0,008	-0,01618	0,00335	0,00249	-0,00721	0,00929	0,01471	-0,0119	-0,00024
SULI	-0,00407	-0,00787	-0,011	-0,02917	-0,00174	-0,0147	-0,00422	-0,01373	0,00141	-0,08541	-0,00849	-0,00423	-0,00858	0,00179	-0,00956	0,08214	0,00724	0,00145	-0,0175	-0,0869	-0,00435
TBLA	0,00886	0,0313	-0,03128	-0,00902	-0,03064	0,00079	0,00217	0,02823	-0,03269	-0,00261	0,00845	-0,03354	0,03353	-0,03924	0,05151	0,00288	-0,00786	-0,06483	0,06372	-0,02679	-0,00177
TBMS	0,01317	-0,00579	-0,00196	-0,02114	0,00135	-0,00236	0,00034	-0,01372	-0,00067	-0,00684	0,01411	-0,00012	-0,14065	-0,0109	-0,03979	0,00358	-0,01721	-0,00036	-0,01679	0,00939	-0,00779
TCID	0,00132	-0,00571	0,00342	-0,00547	0,00248	0,00079	0,01043	0,01145	-0,00776	0,01151	0,01944	0,08705	-0,07986	0,10153	-0,02513	0,01556	-0,00686	-0,00232	-0,02499	-0,0413	-0,00274
TEJA	0,01168	-0,00514	-0,00174	-0,01874	0,0012	-0,0021	0,0003	-0,01219	-0,0006	-0,00608	0,01254	-0,0001	-0,00536	-0,00969	-0,03523	0,00317	-0,01522	-0,00032	-0,01479	0,00826	-0,00685
TFCO	0,0158	-0,00408	-0,00005	-0,02018	0,00342	-0,00048	0,00236	-0,01245	0,00129	-0,0052	0,01686	0,00188	-0,00435	-0,00948	-0,03976	0,00575	-0,01604	0,00165	-0,01441	0,01114	-0,00558
TGKA	0,01242	-0,00403	-0,0007	-0,01734	0,00218	-0,00106	0,00129	-0,01096	0,00041	-0,00496	0,0133	0,0009	-0,00426	-0,0085	-0,03352	0,0041	0,02009	0,00068	-0,01392	0,00931	-0,00589
TINS	0,0186	0,07701	-0,00147	-0,02572	0,00271	-0,04044	0,00142	-0,01629	0,00015	-0,00762	-0,02122	0,00085	-0,0066	-0,01274	0,03651	-0,03207	0,01889	-0,0379	0,01966	0,01276	0,02971
TIRA	0,01168	-0,00514	-0,00174	-0,01874	0,0012	-0,0021	0,0003	-0,01219	-0,0006	-0,00608	0,01254	-0,0001	-0,00536	-0,00969	-0,03523	0,00317	-0,01522	-0,00032	-0,01479	0,00826	-0,00685
TIRT	0,01956	-0,18005	-0,00075	-0,02774	0,0039	-0,00132	0,00247	-0,01728	0,00105	-0,00761	0,02183	0,00184	-0,00647	-0,06596	-0,16805	0,00621	0,21978	-0,00058	0,02196	0,06247	-0,01415
TKGA	0,01278	-0,00563	-0,0019	-0,02054	0,00132	-0,0023	0,00033	-0,01336	-0,00066	-0,00666	0,01374	-0,00011	-0,00587	-0,01062	-0,03854	0,00347	-0,01659	-0,00034	-0,01617	0,00903	-0,00749
TKIM	-0,02412	0,04611	0,00844	-0,03149	0,09318	0,09277	-0,00928	-0,06072	0,04569	-0,01493	0,05478	0,02361	0,26726	-0,0275	0,10176	0,04046	-0,03551	-0,04755	-0,0809	-0,01407	-0,02838
TLKM	0,02002	-0,00744	0,03272	0,00179	0,02077	0,0012	0,01363	0,00736	-0,00302	-0,01756	0,00783	0,00431	0,015	0,04429	-0,0219	0,03354	0,00059	0,00705	-0,01758	0,01926	-0,00082
TMPI	-0,00285	0,11178	-0,0221	-0,09447	0,00124	0,0044	-0,01308	0,00221	-0,00502	0,13065	-0,09714	-0,00407	-0,00978	0,06734	-0,0928	0,03255	0,00255	-0,01783	0,0147	0,09513	-0,00765
TOTO	0,0003	-0,01219	-0,0006	-0,00608	0,01254	-0,0001	-0,00536	-0,00969	-0,03523	0,00317	-0,01522	-0,00032	-0,01479	0,00826	-0,00032	-0,00032	-0,01479	0,00826	-0,00685	0,00914	-0,00445

TRPK	0,01538	-0,00533	-0,00114	-0,02209	0,00248	-0,00159	0,00137	-0,014	0,00026	-0,00648	0,01643	0,00087	-0,00559	-0,01092	-0,04237	0,0049	-0,01766	0,00061	-0,01716	0,01118	-0,00744
TRST	0,011	-0,00916	-0,00508	-0,02547	-0,00156	-0,00661	-0,00363	-0,01811	-0,00374	-0,01053	-0,01687	-0,00313	-0,00964	-0,01501	0,01275	-0,00006	-0,04666	-0,00232	0,01252	-0,02185	-0,0074
TSPC	-0,01138	0,00809	0,00523	-0,00454	0,01925	-0,0214	0,00695	-0,00447	0,0173	0,00651	0,01244	0,01184	0,00692	0,0189	-0,00278	0,01383	-0,02583	-0,0197	0,03435	0,06318	-0,00518
TURI	-0,00766	-0,0094	-0,01441	-0,00223	0,03155	-0,00379	-0,03116	0,03917	-0,00544	-0,02038	-0,02181	0,01626	-0,03074	0,01837	-0,0214	0,00891	-0,01774	-0,04045	0,00319	0,04713	0,015
UGAR	0,01475	-0,00937	-0,00449	-0,02889	-0,00029	-0,005	-0,00157	-0,0194	-0,00286	-0,01067	0,01589	-0,00215	-0,00965	-0,01583	-0,05275	0,00256	-0,02401	-0,00245	-0,02336	0,01003	-0,01198
UNIC	0,0105	-0,00319	-0,02169	0,02914	-0,14295	0,00046	0,00122	-0,00799	0,02495	-0,00348	0,05787	0,00092	0,01978	-0,00615	-0,0238	0,04876	-0,00842	0,00178	0,01283	-0,01344	0,01881
UNSP	0,01576	0,0261	0,06317	0,0022	0,03005	0,02431	-0,08628	-0,08068	-0,00185	-0,00956	-0,01666	-0,00114	0,02593	-0,01466	-0,01833	0,00355	-0,02289	-0,00145	-0,02195	0,0109	-0,04313
UNTR	-0,00802	-0,00215	0,01434	-0,00009	0,0157	0,00345	-0,01807	0,02022	0,00362	0,01751	-0,00644	-0,01755	0,00087	0,01198	0,00638	0,04468	-0,02547	0,06258	-0,01432	0,01242	0,01091
UNVR	0,00843	-0,01589	0,01602	0,00127	-0,01942	-0,00234	0,00033	-0,01358	-0,00067	0,00434	0,00298	-0,00011	-0,00597	-0,01079	-0,01771	0,02533	-0,01164	-0,00035	0,0174	0,05811	0,03356
ZBRA	0,00706	-0,00599	-0,00335	-0,01654	-0,00107	-0,00368	-0,00176	-0,01176	-0,00248	-0,00687	0,00804	-0,00208	-0,00629	-0,00976	-0,03021	0,00054	-0,0142	-0,00227	-0,01459	-0,07853	0,08327



Appendix 9.  
List of Abnormal Return No. 38  
Companies Listed in the Jakarta Stock Exchange  
Year 2004

Code	Abnormal Return (day ...)																				
	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
AAAI	-0,03819	0,04519	0,17978	-0,05449	-0,06637	0,00639	-0,00453	0,02769	0,03669	-0,01531	-0,00515	-0,03529	0,03695	-0,06494	-0,01489	-0,00409	-0,02551	-0,02568	-0,02588	-0,07206	-0,20973
ACAP	0,00016	0,00016	0,00015	0,00015	0,00015	0,00015	0,00014	0,00014	0,00014	0,00014	0,00014	0,02091	-0,00014	-0,00013	-0,00013	-0,00013	-0,00013	-0,00013	-0,00013	-0,00013	-0,00012
ADES	0,00026	0,00026	0,02552	0,04915	-0,04777	-0,00015	-0,00015	-0,00015	-0,00015	-0,00014	-0,02481	0,02549	-0,00015	-0,00014	-0,02483	0,00017	-0,02516	-0,02553	0,02749	0,00045	-0,05157
AISA	0,0015	0,00148	0,00146	-0,0232	0,00177	0,02703	0,02602	-0,02305	0,02598	0,02503	-0,02286	0,00094	0,00093	0,00091	0,0009	0,00089	0,00088	0,00087	0,00086	0,00085	0,00084
AKPI	-0,71719	-0,0601	-0,93231	-0,30659	-0,6495	-0,52171	0,36669	0,7096	-0,5818	-0,92471	0,29899	0,14398	0,98481	0,83395	-0,67478	-0,02184	-0,86682	-0,58402	-0,20973	-0,8997	-0,24676
AKRA	0,04018	-0,02784	-0,00548	0,17214	0,1596	-0,02919	0,05267	-0,02897	-0,0286	0,01912	-0,04348	-0,0436	0,00522	-0,0273	-0,0107	-0,01051	-0,07577	0,06121	-0,02641	0,00708	-0,0097
ALDI	-0,00985	-0,0097	-0,00956	-0,00942	-0,00929	-0,00915	-0,00903	-0,0089	-0,00878	-0,00867	-0,00855	-0,00844	-0,00833	-0,00823	-0,00813	-0,00802	-0,00793	-0,00783	-0,00774	-0,00765	-0,00756
ALFA	0,00395	0,00389	0,00384	0,00378	0,00373	0,00367	0,00362	0,00357	0,00352	0,00348	0,00343	0,00339	0,00334	0,0033	0,00326	0,00322	0,00318	0,00314	0,00311	0,00307	0,00303
ALKA	0,00239	0,00235	0,00232	0,00228	0,00225	0,00222	0,00219	0,00216	0,00213	0,0021	0,00207	0,00204	0,00202	0,00199	0,00197	0,00194	0,00192	0,0019	0,00187	0,00185	0,00183
ALMI	-0,00594	-0,00585	-0,00577	-0,00568	-0,00556	-0,00552	-0,00545	-0,00537	-0,0053	-0,00523	-0,04311	-0,00459	-0,00453	-0,00448	-0,00442	-0,00437	-0,00431	-0,00426	-0,00421	-0,00416	-0,00411
AMFG	-0,00265	-0,00261	-0,00257	-0,00253	-0,00249	-0,002389	-0,00232	-0,00227	-0,00227	-0,00227	-0,00226	-0,00226	-0,00226	-0,00226	-0,00225	-0,00225	-0,00224	-0,00224	-0,00224	-0,00224	-0,00224
ANTA	-0,00152	-0,0015	-0,00148	-0,00145	-0,00143	-0,00141	-0,00139	-0,00137	-0,00136	-0,00134	-0,00132	-0,0013	-0,00127	0,000944	-0,00118	0,000925	-0,0239	-0,00176	-0,00174	-0,00172	-0,00161
ANTM	0,02439	-0,0135	-0,03261	0,02548	0,0054	0,00533	0,08259	-0,03176	-0,01407	0,00473	-0,01431	0,02421	0,00455	-0,05247	-0,015	0,02531	-0,0353	0,02648	0,00513	-0,03611	0,04847
AQUA	-0,00021	-0,00021	-0,0002	-0,0002	-0,0002	-0,00019	-0,00019	-0,00019	-0,00019	-0,00018	-0,00018	-0,00018	-0,00018	-0,00018	-0,00017	-0,00017	-0,00017	-0,00017	-0,00017	-0,00017	-0,00017
ARGO	-0,00001	-0,00001	-0,00001	-0,00001	-0,00001	-0,00001	0,01895	-0,00027	-0,00027	-0,00027	-0,00026	-0,00026	-0,00026	-0,00026	-0,00025	-0,00025	-0,00025	-0,00024	-0,01888	-0,00001	-0,00001
ARNA	-0,21405	-0,1753	0,23848	0,00038	0,00037	0,03829	0,05462	0,01637	0,00026	-0,03057	0,01658	-0,01521	0,20669	-0,00162	-0,0016	0,01544	0,00177	-0,0185	-0,00153	-0,00151	-0,00149
ASGR	0,0172	-0,01509	0,00102	-0,01514	0,01766	0,01713	-0,01517	0,04944	0,00026	-0,03057	0,01658	-0,01521	0,01527	0,00084	0,00083	-0,01536	0,00102	-0,04839	0,01892	-0,0327	-0,05118
ASII	-0,01963	-0,00174	-0,00172	0,01623	-0,05473	0,00815	0,08168	0,02311	0,01387	0,00525	-0,01106	-0,00283	0,00537	-0,05142	-0,01923	0,05001	-0,0602	-0,02808	0,00747	-0,02831	0,03534
AUTO	-0,01628	0,01884	0,00097	0,03553	-0,01627	0,01767	0,03385	0,01612	0,01564	-0,00048	-0,00048	-0,01613	-0,01618	-0,03243	-0,03312	0,03543	-0,0499	-0,03434	0,01966	-0,05279	0,03976
BASS	0,05591	-0,89674	-0,27102	0,11185	0,48613	0,35834	0,70125	-0,57345	0,41428	0,28649	0,66077	-0,5016	0,87589	-0,71671	-0,58892	0,9632	-0,80403	-0,52122	-0,67624	0,39343	0,73634
BATA	0,03181	0,03028	-0,00195	0,01347	0,01304	-0,0023	-0,00227	0,05754	-0,01994	0,01445	-0,00295	-0,00291	-0,00288	-0,00284	-0,00281	-0,00277	-0,00274	-0,0027	-0,00267	-0,00264	-0,00261
BATI	-0,00189	-0,00186	-0,00184	-0,00181	-0,00178	-0,00176	-0,00176	-0,00176	-0,00176	-0,00176	-0,00176	-0,00176	-0,00176	-0,00176	-0,00176	-0,00176	-0,00176	-0,00176	-0,00176	-0,00176	-0,00176
BAYU	-0,00314	-0,00307	-0,003	-0,00294	-0,00288	-0,11812	-0,00046	-0,00045	-0,00044	-0,00044	-0,00043	-0,00042	-0,00041	-0,00041	-0,00041	-0,00041	-0,00039	-0,00038	-0,00037	-0,00037	-0,00036
BIMA	-0,46643	0,33863	0,17946	0,55375	0,39457	0,26678	0,11176	-0,98397	-0,32688	0,19908	0,54199	0,4142	0,2864	0,62931	0,50152	0,37372	0,71663	-0,58883	0,46104	-0,80395	0,14685
BIPP	0,56908	0,44129	0,28211	-0,6564	-0,52861	0,87151	-0,74372	-0,58455	0,45675	0,83104	-0,67187	-0,04615	-0,88698	-0,75918	-0,13347	0,9743	-0,8465	-0,18941	0,06162	-0,93382	0,00107
BKSL	0,40482	0,24564	0,61993	0,49213	0,33296	0,70725	-0,55223	0,89514	-0,76734	-0,63955	-0,98246	-0,85466	-0,19757	0,06978	-0,94198	-0,28489	0,1571	0,99792	-0,37221	0,24441	0,08524
BLTA	-0,57573	0,41655	0,79084	-0,13374	0,00595	-0,87816	-0,71898	0,03327	-0,43618	0,30838	0,18059	-0,5235	0,3957	0,73861	-0,61081	0,79871	-0,67091	-0,01382	-0,88602	0,75823	0,10114
BMSR	-0,00503	-0,00495	-0,00488	-0,00481	0,04714	-0,05471	0,04725	-0,0053	-0,00523	-0,00516	-0,00509	-0,00503	-0,00496	-0,10363	-0,00359	-0,00354	-0,0035	-0,00346	-0,00342	0,00338	-0,00334
BMTR	-0,01564	0,01215	-0,00874	-0,00177	-0,00175	-0,00172	-0,0017	-0,00168	-0,00165	-0,00163	-0,02231	-0,02952	-0,05174	0,0533	-0,00095	-0,00093	-0,00092	-0,01544	-0,03022	0,04524	-0,0009

BRAM	0,00181	0,00178	0,00176	0,00173	0,21733	-0,0014	-0,00138	-0,00136	-0,00134	-0,00132	-0,00131	-0,00129	-0,00127	-0,00126	-0,0772	-0,00027	-0,00027	-0,00027	-0,00027	-0,00027	-0,00026	-0,00026	-0,00026
BRNA	0,00298	-0,07282	0,02455	0,00332	0,00327	0,00323	0,06235	0,03954	0,02027	-0,01622	0,02022	0,00163	0,00165	0,00168	0,00165	0,00163	0,00161	0,00159	-0,08824	0,00264	0,00264	0,00261	
BRPT	-0,03491	-0,01903	0,01437	-0,00254	-0,0025	0,03043	-0,03467	0,11271	-0,00307	-0,03437	0,02979	-0,03431	-0,03491	-0,03592	-0,01907	-0,0012	-0,18086	0,00095	0,00095	0,00095	0,00095	0,00095	0,00095
BTON	-0,00091	-0,0009	-0,00088	-0,00087	-0,00086	-0,00085	-0,00083	-0,00082	-0,00081	-0,0008	-0,00079	-0,00078	-0,00077	-0,00076	-0,00075	-0,00074	-0,00073	-0,00072	-0,00071	-0,00071	-0,00071	-0,00071	-0,00071
BUDI	-0,04842	-0,00078	0,04849	-0,00149	-0,00146	-0,04839	0,04854	-0,00144	-0,04839	0,04857	-0,00141	-0,04839	0,04859	-0,04841	-0,00078	-0,00077	-0,00076	-0,05014	-0,05215	-0,05443	0,05925	0,05925	
BUMI	-0,52423	-0,83992	0,15976	0,0089	0,35181	0,14651	0,83648	-0,6773	-0,54951	-0,9238	0,60961	0,48181	-0,82472	-0,19901	0,7121	0,41412	0,28632	0,62923	0,62923	0,62923	0,62923	0,62923	0,62923
CEKA	-0,00244	-0,00241	-0,00237	-0,02166	-0,00202	-0,002	0,01775	-0,00221	-0,00218	-0,00216	-0,04083	0,01996	-0,0013	-0,02186	-0,00101	-0,02202	-0,02221	-0,00046	-0,11026	0,00084	0,00084	0,00084	
CKRA	-0,10898	0,04589	-0,00953	0,04248	0,03928	-0,01057	-0,01043	-0,01028	-0,1041	-0,00874	-0,00862	-0,00851	0,14746	-0,10005	-0,00903	-0,0583	-0,0082	-0,11209	0,05137	-0,11717	-0,12953	-0,12953	
CLPI	-0,00003	-0,01029	0,00013	0,00012	0,00012	0,00012	0,00012	0,00012	0,00012	0,00011	0,00011	0,00011	0,00011	0,00011	0,00011	0,00011	0,0001	0,0001	0,01051	-0,00002	-0,00002	-0,00002	
CMNP	0,00748	0,01785	-0,00361	-0,01393	-0,0453	0,00825	0,01885	-0,01369	-0,0029	0,00786	0,02887	-0,00335	-0,0033	-0,00326	-0,00322	-0,03405	0,00786	-0,00286	-0,04484	-0,00226	-0,00226	-0,00226	
CMPP	0,40225	0,27446	0,64874	-0,48957	0,36178	0,70468	-0,57689	0,95117	-0,792	0,16629	0,50919	0,3814	0,25361	0,59651	0,46872	0,30955	0,68383	-0,55604	-0,40102	0,24185	0,11406	0,11406	
CNKO	0,0155	-0,12546	0,01714	0,01689	0,01665	0,01642	0,18054	-0,12722	0,01543	0,01522	-0,14945	0,2144	-0,15032	0,01614	0,01594	0,01574	0,01555	0,01536	0,01518	0,015	0,01483	0,01483	
CPIN	0,0025	0,03764	0,0019	0,00187	0,00185	0,00182	-0,0152	0,00201	0,01928	-0,01529	0,00192	0,00188	-0,01547	0,00205	-0,03325	0,00243	0,0024	-0,01592	-0,09066	0,00363	0,00363	0,00363	
CPPR	-0,01671	0,00145	0,00143	0,00141	0,00139	0,01962	0,00109	-0,01686	0,01957	0,00104	0,00102	0,00101	0,001	-0,01696	0,0012	0,00119	-0,01712	0,02002	0,00114	0,00113	-0,07209	-0,07209	
CTBN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CTRA	-0,03509	0,0222	-0,02397	-0,00096	-0,00095	-0,00094	0,03388	0,00981	-0,03478	0,01042	-0,0012	-0,01252	-0,00102	-0,02397	-0,01245	-0,01245	-0,07267	-0,0645	-0,04048	-0,11451	0,03604	0,03604	
CTRS	-0,02991	-0,02991	-0,05184	0,01563	-0,05232	0,0167	0,08472	-0,02918	-0,02924	0,01453	-0,00759	-0,00749	-0,0074	-0,02877	-0,05083	-0,02928	-0,00595	-0,12349	0,02232	-0,08268	0,05279	0,05279	
CTTH	-0,06182	0,00067	0,00066	0,00065	0,00064	0,19782	-0,00215	-0,05692	-0,00134	-0,00133	-0,05935	0,06116	-0,00132	-0,05938	-0,04055	-0,00055	-0,06228	0,00022	-0,06566	-0,06959	0,07784	0,07784	
DART	0,04956	-0,42385	0,26467	0,13688	0,98186	0,82685	-0,69906	-0,04196	-0,91417	-0,78637	-0,6272	-0,00149	-0,34439	-0,18938	0,06158	-0,40449	0,2767	0,1489	0,49181	0,36402	-0,70692	-0,70692	
DAVO	0,05661	0,04297	-0,04937	-0,00386	-0,0038	-0,00375	-0,0637	-0,00365	-0,0036	-0,00355	-0,0035	-0,00346	-0,00341	-0,00337	-0,00333	-0,00329	-0,00325	-0,00321	-0,00317	-0,30313	-0,0031	-0,0031	
DILD	-0,00211	-0,00207	-0,00204	-0,00201	0,17196	-0,05374	-0,00369	-0,05555	0,05199	-0,03551	0,05199	-0,03552	-0,05543	-0,00277	-0,0576	0,05608	-0,05759	-0,06012	0,06048	-0,11827	0,06529	0,06529	
DNET	0,4687	-0,03064	-0,15247	0,20642	-0,03106	-0,14362	0,2709	-0,00012	0,15719	-0,11534	0,1686	0,15512	-0,03932	-0,03866	-0,03803	-0,03742	-0,03682	-0,13669	0,07777	-0,03532	-0,0951	-0,0951	
DNKS	-0,02975	0,00587	-0,0307	0,04414	0,0421	-0,03021	-0,0311	0,04378	0,00525	0,00518	0,07819	-0,02996	0,07497	0,00349	0,03635	0,00299	0,00295	0,00291	0,00288	0,00284	-0,09282	-0,09282	
DPNS	0,00035	-0,04343	0,001	0,00098	0,00097	-0,02198	0,09518	-0,00006	-0,00006	-0,04296	0,00052	0,00051	0,04537	-0,00008	-0,04301	0,00046	-0,022	0,0237	0,00044	0,00043	-0,04449	-0,04449	
DSFI	-0,00095	-0,00093	-0,00092	-0,0009	-0,00089	-0,00088	0,08131	-0,07786	0,16349	-0,00314	-0,07359	-0,00213	0,07383	-0,07358	-0,00212	-0,07806	-0,00113	-0,00112	-0,0011	-0,08344	-0,00011	-0,00011	
DSUC	-0,01248	-0,0123	-0,01212	-0,01194	-0,01177	-0,0116	0,18578	-0,01403	0,05193	0,04713	0,04287	0,01168	-0,01589	-0,01569	-0,09556	-0,0143	-0,01413	-0,04301	-0,01344	-0,04323	-0,01278	-0,01278	
DUTI	0,00202	-0,06838	0,00301	0,00297	-0,03499	0,12173	0,00171	0,00169	0,00166	0,00164	-0,03362	0,00206	0,00204	-0,03456	0,00245	-0,03557	0,04237	0,00234	0,00231	-0,11174	0,0036	0,0036	
DVLA	-0,06232	0,00018	0,03301	-0,0321	0,00015	0,00015	0,03302	-0,00031	-0,0003	-0,0003	-0,03213	0,03302	-0,0003	-0,064	0,03456	-0,03284	0,00048	-0,03359	0,00088	0,00087	0,00086	0,00086	
DYNA	-0,0177	-0,00375	-0,00369	-0,0314	-0,00319	0,01115	-0,0033	-0,01735	0,01128	-0,01727	-0,00294	0,0114	-0,00305	-0,01712	-0,03142	0,01234	-0,04614	-0,01719	-0,01722	-0,04864	0,01547	0,01547	
EKAD	0,01323	0,01303	-0,01795	0,01311	0,01292	0,01274	0,01256	-0,01943	0,01266	0,01249	-0,02057	0,04663	0,04489	-0,05228	0,01208	0,04599	0,01137	-0,05464	0,01189	0,01175	0,01161	0,01161	
ERTX	-0,06951	0,00449	0,00443	0,16204	0,00201	0,06998	0,001	0,00099	0,00097	0,00096	0,00095	0,00094	0,00092	0,00091	0,0009	0,00089	-0,09471	-0,31552	-0,20219	0,00824	0,00815	0,00815	
ESTI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ETWA	-0,02857	-0,00351	-0,02872	0,02291	-0,02865	0,02299	-0,00329	-0,02853	-0,00285	-0,00281	-0,00278	-0,00274	-0,02869	-0,02903	-0,00197	-0,00195	-0,00192	-0,02935	-0,05801	-0,0907	0,0661	0,0661	
FAST	-0,00042	-0,00041	-0,00041	-0,0004	-0,0004	-0,00039	-0,00038	-0,00038	-0,00038	-0,00037	-0,00037	-0,00036	-0,00036	-0,00035	-0,00035	-0,00034	-0,00034	-0,00033	-0,00033	-0,00033	-0,00032	-0,00032	
FASW	-0,09641	-0,00262	-0,00258	-0,00254	-0,0025	0,03153	0,0957	-0,00424	-0,12376	0,06554	-0,00339	-0,03519	-0,03579	0,06567	-0,06698	0,03163	-0,00282	-0,10158	0,03504	-0,07257	0,11292	0,11292	
GDWU	0,40995	0,28215	0,65644	-0,49727	0,36947	0,71238	-0,58459	0,45679	-0,7997	-0,67191	-0,01481	-0,88702	-0,75922	-0,10213	-0,97434	-0,84654	-0,18945	0,06166	-0,93386	-0,77885	-0,12175	-0,12175	

G DYR	-0.25675	0.09757	-0.96978	-0.31269	0.18489	0.0571	-0.40001	0.27221	0.61512	-0.48732	0.35953	0.70244	-0.02228	-0.39657	0.23739	-0.61168	0.4525	-0.00616	0.01837	-0.00647	-0.00631
G GRM	0.00022	0.00393	0.01127	0.00731	-0.00739	0.0623	0.0336	-0.01801	-0.02145	0.02688	-0.00454	0.00564	0.01896	-0.00472	-0.02449	-0.03827	-0.05332	0.22234	-0.01475	-0.02954	-0.0035
G MTD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G RIV	0.01021	-0.058	-0.03657	0.0125	0.01216	0.01184	0.04759	0.03322	0.00945	-0.12234	0.01238	0.01206	-0.01263	0.0244	-0.02467	-0.00028	-0.00027	-0.00027	-0.00027	-0.02497	0.00003
H DTX	-0.00197	-0.00194	-0.00191	-0.00188	-0.00186	-0.00183	-0.0018	-0.00178	-0.00175	-0.00173	-0.00171	-0.00169	-0.00166	-0.00164	-0.00162	-0.0016	-0.00158	-0.00156	-0.00155	-0.00153	-0.00151
H ERO	-0.00044	-0.00043	-0.00042	-0.04952	0.00047	0.00046	0.00046	0.00045	0.00044	0.02633	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	-0.02527	0.00037	0.02632	0
H EXA	-0.00683	0.04701	-0.0414	-0.00682	0.01088	-0.05877	0.03047	0.01114	0.02798	-0.02374	-0.02371	-0.00639	-0.0063	-0.04087	-0.00571	0.03027	-0.04067	0.01244	-0.00567	0.04734	-0.02291
H MSP	-0.0013	-0.02211	0.00983	-0.03789	0.01069	-0.00047	0.0158	0.00991	-0.00094	-0.03261	-0.01672	0.03327	-0.02211	-0.00017	-0.00017	0.00525	0.01046	-0.01671	0.00516	-0.00583	-0.00031
I ATG	-0.0002	-0.0002	-0.0002	-0.00019	-0.00019	-0.00019	-0.00019	-0.00018	-0.00018	-0.00018	-0.00018	-0.00017	-0.00017	-0.00017	-0.00017	-0.00017	-0.00016	-0.00016	-0.08999	0.00091	0.0009
I DSR	-0.00176	-0.0465	0.04588	-0.00171	-0.00169	-0.00167	-0.00164	-0.00162	-0.0016	-0.00158	-0.00156	-0.00154	-0.00152	-0.0015	-0.00148	-0.04635	0.04615	-0.00145	-0.04634	-0.095	0.05225
I GAR	-0.00032	-0.00032	-0.0733	0.04018	0.00018	-0.03774	0.0796	-0.03693	0.00011	0.00011	-0.03785	0.04009	0.00008	-0.03789	0.00056	0.04006	-0.07592	-0.04018	0.00147	-0.04151	0.00194
I KAI	-0.00445	-0.00439	-0.00432	-0.00426	-0.0042	-0.00414	0.16027	-0.11198	-0.0837	-0.00365	-0.0036	-0.00355	0.08234	-0.08355	-0.04644	-0.00293	-0.00289	-0.00285	0.08701	-0.16857	0.09696
I MAS	-0.92493	-0.26784	0.14005	0.48295	0.35516	0.22737	0.57027	0.44248	0.31468	0.18689	0.03188	0.37478	0.24699	0.58989	0.4621	0.33431	0.67721	-0.54942	0.39025	-0.76453	-0.10744
I NAF	0.00062	0.00061	0.0006	0.0006	0.00059	0.00058	0.00057	0.00056	0.00056	0.00055	0.00054	0.00053	0.00053	0.00053	0.00052	0.00051	0.0005	0.0005	0.00049	0.00048	0.00048
I NAI	-0.00136	0.03262	-0.06752	-0.00084	0.10478	-0.03413	-0.00184	0.03106	-0.00224	0.06145	-0.00303	-0.06282	-0.00218	-0.06585	-0.00132	-0.0013	0.06684	-0.0021	-0.00207	-0.16144	-0.00015
I NCI	0.00021	0.03417	-0.0003	-0.0003	-0.0003	-0.00029	-0.00029	0.03259	-0.00073	-0.03255	-0.01674	-0.00007	-0.00007	-0.00006	-0.0168	0.00015	0.0342	0.0162	-0.01666	-0.04968	0.00032
I NCO	-0.00358	-0.02015	-0.02255	-0.07681	-0.02843	0.02327	0.00096	-0.02305	-0.01775	0.02932	-0.00559	0.06198	-0.02132	-0.08872	-0.0236	-0.08775	-0.01226	-0.02842	-0.12545	-0.00516	0.01407
I NDF	0.03349	0.00016	0.00016	-0.03164	-0.03224	0.03507	0.03345	0.00011	-0.03171	0.03343	-0.03174	0.03341	0.00008	0.00008	-0.03178	-0.03244	0.00088	0.00087	-0.03321	-0.03404	0.03826
I NDR	-0.02001	0.00148	-0.00937	-0.00936	0.00173	0.0017	0.00168	0.00166	-0.00945	0.09146	-0.04058	0.00108	-0.0204	-0.02061	-0.03208	0.00199	-0.0329	0.02646	-0.00971	-0.06928	0.02865
I NDS	-0.00124	-0.00122	-0.00121	-0.00119	-0.00117	-0.00116	-0.00114	-0.00112	-0.00111	-0.00109	-0.00108	-0.10317	0.07621	-0.0007	-0.00069	-0.00069	-0.00068	-0.00067	-0.00066	-0.00065	-0.00065
I NKP	0.2448	0.58771	0.45991	0.33212	0.67503	-0.54723	0.41944	0.76235	-0.63455	-0.47538	0.84967	-0.72187	-0.5627	0.93698	-0.77781	-0.65002	-0.0243	0.36721	0.23942	0.08024	-0.45453
I NTA	0.00141	0.00139	0.00137	0.00135	0.00133	0.00131	0.00129	0.00127	0.00127	0.00126	0.00125	0.00124	0.00123	0.00123	0.00122	0.00121	0.0012	0.00119	0.00118	0.00117	0.00116
I NTD	-0.0027	-0.00266	-0.00262	-0.00259	-0.00255	-0.00251	-0.00248	-0.00244	-0.00241	-0.00238	-0.00235	-0.03416	-0.00187	-0.00185	-0.00183	-0.0018	-0.00178	-0.00176	-0.00174	-0.00172	-0.0017
I NTP	0.01354	-0.02423	0.00107	-0.01174	0.00123	0.04012	0.01312	0.02511	0.00011	-0.01193	0.01245	-0.01194	-0.02411	0.00057	-0.01194	-0.0246	-0.02497	-0.05206	-0.01215	0.01643	-0.08278
I SAT	-0.01652	-0.00509	-0.00516	0.00078	0.01888	0.03639	0.0118	0.06352	-0.01683	-0.00038	0.01641	0.01054	-0.00617	-0.05085	-0.04172	0.04337	-0.01838	-0.01262	-0.01282	-0.05766	-0.00004
J ECC	0.00294	-0.10203	0.005	0.0049	0.00481	0.00472	0.00463	0.00454	0.00446	0.00438	0.0043	-0.09405	0.04954	0.00501	0.00493	-0.01609	0.00511	0.00503	0.02636	0.00455	0.00448
J IHD	0.001	-0.03529	-0.03596	0.00245	0.08083	-0.03551	0.03924	-0.03559	0.00142	-0.03638	0.00205	0.00201	0.0413	0.00128	-0.03657	0.04121	0.03904	-0.03589	0.039	-0.03595	0.00108
J KSW	0.01915	-0.06158	0.01979	-0.06098	-0.06176	-0.06267	-0.01893	-0.06349	0.02918	-0.0182	0.02689	-0.06123	-0.01752	0.02757	-0.14645	-0.01582	-0.01563	-0.01544	-0.06466	-0.17052	0.11106
J PRS	0.67354	0.88865	-0.76086	0.47389	-0.82096	0.63872	-0.98578	-0.85799	0.12339	-0.46629	0.68556	-0.55777	0.40275	-0.74566	-0.08857	-0.96077	-0.30368	0.17589	-0.55017	0.89308	0.23598
J RPT	0.00305	-0.0103	0.00316	0.00312	0.00307	-0.02399	0.05892	-0.0369	0.03046	0.00264	-0.02407	0.04405	0.00235	-0.02401	0.00263	-0.01093	0.00273	0.0027	0.00267	0.09344	0.01894
J SPT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
K AEF	-0.02465	0.02827	0.00122	0.00121	0.00119	-0.02478	0.05482	0.02605	-0.04892	0.00107	-0.02492	0.00138	0.02805	-0.02498	0.00132	0.0013	-0.02541	0.0016	-0.05332	-0.02685	0.00253
K ARK	-0.83078	-0.70299	-0.04589	-0.9181	-0.79031	-0.13321	0.00542	-0.84625	-0.22053	0.09274	-0.93356	-0.30785	0.14868	0.02088	-0.39517	0.236	0.1082	-0.45111	0.32332	-0.6976	-0.04051
K ARW	-0.0004	-0.0004	-0.00039	-0.00038	-0.00038	-0.00037	-0.00037	-0.00037	-0.00036	-0.00036	-0.00035	-0.00035	-0.00034	-0.00034	-0.00034	-0.00033	-0.00033	-0.00032	-0.00032	-0.00031	-0.00031
K BLI	-0.00172	-0.0017	-0.00167	0.05632	-0.05723	-0.00165	-0.00163	-0.0016	-0.00158	-0.0596	-0.00077	0.06093	-0.00155	-0.0596	-0.00077	-0.00076	-0.06249	0.06587	-0.00079	-0.12431	0.00068
K BLM	-0.00373	-0.06524	0.12867	-0.06256	-0.00369	-0.00364	-0.00359	-0.00354	-0.00349	-0.06511	-0.00258	-0.00254	-0.00251	-0.00248	-0.00245	-0.00242	-0.00239	-0.06823	-0.00154	-0.00152	-0.0015



POLY	-0,01544	-0,01521	-0,01499	-0,01477	-0,01456	-0,01435	-0,01415	-0,01396	-0,01377	-0,01359	-0,01341	-0,01323	-0,01306	-0,0129	-0,01274	-0,01258	-0,01243	-0,01228	-0,01213	-0,01199	-0,01185
PRAS	-0,00033	-0,00033	-0,00032	-0,00032	-0,00031	-0,00031	0,16405	-0,00258	-0,00255	-0,00251	-0,00248	-0,00245	-0,00242	-0,00239	-0,00236	-0,00233	-0,0023	-0,00227	-0,00224	-0,00222	-0,00219
PUSD	-0,00054	-0,00053	-0,00052	-0,00052	-0,00051	-0,0005	-0,00049	-0,00049	-0,00048	-0,00047	-0,00047	-0,00046	-0,00046	-0,00045	-0,00044	-0,00044	-0,00043	-0,00042	-0,00042	-0,00042	-0,00041
PTRO	0,09577	-0,00417	-0,00411	-0,00405	-0,00399	-0,03754	0,101	-0,0153	-0,0152	-0,01512	0,00665	-0,02574	0,00702	-0,03659	0,06375	-0,02539	-0,08996	-0,03824	-0,01471	-0,00233	-0,0023
PUDP	0,0255	0,02445	-0,00117	0,02348	0,04658	-0,0251	-0,04877	-0,00113	0,02354	-0,00144	-0,00142	-0,0014	-0,02546	-0,00106	-0,00104	-0,00103	-0,00102	-0,001	-0,00099	-0,00098	-0,00097
PWON	-0,00121	-0,00119	-0,00118	0,01499	-0,00138	-0,00136	-0,00134	0,30087	-0,01768	0,03173	0,04186	-0,00625	-0,00617	-0,08552	-0,00499	-0,00496	0,00748	-0,00496	-0,0049	-0,00485	-0,00479
PWSI	0,00592	0,00583	0,00574	-0,15859	0,00796	0,00785	0,00774	0,40215	0,00213	0,0021	0,00207	0,00204	0,00202	0,00199	0,00197	0,00194	0,00192	0,14303	0,00017	0,00017	0,00017
PYFA	-0,07401	0,00287	0,00282	0,00278	0,00274	0,08486	0,00151	-0,07438	0,08471	-0,07453	0,00236	0,00233	0,08456	0,00121	-0,07476	0,00309	-0,08021	0,00309	0,00305	-0,08683	0,00404
RALS	-0,00664	0,0145	-0,01189	-0,00134	-0,01181	-0,00115	0,02008	0,05049	0,03735	0,04483	-0,08469	0,05712	0,01579	-0,01218	-0,00289	-0,04901	-0,02162	-0,02174	-0,02189	-0,08381	-0,00048
RBMS	-0,00723	-0,00713	-0,00702	0,04784	-0,00761	-0,0594	-0,00667	-0,00658	0,04832	-0,05907	-0,00636	-0,00628	0,04865	-0,00682	-0,00674	-0,00665	-0,00657	-0,00649	-0,16242	-0,00448	-0,00443
RDTX	-0,50731	0,85022	-0,69936	-0,04226	-0,91447	-0,7553	-0,6275	0,00179	-0,84262	-0,2169	0,05773	-0,43202	0,30422	-0,14505	0,51933	0,36016	0,73445	-0,94956	-0,29247	0,16467	0,03688
RICY	-0,04751	0,02694	-0,00396	-0,01819	-0,04609	-0,03177	-0,01683	-0,00187	-0,01657	-0,01635	-0,01614	-0,03045	-0,01554	-0,03008	-0,05984	-0,04557	-0,06223	-0,02993	0,05681	-0,01322	0,08415
RIGS	-0,00028	-0,00027	0,01562	-0,01614	0,01563	-0,01614	-0,03207	0,08237	-0,04647	-0,00032	-0,00031	0,01561	0,00733	0,09269	-0,00178	-0,00176	-0,0657	0,01426	-0,00111	-0,00109	-0,00108
RIMO	0,00019	0,00019	0,00018	-0,05457	0,00097	0,05895	-0,05466	0,00089	0,00088	0,00086	0,00085	0,00084	0,00083	0,00082	-0,05727	0,18671	-0,10476	-0,05761	0,00119	0,00118	0,00117
RYAN	0,00494	-0,32349	0,50235	0,33081	0,49037	-0,00949	0,155	-0,01151	-0,01136	-0,15216	-0,00918	0,15545	-0,01108	-0,01094	-0,0108	-0,01067	-0,01054	-0,01041	-0,15145	-0,00849	-0,00839
SAFE	-0,00022	-0,01536	0,00002	0,01541	-0,00021	-0,0002	-0,0002	-0,0002	-0,01537	-0,0154	0,00022	0,01588	0,03086	-0,09015	0,06659	-0,00008	-0,01551	-0,01557	0,0003	0,0003	0,00029
SAIP	-0,28297	0,12379	-0,49808	0,33891	0,21111	0,5854	0,42623	0,29843	0,64134	-0,01562	-0,88783	-0,72866	-0,10294	-0,26361	0,13582	0,47872	0,35093	0,56604	0,43825	-0,78116	0,15544
SCCO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SCPI	-0,00363	-0,00357	-0,00352	-0,00347	-0,00342	-0,00337	-0,00333	-0,00328	-0,00324	-0,00319	-0,00315	-0,00311	-0,00307	-0,00303	-0,00299	-0,00296	-0,00292	-0,00289	-0,00285	-0,00282	-0,00278
SHDA	0,7331	-0,6053	0,47751	0,82042	-0,69262	-0,03553	-0,90773	-0,77994	0,12285	-0,99505	-0,33796	0,21017	0,08237	-0,42528	0,29749	0,13831	0,5126	-0,06343	0,00838	0,00798	-0,0057
SHID	-0,00606	-0,00597	0,02491	-0,03611	-0,06733	-0,00477	0,02817	-0,00509	0,05863	-0,00582	-0,00574	0,11397	-0,08719	-0,03507	-0,00559	-0,00552	-0,03538	-0,03589	-0,00459	-0,03641	-0,00411
SHSA	-0,82871	-0,70092	-0,04383	-0,91603	-0,75686	-0,13114	0,00335	-0,84418	-0,21846	0,05929	-0,9315	-0,30578	0,14661	0,01882	-0,36172	0,23393	0,10614	-0,44904	0,32125	0,19345	-0,03844
SIIP	0,08513	-0,45941	0,33162	0,17245	0,54673	0,38756	0,25977	0,63405	-0,47488	0,34709	0,68999	-0,5622	0,43441	0,77731	-0,64952	-0,52172	0,86463	-0,73684	-0,60904	0,95195	-0,82416
SIMA	0,60254	0,47475	-0,81765	-0,68986	-0,06415	0,40705	-0,74996	-0,62217	0,49437	0,83728	-0,70948	0,05239	-0,9246	-0,24444	0,11665	-0,96163	0,30454	0,17674	0,51965	0,39186	0,73476
SIMM	0,00169	0,00166	0,00164	0,00161	0,02623	0,00121	0,0012	0,00118	-0,0229	0,00147	0,00146	0,00144	0,00142	0,0014	0,00138	0,00137	0,00135	0,00133	0,00132	0,0013	0,00129
SIPD	-0,19371	0,0062	0,0061	0,00602	0,00593	0,00585	0,00577	0,00569	0,25223	0,0022	-0,1952	0,25149	0,00148	0,00146	0,00144	0,00142	-0,19616	0,0038	0,00375	-0,24335	
SKLT	-0,00596	-0,00587	-0,00579	-0,0057	-0,00562	-0,00554	-0,00547	-0,00539	-0,00532	-0,00525	-0,00518	-0,00511	-0,00505	-0,00498	-0,00492	-0,00486	-0,0048	-0,00474	-0,00468	-0,00463	-0,00458
SMAR	-0,43442	0,30663	0,14745	0,52174	0,39394	0,23477	0,10698	-0,44988	0,32209	0,69638	-0,5372	0,40941	0,75232	-0,62452	0,49673	0,83963	0,21392	-0,05891	-0,89973	-0,77194	-0,64415
SMCB	-0,03539	-0,03579	-0,02436	-0,01221	-0,02452	-0,01195	0,01392	0,02622	0,00025	-0,01218	0,02564	-0,04911	0,00088	0,00086	0,00085	-0,01211	0,00104	0,04037	0,01298	-0,0123	0,01298
SMDM	0,25067	0,12287	-0,46578	0,33799	0,21019	0,5531	0,42531	0,29751	0,64042	-0,51262	0,38483	0,72774	-0,59994	0,44077	0,81506	-0,68726	-0,52809	0,90238	-0,7432	-0,61541	0,98969
SMDR	0,00489	0,00482	0,02407	0,00439	0,00433	0,00427	0,00421	0,00415	0,0041	0,00404	0,00399	0,00394	0,00389	0,00384	0,00379	0,00374	0,0037	0,00365	0,00361	0,00357	0,00352
SMPL	0,42449	0,2967	0,6396	-0,51181	0,35264	0,14733	0,01954	-0,36245	0,23465	0,10686	-0,97907	-0,32197	0,19418	-0,40929	0,2815	0,12233	-0,49661	-0,83952	-0,71172	-0,05463	0,275
SMRA	-0,66227	0,35224	0,19306	0,56735	0,91026	-0,78246	-0,65467	-0,99757	-0,86978	-0,74199	-0,08489	-0,92988	0,72042	-0,54234	-0,8119	0,60244	-0,92228	0,71282	0,56196	0,40279	0,275
SMSM	-0,42103	0,29324	0,16544	0,50835	0,38056	0,25276	0,59567	0,46787	0,34008	0,62299	-0,55519	0,4274	0,77031	-0,64251	-0,48334	0,85762	-0,72983	-0,57482	0,41564	-0,78993	-0,13284
SOBI	-0,10534	0,07614	-0,03207	-0,05772	0,02219	-0,03191	-0,05916	-0,00352	-0,03226	-0,03249	0,02849	-0,03242	0,02858	-0,03236	-0,00202	-0,00199	-0,06336	-0,00084	-0,00083	-0,00081	-0,0008
SONA	0,0011	-0,03269	0,00176	-0,06828	0,0785	0,00155	-0,06856	0,00282	0,00276	0,00271	0,04045	0,00196	0,00192	0,00189	0,00186	0,00183	0,0018	0,00177	0,00175	0,0382	0,00114



SPMA	-0,0254	0,02753	-0,02544	0,00087	0,00085	0,00084	0,02748	0,00045	0,00044	0,00044	-0,02554	0,00077	0,02744	-0,02558	0,0541	-0,05059	0,00068	-0,02604	-0,02647	0,0013	0,00128
SRSN	-0,1296	0,01306	0,01287	0,01268	0,0125	0,17665	0,00984	0,0097	0,00957	0,00944	0,00932	0,0092	0,00908	0,00897	-0,13222	0,01051	0,01038	0,01026	0,01013	-0,1547	0,20951
SSIA	0,43888	0,27971	0,654	-0,9969	-0,86911	-0,74132	-0,08422	-0,95643	-0,82863	-0,66946	0,04375	-0,89457	-0,25886	0,13107	0,97189	-0,34618	0,18701	0,56129	0,4335	0,27432	0,11931
STTP	-0,00265	-0,00261	-0,00258	-0,00254	-0,0025	-0,00247	-0,09635	-0,00109	-0,00108	-0,00107	-0,02702	-0,0007	-0,00069	-0,00068	-0,00067	-0,00066	-0,00065	-0,00064	-0,00064	-0,00063	-0,00062
SUBA	-0,03729	-0,1058	-0,00232	-0,00229	-0,00225	0,11153	-0,03779	0,03195	-0,00371	-0,03768	-0,00316	-0,00311	-0,00307	-0,03829	-0,00255	-0,00252	-0,03908	-0,00201	-0,00199	-0,03997	-0,0015
SUDI	-0,59652	0,46873	0,81164	-0,60634	0,98062	-0,82145	-0,69365	0,03656	-0,90877	-0,28305	-0,62596	-0,96886	-0,34315	0,68606	0,02896	0,22309	0,56807	0,91098	-0,91098	0,25389	0,09887
SULI	-0,00279	-0,00274	-0,0027	-0,00267	-0,00263	-0,00259	-0,00255	-0,00252	-0,00249	-0,00245	-0,00242	-0,00239	-0,0921	-0,00118	0,02896	0,22309	0,56807	0,91098	-0,91098	0,25389	0,09887
TBLA	-0,02994	-0,00287	0,07928	-0,02926	-0,00357	-0,00352	-0,00347	-0,02938	0,02364	-0,02931	-0,02963	-0,00256	-0,00253	-0,02993	-0,00212	-0,00209	-0,03029	-0,0017	-0,00168	-0,05979	-0,00096
TBMS	-0,00126	-0,00124	-0,00123	-0,00121	-0,00119	-0,00117	-0,00116	-0,00114	-0,00113	-0,00111	-0,0011	-0,00108	-0,00107	-0,00106	-0,00104	-0,04397	-0,00049	-0,00048	-0,00047	-0,00047	-0,00046
TCID	-0,0033	0,01403	-0,00346	-0,00341	0,01363	-0,00356	0,00485	-0,00357	-0,00353	-0,01177	-0,00332	-0,00328	-0,0116	-0,00309	-0,00305	-0,03678	-0,0113	0,08579	-0,00346	-0,06012	-0,00271
TEJA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TFCO	0,01986	-0,00096	-0,00095	-0,00093	-0,00092	-0,00091	-0,00089	-0,00088	-0,00087	-0,00086	-0,00085	-0,00084	-0,00082	-0,00081	-0,0008	-0,00079	-0,00078	-0,00077	-0,00077	-0,00076	-0,1016
TGKA	0	0	0	0	0	0	0	0,04552	-0,00062	-0,00062	-0,00061	-0,0006	-0,00059	-0,00058	-0,00057	-0,00056	-0,00056	-0,00055	-0,00054	-0,00054	-0,00054
TINS	-0,01012	-0,00012	-0,00012	0,00984	-0,01997	-0,01003	0,0205	-0,01008	-0,01004	0,01033	0,01008	-0,00011	-0,00011	-0,03003	-0,03059	-0,05245	-0,00992	-0,00993	-0,00995	-0,09135	-0,02293
TIRA	-0,00222	-0,00218	-0,00215	-0,00212	-0,00209	-0,00206	-0,00203	-0,002	-0,00198	-0,00195	-0,00192	-0,00188	-0,00185	-0,00185	-0,00183	-0,00181	-0,00178	-0,00176	-0,00174	-0,00172	-0,0017
TIRT	0,01878	-0,89098	-0,23389	0,1061	-0,94692	-0,32121	0,19342	0,03424	-0,40853	0,24936	0,12156	-0,49585	0,33667	0,20888	0,55179	0,42399	0,2962	0,63911	0,48409	-0,85838	0,20128
TKGA	-0,83958	-0,71179	-0,0547	-0,9269	-0,79911	-0,63994	-0,01422	-0,88643	-0,72725	-0,10154	-0,94237	-0,81457	0,18886	0,02969	-0,87467	-0,74688	0,08978	-0,93477	-0,30905	0,18126	-0,52417
TKIM	0,13525	0,50953	0,35036	0,22256	0,56547	0,43768	0,81196	-0,65279	-0,525	0,8679	-0,74011	-0,61232	0,95522	-0,82743	-0,69963	-0,04254	-0,91475	-0,68444	-0,55664	0,89955	-0,77176
TLKM	-0,76499	-0,10789	-0,9801	-0,85231	-0,69729	-0,53812	0,9124	-0,78461	-0,12752	-0,99972	-0,84055	-0,21483	0,08704	0,42995	0,77285	-0,64506	-0,98797	-0,86017	-0,73238	0,07528	0,44957
TMPI	0,02942	-0,0089	-0,04527	-0,00811	-0,0459	0,07153	-0,04487	-0,04566	-0,04656	0,03464	-0,00694	-0,04633	-0,00625	-0,00617	-0,04724	-0,04844	-0,0498	-0,05134	0,04573	-0,05128	-0,00362
TOTO	0,00066	0,00065	0,00064	0,12244	-0,00115	-0,00113	-0,00111	-0,0011	-0,00108	-0,00107	-0,00106	-0,00104	-0,00103	-0,00102	-0,001	-0,00099	-0,00098	-0,00097	-0,00096	-0,00094	-0,09977
TRPK	-0,00066	-0,00065	-0,00064	-0,00063	-0,00062	-0,00061	-0,0006	-0,0006	-0,00059	-0,00058	-0,00057	-0,00056	-0,00056	-0,00055	-0,00054	-0,00054	-0,00053	-0,00052	-0,00052	-0,00051	-0,00051
TSPC	-0,00868	0,01601	0,05589	0,02909	0,01293	-0,00938	0,04221	0,02564	-0,01659	-0,00961	-0,00953	0,01169	0,01134	-0,00271	-0,00953	-0,00256	-0,00252	-0,0094	-0,00238	0,00503	0,00503
TURI	-0,03118	0,02724	-0,01685	-0,00232	-0,00229	-0,01676	0,0127	0,04131	-0,00277	0,01116	-0,01659	-0,01656	0,01166	-0,0165	-0,0165	0,02645	0,0114	-0,03009	-0,0164	-0,03073	0,04253
UGAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UNIC	0,00428	0,00421	0,00415	0,00409	0,00403	0,00397	0,00392	0,00386	0,00381	0,00376	0,00371	0,00366	0,061	0,00282	0,00279	0,00275	0,00272	0,00268	0,00265	0,00262	0,00259
UNSP	0,1411	0,98193	-0,35621	0,22842	0,06925	-0,44353	0,28436	0,15657	0,53085	0,87376	-0,74596	-0,58679	0,96108	-0,83328	-0,17619	0,0484	-0,3913	0,73421	0,57919	0,4514	0,32361
UNTR	0,35926	0,70216	-0,57437	0,44657	0,78948	-0,66169	-0,53389	0,8768	-0,74901	-0,58983	0,96412	-0,83633	-0,67715	-0,05144	-0,89226	-0,76447	-0,13876	0,97958	-0,85179	-0,1947	0,06669
UNVR	-0,0205	-0,00009	0,02044	-0,00709	-0,00028	0,00648	0,01976	0,00593	-0,02033	-0,01378	-0,00027	0,01326	0,0129	-0,00719	-0,01376	-0,00034	-0,0205	0,00677	-0,00698	-0,02754	0,0426
ZBRA	-0,11403	0,40665	-0,78094	-0,62176	-0,99605	-0,81381	-0,15672	-0,47656	0,85084	0,19375	0,53666	0,40886	0,28107	-0,62397	0,49618	0,36839	-0,71129	-0,5835	-0,37404	0,24625	0,11846

**Appendix 10.**  
**List of Sum21 and Sum11**  
**Companies Listed in the Jakarta Stock Exchange**  
**Year 2002**

Code	Sum21	Sum11	Code	Sum21	Sum11	Code	Sum21	Sum11
AALI	-0,1619	-0,098	CPIN	0,05104	-0,0376	INCI	0,07087	-0,0611
ACAP	-0,0322	0,01147	CPPR	-0,0483	-0,1415	INCO	-0,4532	-0,4228
ADES	-0,0578	-0,1019	CTBN	-0,0303	0,0329	INDF	-0,0355	-0,0518
AISA	0,15735	0,05546	CTRA	0,07751	0,00733	INDR	-0,0356	-0,1024
AKPI	0,36627	0,51886	CTRS	0,07219	0,06362	INDS	0,0724	0,06714
AKRA	0,71767	0,13423	CTTH	-0,1915	0,06391	INTD	-0,3033	-0,0577
ALDI	0,20349	-0,1333	DART	-0,1471	-0,1665	INTP	-0,0604	-0,0121
ALFA	-0,0436	-0,0393	DAVO	0,2142	0,37557	ISAT	0,00061	-0,0367
ALKA	0,16067	0,06248	DILD	-0,0409	-0,0587	JECC	-0,2874	-0,0046
ALMI	-0,0725	0,03155	DILA	0,10842	0,04988	JIHD	-0,1798	-0,1137
AMFG	0,00508	-0,0045	DNET	-0,1002	-0,0957	JKSW	-0,3145	-0,2225
ANTM	-0,0606	-0,0906	DNKS	-0,2302	-0,1185	JPRS	0,66929	0,44314
APIC	-0,0377	0,04663	DPNS	-0,0002	-0,0752	JRPT	0,09797	0,12579
AQUA	-0,0359	-0,1631	DSFI	-0,0433	0,0102	JSPT	0,05845	-0,0436
ARNA	-0,0231	-0,0971	DSUC	0,14536	0,04981	KAEF	0,06564	0,01161
ASGR	-0,1576	-0,1601	DUTI	0,02524	-0,0514	KARK	0,21451	0,11587
ASII	0,12963	0,00961	DVLA	-0,2634	0,01586	KARW	0,14646	0,0446
AUTO	0,09353	-0,0165	DYNA	-0,0077	-0,1112	KBLI	0,03492	-0,0843
BASS	-0,2085	-0,2602	EKAD	0,06114	-0,0242	KBLM	-0,042	-0,1214
BATA	0,13263	0,18203	ERTX	-0,2003	-0,1188	KDSI	-0,1731	-0,2386
BATI	0,0561	0,09723	ESTI	-0,0961	-0,0028	KIAS	0,04746	-0,0623
BAYU	-0,0918	-0,1563	ETWA	0,01768	-0,0554	KICI	0,05757	-0,0968
BIMA	-0,1491	-0,1455	FAST	-0,121	-0,0487	KIJA	-0,0764	-0,0085
BIPP	-0,0082	0,05066	FASW	-0,2941	-0,2149	KKGI	0,18109	0,16726
BKSL	-0,0523	-0,0346	FMIJ	-0,0829	-0,114	KLBE	-0,0121	-0,0166
BLTA	0,03695	-0,1123	GDWU	-0,0988	0,05213	LAPD	0,0825	0,0381
BMSR	0,02172	-0,0988	GDYR	0,09358	0,07897	LION	0,10122	-0,1814
BMTR	0,07826	0,08246	GGRM	-0,3194	-0,2225	LMPI	-0,0441	0,03469
BRAM	0,02921	-0,1316	GMTD	0,10355	0,02032	LMSH	1,54486	0,86217
BRNA	0,05561	0,15213	GRIV	0,04953	-0,071	LPCK	0,01003	-0,0332
BRPT	0,13758	-0,0117	HDTX	0,27445	0,00355	LPIN	0,25195	0,24088
BTON	0,15256	0,07634	HEXA	0,25359	0,33638	LPKR	-0,3073	-0,1714
BUDI	0,19674	-0,2768	HMSP	-0,115	0,0643	LSIP	-0,0407	-0,0339
BUMI	0,08428	0,10067	IATG	-0,4893	-0,1891	LTLS	-0,0356	-0,0895
CEKA	0,04211	-0,084	IDSR	-0,1103	-0,0319	MBAI	0,41685	0,17611
CKRA	0,08296	-0,0042	IGAR	0,11479	-0,1177	MDLN	-0,002	-0,1465
CMNP	0,11218	-0,0256	IKAI	0,06271	-0,0787	MDRN	-0,0513	-0,0818
CNKO	-0,7859	-0,1744	IMAS	-0,0376	0,04689	MEDC	0,06559	-0,0485
CNTX	0,20668	0,16119	INAF	-0,0983	0,10048	MERK	0,16799	0,06941
			INAI	0,09283	0,02554	META	-0,082	0,11431

MIRA	0,24436	-0,0051
MLBI	-0,0636	-0,1198
MLIA	-0,158	0,03487
MLND	0,04449	-0,0883
MLPL	-0,1447	-0,0863
MPPA	0,03368	-0,0001
MRAT	0,0398	0,15222
MTDL	0,1099	-0,0484
MTSM	0,02535	-0,0719
NIPS	-0,1747	-0,1769
PBRX	0,30451	0,4328
PICO	-0,015	-0,003
PLAS	0,08307	0,08568
PLIN	0,10824	-0,0507
PNSE	-0,2908	-0,1359
POLY	0,28978	0,37922
PRAS	-0,2237	-0,229
PSDN	0,04391	-0,095
PTRO	0,18715	0,07298
PUDP	-0,0341	-0,0397
PWON	-0,0223	0,07367
PWSI	-0,5535	-0,4414
PYFA	-0,039	-0,0306
RALS	-0,0986	-0,0204
RDTX	0,06719	-0,1526
RICY	-0,0189	-0,1001
RIGS	0,34268	0,34104
RIMO	-0,0718	-0,1343
RMBA	0,02304	-0,1751
RYAN	0,12126	0,00341
SAFE	-0,2107	-0,0093
SAIP	0,00807	0,01864
SCCO	0,13267	-0,1027
SCPI	-0,3093	-0,0302
SHDA	0,16301	0,1269
SHID	-0,1813	-0,1099
SHSA	-0,1184	-0,1723
SIIP	-0,0584	-0,1071
SIMA	0,01083	-0,0481
SIMM	-0,0501	-0,1546
SIPD	-0,0644	-0,1021
SKLT	0,15734	-0,0104
SMAR	-0,0148	-0,0871
SMCB	-0,1625	-0,2457
SMDM	-0,2356	-0,4046
SMDR	-0,0091	-0,1066
SMGR	-0,2742	-0,0877
SMPL	0,1468	0,04019

SMRA	0,40803	0,28518
SMSM	-0,0335	-0,013
SOBI	-0,1333	-0,1734
SONA	0,01115	0,06069
SPMA	-0,1422	-0,0281
SRSN	0,33646	0,26807
SSIA	-0,1701	-0,2864
STTP	0,0405	0,07621
SUBA	-0,1219	-0,026
SUDI	-0,1115	-0,2225
SULI	-0,0513	-0,1112
TBLA	0,12642	-0,049
TBMS	-0,0028	-0,0715
TEJA	0,17428	0,19193
TFCO	0,1117	0,12624
TGKA	-0,1727	0,11286
TIRA	0,00463	-0,0834
TIRT	-0,0182	-0,0981
TKGA	0,05457	-0,0459
TKIM	-0,0328	-0,0852
TLKM	-0,1259	-0,0185
TMPI	-0,0101	0,00386
TOTO	0,03454	0,05887
TRPK	0,41461	0,28347
TRST	-0,0224	-0,0336
TSPC	0,01014	0,04217
TURI	0,51893	0,01666
UGAR	-0,2972	-0,1783
UNIC	-0,2732	-0,0411
UNSP	-0,1436	-0,1871
UNTR	0,03843	-0,0306
UNVR	0,10304	0,02537
ZBRA	0,08985	-0,0257

INDONESIA

## Appendix 11.

## List of Sum21 and Sum11

## Companies Listed in the Jakarta Stock Exchange

Year 2003

Code	Sum21	Sum11	Code	Sum21	Sum11	Code	Sum21	Sum11
AALI	0,02257	-0,0279	CLPI	-0,0679	-0,048	IATG	-0,0665	-0,2224
ACAP	-0,1311	-0,1054	CMNP	-0,0776	-0,085	IDSR	0,02093	0,02294
ADES	0,08653	0,08586	CMPP	0,22984	-0,0211	IGAR	0,02125	-0,0632
AISA	-0,2699	-0,1372	CNKO	-0,1495	-0,0986	IKAI	0,08024	0,07296
AKPI	0,09468	-0,1009	CNTX	-0,0649	-0,1298	IMAS	-0,2477	-0,2134
AKRA	-0,1006	0,00062	CPIN	0,1049	0,02225	INAF	-0,021	-0,0027
ALDI	0,30936	-0,2036	CPPR	-0,0574	-0,0069	INAI	-0,1679	-0,081
ALFA	-0,0091	-0,0051	CTBN	-0,0981	-0,0643	INCI	0,0512	-0,0848
ALKA	-0,1639	-0,1104	CTRA	0,26246	0,26165	INCO	-0,0279	-0,0312
ALMI	-0,0759	-0,1553	CTRS	-0,1595	-0,1205	INDF	0,19433	0,17852
AMFG	0,12435	0,11111	CTTH	-0,1806	-0,2872	INDR	0,11292	0,01435
ANTA	0,69636	-0,1127	DART	-0,0432	-0,1674	INDS	-0,1298	-0,1814
ANTM	-0,1137	-0,139	DAVO	0,34329	-0,1755	INTA	-0,4377	-0,392
APLI	0,3335	0,01728	DILD	-0,1978	-0,1849	INTD	-0,0938	-0,0618
AQUA	-0,0958	-0,0452	DILDA	-0,0209	0,01899	INTP	-0,0259	0,00055
ARGO	-0,097	-0,0636	DLTA	-0,4314	-0,3135	ISAT	0,0155	0,02653
ARNA	-0,0703	-0,0241	DNET	-0,4314	-0,3135	JECC	0,03628	0,00792
ASGR	0,12956	0,08752	DNKS	0,32216	0,23698	JIHD	0,06983	-0,1267
ASII	0,07046	0,04106	DPNS	0,04696	0,03265	JKSW	-0,0463	-0,0803
AUTO	-0,0373	-0,0182	DSFI	0,12544	-0,0125	JPRS	-0,1402	-0,1552
BASS	-0,0501	-0,0977	DSUC	-0,017	-0,0438	JRPT	0,06919	0,06131
BATA	-0,1158	0,00964	DUTI	0,14256	0,15334	JSPT	-0,0149	-0,018
BATI	-0,0166	-0,0072	DVLA	-0,0482	-0,1147	KAEF	0,08941	0,09318
BAYU	0,33787	-0,1994	DYNA	0,17994	0,17395	KARK	1,01597	0,83236
BIMA	-0,0625	-0,0418	EKAD	-0,0402	-0,011	KARW	-0,0862	-0,0593
BIPP	0,26481	0,1326	ERTX	0,10334	-0,0773	KBLI	0,08407	0,07163
BKSL	-0,093	-0,0943	ESTI	-1,1998	-0,3884	KBLM	-0,044	-0,0226
BLTA	-0,0986	-0,0621	ETWA	-0,0859	-0,0468	KDSI	-0,1172	-0,0791
BMSR	0,06418	-0,0549	FAST	-0,0877	-0,054	KIAS	-0,097	-0,0636
BMTR	-0,0859	-0,0417	FASW	-0,1204	-0,0591	KICI	0,0055	0,05444
BRAM	-0,046	-0,0581	FMI	-0,0471	-0,031	KIJA	0,22528	0,03685
BRNA	-0,0747	-0,0526	GDWU	0,26833	0,21312	KKGI	0,13243	0,31282
BRPT	0,24246	0,14661	GDYR	0,13841	-0,0085	KLBF	0,24341	0,18438
BTON	-0,0513	-0,0643	GGRM	0,05563	0,07332	LAPD	-0,3477	-0,2543
BUDI	-0,1506	-0,1705	GMTD	0,39225	-0,401	LION	-0,0802	-0,0894
BUMI	-0,1256	-0,3314	GRIV	-0,1087	-0,0909	LMAS	-0,1355	-0,1081
CKRA	0,24586	0,25079	HDTX	-0,0666	0,01516	LMPI	-0,0143	0,19501
			HEXA	0,05034	0,08663	LMSH	0,0824	-0,0652
			HMSP	0,04396	0,06111			

LPCK	-0,1305	-0,0258
LPIN	-0,1238	-0,0771
LPKR	0,05653	0,09181
LSIP	0,17648	0,24219
LTLS	0,09425	0,04494
MBAI	0,11408	-0,0807
MDLN	-0,1386	-0,0884
MDRN	0,11033	-0,0411
MEDC	-0,1505	-0,0546
MERK	-0,0788	-0,0115
META	0,57831	-0,1856
MIRA	-0,3102	-0,0787
MLBI	-0,0898	-0,0548
MLIA	0,05217	0,13578
MLND	-0,1167	-0,0698
MLPL	0,0653	-0,0179
MPPA	0,07149	0,08701
MRAT	0,05194	0,0139
MTDL	0,17654	0,20896
MTSM	-0,1177	-0,0851
NIPS	-0,1899	-0,0547
PBRX	0,01922	-0,0097
PICO	-0,215	-0,1332
PLAS	-0,1785	0,014
PLIN	-0,2539	-0,0907
PNSE	-0,1177	-0,0851
POLY	0,53527	0,2441
PRAS	0,15877	0,27593
PSDN	-0,097	-0,0636
PTRO	0,09205	-0,0538
PUDP	-0,1586	-0,0886
PWON	-0,1465	-0,0952
PWSI	-0,479	-0,4434
PYFA	-0,0853	-0,0731
RALS	0,12823	0,11186
RBMS	0,39826	0,38131
RDTX	-0,1046	-0,0684
RICY	-0,0486	0,02553
RIGS	-0,145	-0,0378
RIMO	0,1182	0,05822
RYAN	-0,1581	-0,131
SAFE	-0,179	0,00516
SAIP	-0,1034	-0,0678
SCCO	-0,1042	-0,0696
SCPI	-0,0377	-0,0143
SHDA	-0,1002	-0,0655
SHID	-0,1787	-0,2415
SHSA	-0,1116	-0,0722

SIIP	0,03689	0,04574
SIMA	-0,0574	-0,0048
SIMM	0,08624	0,0366
SIPD	-0,1041	-0,0934
SKLT	-0,3616	-0,0396
SMAR	0,31316	-0,0111
SMCB	-0,0106	0,07505
SMDM	0,43607	0,47156
SMDR	-0,1419	-0,0869
SMGR	-0,0281	-0,0269
SMPL	-0,0904	0,07844
SMRA	-0,0169	-0,0339
SMSM	-0,0226	-0,0407
SOBI	-0,2087	-0,072
SONA	-0,1964	-0,0982
SPMA	-0,0894	-0,0634
SRSN	-0,0605	-0,1105
SSIA	0,0593	-0,0846
STTP	-0,0405	-0,0172
SUBA	-0,1346	0,02437
SUDI	-0,0432	-0,0257
SULI	-0,2175	-0,047
TBLA	-0,0488	-0,0139
TBMS	-0,2442	-0,2065
TCID	0,06284	0,04038
TEJA	-0,097	-0,0636
TFCO	-0,0719	-0,0523
TGKA	-0,0405	-0,0177
TINS	0,0162	0,00785
TIRA	-0,097	-0,0636
TIRT	-0,1289	0,07888
TKGA	-0,1061	-0,0695
TKIM	0,39961	0,25396
TLKM	0,16635	0,09688
TMPI	0,15533	0,04257
TOTO	-0,0956	-0,0424
TRPK	-0,0983	-0,0672
TRST	-0,1706	-0,0977
TSPC	0,13877	0,10797
TURI	-0,047	-0,0233
UGAR	-0,1815	-0,1137
UNIC	-0,0041	0,10894
UNSP	-0,1166	-0,0998
UNTR	0,13255	0,08604
UNVR	0,0693	0,09081
ZBRA	-0,1125	-0,0661

**Appendix 12.**  
**List of Sum21 and Sum11**  
**Companies Listed in the Jakarta Stock Exchange**  
**Year 2004**

Code	Sum21	Sum11	Code	Sum21	Sum11	Code	Sum21	Sum11
AALI	-0,3294	-0,4463	CMPP	4,25257	2,60166	INAI	-0,1134	-0,2354
ACAP	0,02136	0,01988	CNKO	0,07948	0,03837	INCI	-0,017	-0,0492
ADES	-0,0719	-0,0986	CPIN	-0,1007	-0,1391	INCO	-0,461	-C,3222
AISA	0,05003	-0,014	CPPR	-0,065	-0,0785	INDF	-0,0494	-0,0896
AKPI	-4,8595	-1,2419	CTBN	-1,1917	-1,1917	INDR	-0,1159	-0,1674
AKRA	0,14967	-0,174	CTRA	-0,3401	-0,3197	INDS	-0,0451	-0,0334
ALDI	-0,1808	-0,0884	CTRS	-0,3592	-0,2684	INKP	1,10649	-0,7177
ALFA	0,07252	0,03547	CTTH	-0,1026	-0,1795	INTA	0,04043	-0,0082
ALKA	0,04379	0,0214	DART	-1,5365	-0,9309	INTD	-0,0779	-0,0526
ALMI	-0,1423	-0,0866	DAVO	-0,0119	-0,0362	INTP	-0,1687	-0,2151
AMFG	-0,2213	-0,166	DILD	-0,0743	-0,1215	ISAT	-0,0426	-0,1299
ANTA	-0,2059	-0,1917	DNET	0,57409	-0,0559	JECC	-0,0625	-0,0008
ANTM	0,03754	-0,0184	DNKS	0,10935	0,08479	JIHD	0,00477	0,05856
AQUA	-0,1594	-0,1575	DPNS	-0,0482	-0,0382	JKSW	-0,6212	-0,3418
ARGO	-0,0028	-0,0209	DSFI	-0,0342	-0,2426	JPRS	-1,9071	-0,8134
ARNA	-0,0123	0,02805	DSUC	-0,0149	-0,2135	JRPT	-0,0432	-0,0764
ASGR	-0,1132	-0,1399	DUTI	-0,1253	-0,1583	JSPT	0	0
ASII	-0,0325	-0,1029	DVLA	-0,121	-0,0922	KAEF	-0,1038	-0,1193
AUTO	-0,0349	-0,1405	DYNA	-0,2197	-0,1445	KARK	-6,3786	-1,9887
BASS	0,49395	-0,1791	EKAD	0,13408	0,06872	KARW	-0,0074	-0,0036
BATA	0,10361	-0,0305	ERTX	-0,4132	-0,5905	KBLI	-0,1956	-0,1236
BATI	-0,0502	-0,0792	ESTI	-0,1953	-0,1953	KBLM	-0,1761	-0,0902
BAYU	-0,1393	-0,0043	ETWA	-0,2621	-0,181	KDSI	-6,0788	-1,6379
BIMA	2,94563	2,67888	FAST	-0,0077	-0,0038	KIAS	0	0
BIPP	-2,4919	-3,4304	FASW	-0,1149	-0,0731	KICI	-0,0178	-0,0087
BKSL	-0,3406	-2,0793	GDWU	-5,2126	-5,5463	KIJA	0,13621	-0,2289
BLTA	-2,3763	-1,2485	GDYR	-0,4789	0,72076	KKGI	0,29933	0,3026
BMSR	-0,1386	-0,1429	GGRM	-0,0275	-0,1262	KLBF	-0,0035	-0,0896
BMTR	-0,0785	-0,0544	GMTD	0	0	LION	-0,0098	-0,1476
BRAM	0,13368	-0,0839	GRIV	-0,0944	-0,0145	LMAS	-0,3475	-0,2486
BRNA	0,02348	-0,0506	HDTX	-0,0361	-0,0177	LMPI	0,06521	0,21347
BRPT	-0,3332	-0,3318	HERO	-0,0207	0,00149	LMSH	-0,0495	-0,0905
BTON	-0,0167	-0,0082	HEXA	-0,0723	-0,0622	LPCK	0,30275	-0,1607
BUDI	-0,1542	-0,1494	HMSP	-0,0517	-0,0027	LPIN	-0,023	0,05997
BUMI	1,06975	3,08105	IATG	-0,0914	-0,0895	LPKR	0,3045	-0,0473
CEKA	-0,2627	-0,241	IDSR	-0,1122	-0,0983	LSIP	-0,219	-0,204
CKRA	-0,4877	-0,3527	IGAR	-0,1775	-0,1492	LTLS	-0,1165	-0,1223
CLPI	0,00197	0,01133	IKAI	-0,1129	-0,0481	MBAI	-0,0946	-0,1157
CMNP	-0,0824	-0,0632	IMAS	3,2131	1,68602	MDLN	-6,3598	-2,5518
			INAF	0,01143	0,00559	MDRN	2,32349	0,85162

MEDC	-0,115	-0,1156
MERK	-0,2004	-0,1161
META	-0,2953	-0,1444
MIRA	-0,2779	-0,2759
MLBI	-0,0299	-0,0112
MLIA	-0,1523	-0,1522
MLND	0	0
MLPL	-0,2866	-0,0017
MPPA	-0,2764	-0,3473
MRAT	-4,5237	-1,2986
MTDL	-0,1242	-0,1643
MTSM	0	0
NIPS	0,03333	0
PBRX	-0,0643	-0,0854
PICO	0,11282	0,13795
PLAS	-3,196	-1,5426
PLIN	-0,0423	-0,0123
PNSE	0	0
POLY	-0,2834	-0,1386
PRAS	0,12884	-0,0257
PSDN	-0,0099	-0,0048
PTRO	-0,0606	-0,1578
PUDP	0,02957	-0,0364
PWON	0,24423	-0,078
PWSI	0,44632	0,15749
PYFA	-0,1797	-0,139
RALS	-0,091	-0,2254
RBMS	-0,2331	-0,1686
RDTX	-3,1053	0,64844
RICY	-0,3342	-0,162
RIGS	0,05899	0,05706
RIMO	-0,0722	-0,0261
RYAN	0,88896	-0,0865
SAFE	-0,0386	-0,0069
SAIP	1,18954	-0,639
SCCO	0	0
SCPI	-0,0666	-0,0326
SHDA	-1,3794	0,48293
SHID	-0,161	-0,1415
SHSA	-5,4438	-1,0663
SIIP	1,64492	-0,1852
SIMA	-0,6714	-0,5436
SIMM	0,03005	0,01506
SIPD	-0,2676	-0,3699
SKLT	-0,1094	-0,0535
SMAR	1,02124	-0,8244
SMCB	-0,0939	0,02208
SMDM	2,94623	1,08657

SMDR	0,10451	0,04124
SMPL	-1,8322	-3,1798
SMRA	-1,617	1,06882
SMSM	1,82845	-1,4375
SOBI	-0,3345	-0,0784
SONA	0,01624	0,09457
SPMA	-0,0606	-0,0687
SRSN	0,13715	0,00044
SSIA	-2,541	1,23253
STTP	-0,1486	-0,0336
SUBA	-0,2229	-0,1373
SUDI	-3,0034	-1,3912
SULI	-0,1321	-0,1059
TBLA	-0,1917	-0,1633
TBMS	-0,0635	-0,0517
TCID	-0,053	-0,0529
TEJA	0	0
TFCO	-0,0979	-0,1096
TGKA	0,038	-0,0063
TINS	-0,2671	-0,2473
TIRA	-0,0407	-0,0199
TIRT	-0,2903	1,90934
TKGA	-10,358	-4,6569
TKIM	-1,2719	-3,9949
TLKM	-7,557	-2,6168
TMPI	-0,3814	-0,2717
TOTO	0,00799	-0,1098
TRPK	-0,0121	-0,0059
TSPC	0,10371	-0,0338
TURI	-0,0311	-0,0513
UGAR	0	0
UNIC	0,13007	0,08999
UNSP	2,83087	0,36437
UNTR	-2,3308	-2,3963
UNVR	-0,0105	-0,0011
ZBRA	-2,3456	0,16307

## Appendix 13.

## Regression Analysis for Sum21

## Descriptive Statistics

	Mean	Std. Deviation	N
<b>SUM21</b>	-3,282950E-02	,155708	556
<b>ROE</b>	25,6999	957,1549	556
<b>NPM</b>	-,2761	5,7843	556
<b>ATO</b>	,9137	,8510	556
<b>LEV</b>	8,0950	90,7799	556

## Correlations

		SUM21	ROE	NPM	ATO	LEV
<b>Pearson Correlation</b>	<b>SUM21</b>	1,000	-,007	,148	,050	-,012
	<b>ROE</b>	-,007	1,000	,001	-,138	,509
	<b>NPM</b>	,148	,001	1,000	,061	,008
	<b>ATO</b>	,050	-,138	,061	1,000	-,037
	<b>LEV</b>	-,012	,509	,008	-,037	1,000
<b>Sig. (1-tailed)</b>	<b>SUM21</b>	,	,431	,000	,119	,393
	<b>ROE</b>	,431	,	,490	,001	,000
	<b>NPM</b>	,000	,490	,	,077	,421
	<b>ATO</b>	,119	,001	,077	,	,191
	<b>LEV</b>	,393	,000	,421	,191	,
<b>N</b>	<b>SUM21</b>	556	556	556	556	556
	<b>ROE</b>	556	556	556	556	556
	<b>NPM</b>	556	556	556	556	556
	<b>ATO</b>	556	556	556	556	556
	<b>LEV</b>	556	556	556	556	556



Variables Entered/Removed<sup>b</sup>

Model	Variables Entered	Variables Removed	Method
1	LEV, NPM, ATO, ROE <sup>a</sup>		Enter

a All requested variables entered.

b Dependent Variable: SUM21

Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,155 <sup>a</sup>	,024	,017	,154395	,024	3,369	4	551	,010	1,916

a Predictors: (Constant), LEV, NPM, ATO, ROE

b Dependent Variable: SUM21

ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,321	4	8,031E-02	3,369	,010 <sup>a</sup>
	Residual	13,135	551	2,384E-02		
	Total	13,456	555			

a Predictors: (Constant), LEV, NPM, ATO, ROE

b Dependent Variable: SUM21

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics		
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	-3,851E-02	,010		-3,963	,000					
	ROE	8,679E-07	,000	,005	,108	,914	-,007	,005	,005	,727	1,376
	NPM	3,931E-03	,001	,146	3,463	,001	,148	,146	,146	,996	1,004
	ATO	7,588E-03	,008	,041	,973	,331	,050	,041	,041	,976	1,025
	LEV	-2,399E-05	,000	-,014	-,286	,775	-,012	-,012	,012	,740	1,352

a Dependent Variable: SUM21

## Collinearity Diagnostics(a)

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	ROE	NPM	ATO	LEV
1	1	1,746	1,000	,13	,00	,00	,12	,01
	2	1,507	1,077	,00	,24	,00	,01	,23
	3	1,001	1,321	,00	,00	,99	,00	,00
	4	,487	1,893	,02	,72	,00	,00	,76
	5	,259	2,599	,86	,04	,01	,87	,00

a Dependent Variable: SUM21

Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-,562886	1,05896E-02	-3,282950E-02	2,40588E-02	556
Residual	-,456804	,451277	-1,051442E-17	,153838	556
Std. Predicted Value	-22,032	1,805	,000	1,000	556
Std. Residual	-2,959	2,923	,000	,996	556

a Dependent Variable: SUM21

Appendix 14.  
**Regression Analysis for Sum11**

**Descriptive Statistics**

	Mean	Std. Deviation	N
SUM11	-4,6501455E-02	,1096424	550
ROE	26,3258	962,4055	550
NPM	-,2825	5,8190	550
ATO	,9282	,8863	550
LEV	8,1817	91,2721	550

**Correlations**

		SUM11	ROE	NPM	ATO	LEV
Pearson Correlation	SUM11	1,000	-,051	,150	,041	-,032
	ROE	-,051	1,000	,001	-,132	,509
	NPM	,150	,001	1,000	,060	,008
	ATO	,041	-,132	,060	1,000	-,037
	LEV	-,032	,509	,008	-,037	1,000
Sig. (1-tailed)	SUM11		,118	,000	,170	,229
	ROE	,118		,488	,001	,000
	NPM	,000	,488		,080	,421
	ATO	,170	,001	,080		,192
	LEV	,229	,000	,421	,192	
N	SUM11	550	550	550	550	550
	ROE	550	550	550	550	550
	NPM	550	550	550	550	550
	ATO	550	550	550	550	550
	LEV	550	550	550	550	550

Variables Entered/Removed<sup>b</sup>

Model	Variables Entered	Variables Removed	Method
1	LEV, NPM, ATO, ROE <sup>a</sup>		Enter

a All requested variables entered.

b Dependent Variable: SUM11

Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,160 <sup>a</sup>	,026	,019	,1086174	,026	3,602	4	545	,007	1,988

a Predictors: (Constant), LEV, NPM, ATO, ROE

b Dependent Variable: SUM11

ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,170	4	4,250E-02	3,602	,007 <sup>a</sup>
	Residual	6,430	545	1,180E-02		
	Total	6,600	549			

a Predictors: (Constant), LEV, NPM, ATO, ROE

b Dependent Variable: SUM11

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics		
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	-4,845E-02	,007	-7,148	,000				,728	1,374	
	ROE	-4,784E-06	,000	-,042	-,847	,397	-,051	-,036	-,036	,996	1,004
	NPM	2,796E-03	,001	,148	3,504	,000	,150	,148	,148	,978	1,023
	ATO	3,204E-03	,005	,026	,606	,545	,041	,026	,026	,740	1,352
	LEV	-1,284E-05	,000	-,011	-,217	,828	-,032	-,009	-,009		

a Dependent Variable: SUM11

Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	ROE	NPM	ATO	LEV
1	1	1,739	1,000	,13	,00	,00	,13	,01
	2	1,506	1,074	,00	,24	,00	,01	,23
	3	1,001	1,318	,00	,00	,99	,00	,00
	4	,487	1,889	,01	,72	,00	,00	,76
	5	,267	2,550	,85	,04	,01	,86	,00

a Dependent Variable: SUM11

## Residuals Statistics(a)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-,4216116	1,634700E-02	-4,6501455E-02	1,759704E-02	550
Residual	-,3241849	,3244441	2,836115E-17	,1082210	550
Std. Predicted Value	-21,317	3,572	,000	1,000	550
Std. Residual	-2,985	2,387	,000	,996	550

a Dependent Variable: SUM11