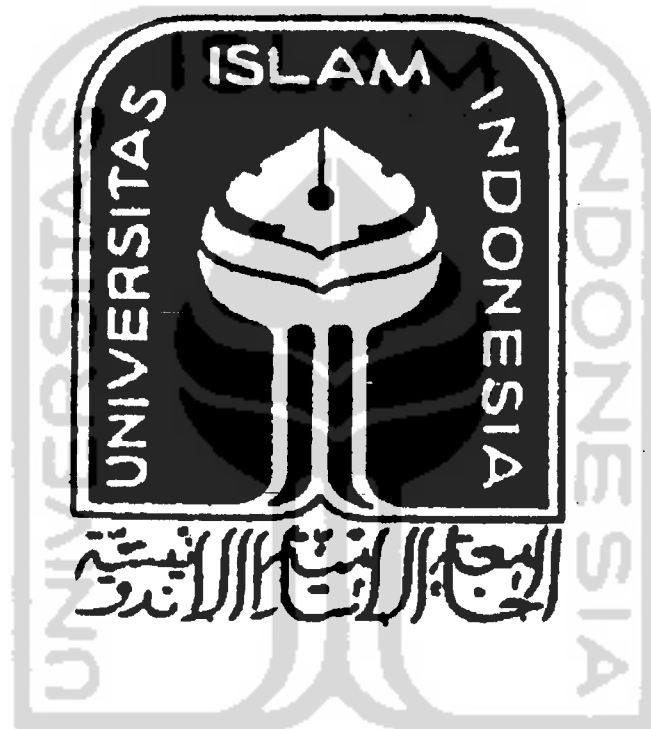


**CHANGE IN INVENTORY AND FIRM VALUATION**  
**A THESIS**

Presented as a Partial Fulfillment of the Requirements To obtain the  
Bachelor Degree in Accounting Department



By

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**YOGYAKARTA**  
**2005**

# **CHANGE IN INVENTORY AND FIRM VALUATION**

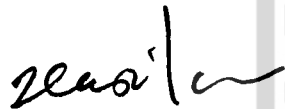
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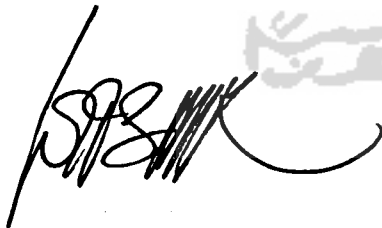
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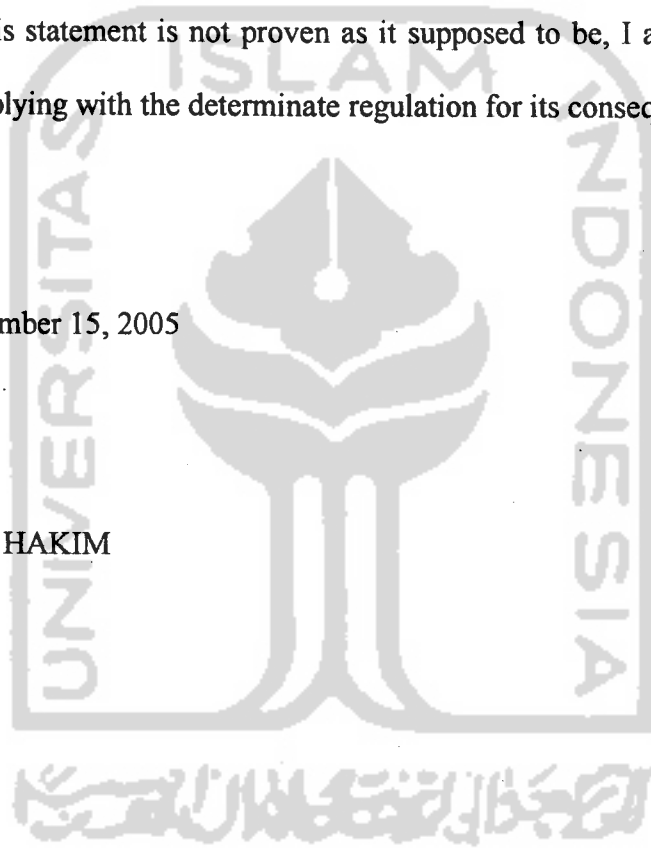
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Yogyakarta, September 15, 2005

LUTHFI AZIZUL HAKIM



# CHANGE IN INVENTORY AND FIRM VALUATION

## A BACHELOR DEGREE THESIS

By

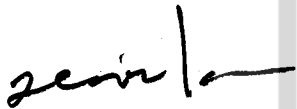
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On September 28, 2005  
And Declare Acceptable

Board of Examiners

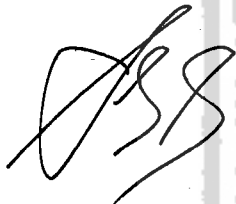
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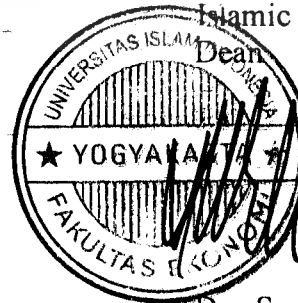
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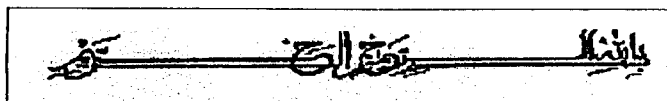
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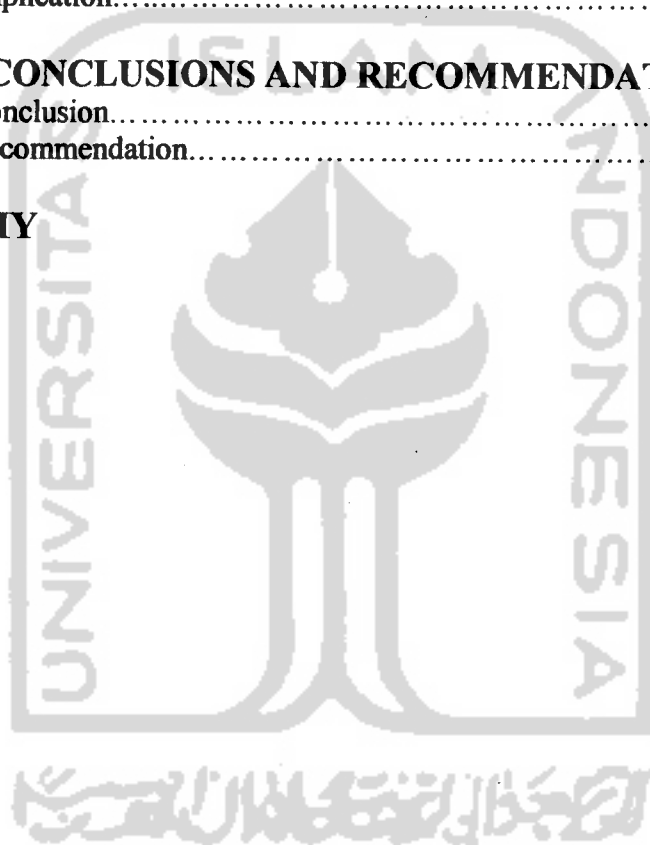
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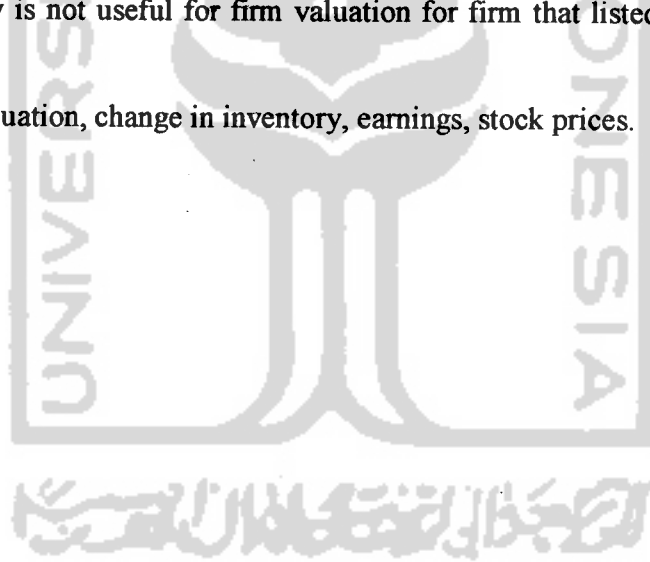
## ABSTRACT

Hakim, Luthfi A. (2005). *Change in Inventory and Firm Valuation*. Yogyakarta. International Program, Faculty of Economics, Islamic University of Indonesia.

Fundamental analysis has been the primary approach used by security analysts for making investment choices. It assumes that the value of a stock can be determined by careful examinations of a stock can be determined by careful examination of fundamental value drivers. One of the drivers is the informativeness change in inventory.

The purpose of this study is to examine whether knowledge of the informativeness of change in inventory is useful for firm valuation and whether earning positively influence stock price. A firm's change in inventory is informative if its percentage in cost of good sold is positively and significantly associated with its lag one percentage of production added to inventory (a measure of change in inventory, and other firms). Analyses then are performed to examine the association between stock price and earnings. Result consistently show that earning is correlate positively and significantly with stock price, but the results also show the association is inconsistently lower for the firm with informative change in inventory. Thus, the knowledge of informativeness of change in inventory is not useful for firm valuation for firm that listed at Jakarta Stock Exchange.

Key words: firm valuation, change in inventory, earnings, stock prices.





## ABSTRAK

Hakim, Luthfi A. (2005). *Change in Inventory and Firm Valuation*. Yogyakarta. International Program, Fakultas Ekonomi, Universitas Islam Indonesia.

Analisa Fundamental telah menjadi pendekatan utama yang digunakan oleh para analis untuk membuat pilihan investasi. Diasumsikan bahwa nilai dari saham didapatkan dari pengamatan secara hati-hati pada *fundamental value driver*-nya. Salah satu dari *driver*-nya adalah informasi perubahan di persediaan.

Tujuan dari penelitian ini adalah untuk meneliti apakah pengetahuan tentang informasi dari perubahan pada persediaan berguna untuk penilaian perusahaan dan apakah laba akuntansi secara positif mempengaruhi harga saham. Perubahan pada persediaan pada sebuah perusahaan bernilai informasi apabila persentasi dari harga pokok penjualan berhubungan secara positif dan signifikan dengan persentasi dari produksi yang ditambahkan pada persediaan (sebuah pengukuran dari perubahan persediaan dan perusahaan lainnya). Analisa kemudian dilaksanakan untuk meneliti hubungan antara harga saham dan laba akuntansi. Hasilnya menunjukkan bahwa laba akuntansi secara konsisten mempengaruhi harga saham secara positif dan signifikan, tapi hasil lain menunjukkan bahwa hubungan antara harga saham dan laba akuntansi lebih rendah untuk perusahaan yang bernilai informasi pada perubahan di persediaan. Jadi, pengetahuan tentang informasi perubahan persediaan tidak terlalu berguna untuk penilaian perusahaan untuk perusahaan yang terdaftar di Bursa Efek Jakarta.

Kata kunci: penilaian perusahaan, perubahan persediaan, laba akuntansi, harga saham.

# **CHAPTER I**

## **INTRODUCTION**

### **1.1. Study Background**

The global economic condition of the world market gives a huge impact on economic condition for all countries, including Indonesia. Stock market as a place in which the stocks were traded will be easily responded to those changes, as the result from the interaction between the firm and investor that occurred due to resources dependency. Furthermore, the interactions are intended for mutual benefits toward all of the sides, as the firm needs an investment from the investors, in the other hand the investors expect a benefit from their investment. In general, stock market has a function to mobilize the investment flows to the firm listed in stock market. The function of stock market will perform effectively when investors possess the sufficient financial information about the targeted firms in which their investment will be allocated.

The availability of stock market information for the investor is very crucial because it leads the investors to a good decision making in term of the stock. There are two kinds of information, technical information and fundamental information. Firstly, technical information provides the market information and other macro economic information such as inflation rate, currency rate, economic and politic condition, etc. Secondly, fundamental information provides the information about the performance and internal information of the firm.

In term of decision making process, investors should consider two main factors, expected return and risk of stocks. Investors always determine an efficient portfolio, as it has been suggested in Markowitz's portfolio theory (Jogiyanto: 2003), it is stated that efficient portfolio is the portfolio which gives the highest expected return in a certain value of risk. Hence, investors need information to reduce the uncertainty in the decision making process of their investment, to predict the future cash flows. Accounting information, especially financial statement, is one type of information available to be used by the investor and the creditors. Financial statement as the final result of the accounting process is designed to give information that supports the decision making process.

According to White, Sondhi and Fried (1997), the objective of financial report is to provide information about financial position, performance, which can be used by the users in decision making process. Generally, financial statement includes balance sheet, income statement, statement of cash flows, and statement of owner's equity or statement of retained earning. Statement of owner's equity or statement of retained earning is useful to predict the ability of the company to increase their funding sources. This statement of owner's equity explained about the increase and decrease of net assets during the period. Inventory is an active element on the operational of the manufacturing company, whereas purchasing and selling of the inventory are transactions that often happened. The selling of inventory with marking up on cost is the main activity of the company. In the determination of the profit, cost of good sold is the main deductive variable to the selling revenue. Besides, the biggest investment of manufacturing company is on

inventory. This research tries to investigate whether statement of changing in earning and the statement of changing in inventory effect the firm valuation.

Bernard and Noel [1991] investigate the ability of inventory disclosures to predict future sales and earnings. The study concentrates on seven industries for which firms disclose raw materials (RM), work-in-process (WIP), and finished goods (FG) inventory balances. Structure is added to the analysis by drawing on several economic models of inventory management in order to generate expected inventory balances. The FG inventory investment decision is characterized as one of "maximizing expected future cash flows by choosing levels of production (possibly for the future, if pre-commitment is necessary)". Thus, changes in the level of FG inventory may be informative about future sales and profitability. In addition, changes in WIP inventory may be informative about management expectations. Several findings are noteworthy, first, inventory disclosures contain information useful in the projection of future sales and earnings beyond what included in the time series of past sales and earnings alone. While an unexpected change in total inventory is a negative indicator of future earnings and profit margins, it is a positive leading indicator for sales. For retailers, this seemingly inconsistent finding is attributed to the need to "dump" inventory in response to an unexpected decline in demand. Second, the effect on future sales differs for changes in FG versus WIP and RM inventories. For instance, in WIP and RM the positive relation between inventory change and future sales is the strongest.

Lev and Thiagarajan (1993) have searched and generated 12 signals for fundamental analysis. One of the signals increases in inventory, measured by

percentage change in inventory value minus percentage change in sales (referred by Jiambalvo, Noreen and Shelvin (1997) as PCIS) their result shows that increase in inventory is negatively associated with 12 months excess stock returns, i.e., a result that is consistent with that implied in Bernard and Noel (1991)

Jiambalvo, Noreen and Shelvin (1997) have studied the association between cumulative abnormal return (CAR) over a 12 months windows with the increase in inventory, measured by the change in percentage of production added to inventory (CPAI). Their results show that CPAI is positively associated with CAR.

The purpose of this study is to examine whether knowledge of the informativeness of change in inventory is useful for firm valuation purposes. The concept of prior studies, particularly those in Lev and Thiagarajan (1993) and Jiambalvo, noreen and Shelvin (1997), are reconciled to define the informativeness of change in inventory. The sample firms are divided into two groups: group 1 consist of firms with positive and significant association between percentage change in cost of good sold and lag one percentage of production added to inventory while group 0 consist of other firms. It is hypothesized that the association between stock price and earnings is higher for the firm in group 1 because (1) besides affecting the cash component of earnings, their current inventory change is proportionate and can better support future cost of good sold and sales (Lev and Thiagarajan, 1993), i.e., the change has a higher sustainability, and (2) the quality of reported earnings derived from subtracting cost of good sold and other expense from sales, therefore, is also higher.

This study uses a research methodology that is fundamentally different from those in prior studies in two respects. First, it classifies firms into two groups while Lev and Thiagarajan (1993), and Jiambalvo, Noreen and Shelvin (1997) do not. Second, it uses the valuation approach to examine the association between firm value and earnings while Lev and Thiagarajan (1993), and Jiambalvo, Noreen and Shelvin (1997) use the cumulative abnormal returns approach to study the incremental value of increase in inventory over earnings.

Therefore, this research tries to present further information to determine this issue conducted at Jakarta Stock Exchange.

## **1.2 Problem Formulation**

Refer to the research background that stock price reflect the condition of the firm, hereby, problem formulation of this research will be assessed as follow:

“Do changing in earning and changing in inventory influence firm valuation?”

## **1.3 Research Objectives**

The objective of this research is to identify whether changing in earning and changing in percentage of inventory give an effect to firm valuation.

## **1.4 Limitation of Research Area**

In order to maintain the focus of this study, several limitations should be acknowledged. In this study the writer makes some limitation in the investigation, it focuses on the fact whether knowledge of the informativeness of change in

inventory is useful for firm valuation purposes. In this case the research is conducted on Indonesian manufacturing company with some scope limitations, which are:

1. Manufacturing company that is still operating until 2003, listed and actively traded in JSX and published financial report from 1997-2002.
2. Income used in this research is annual net income excluded discounted operation, extraordinary items, change in accounting principle.
3. Inventory used in this research change in percentage of production added to inventory (CPAI).

### **1.5 Research Contribution**

This research is about changing in inventory and firm valuation of manufacturing company listed in JSX. It could give several contributions:

1. For investors, new investors, shareholders, creditors, this research can contribute one important consideration whenever they want to set their economic decision based on earning and inventory information.
2. This research is expected to give contribution to enrich the divining manual and enrich previous research on changing in inventory and firm valuation.
3. For the researcher, this research can change the writer perspective toward the role of changing in inventory in a company, so that the writer can finally realize that some aspect can motivate the changing in inventory choice of a company.

## 1.6 Definition of Term

Key words: Inventory, stock price, and earnings. The writer will elaborate more about these terms as follows:

Inventory is merchandise owned by the company in a certain period, for the intention of resale, directly or through process of production in normal operation cycle; includes work in process inventory or raw material inventory (Jusup, 1987).

Stock price is the price of the stock that recorded at the end of the transaction date (*closing price*). According to SAK, stock price is the market price on transaction date for company that listed on stock market, or fair value that determined by end of board of directors meeting for stock that does not have market value.

Earnings is the extend to which a company could consume product over time and be as well off at the end of the period as it was at the beginning, according to economic theory. Financial reporting uses that premise as a guide for income measurement. Capital invested at the beginning of a reporting period less net assets owned at the end of that time equals income from a financial reporting perspective.



## **CHAPTER II**

### **REVIEW OF RELATED LITERATURE**

Why are financial statements useful? Because they help investors and creditors to make a better decision. Financial statements are, at best, only an approximation of economic reality because of the selective reporting of economic event by the accounting system, compounded by alternative accounting methods and estimates. The tendency to delay accounting recognition of some transactions and valuation changes means that financial statements tend to lag behind reality as well.

#### **2.1. Need for Financial Statements Analysis**

Financial reporting system in developing countries, such as Indonesia, is not as complex as United States financial reporting system. Financial reporting in Indonesia and many changing markets have evolved substantially during the last ten years, with an increasing emphasis on providing information useful to both domestic and foreign creditors and equity investors (White, Sondhi and Fried, 1997).

White, Sondhi and Fried (1997) also argued that in an ideal world, the user of financial statements could focus only on the bottom lines of financial reporting: net income and stockholders' equity. If financial statements were comparable among companies (regardless of country), consistent over time, and always fully reflected the economic position of the firm the financial analysis would be simple.

## **2.2. Financial Statements Users**

According to Carmichael, Lilien, and Mellman (1996) there are two main financial statements users, which are internal and external user. Internal user is the management of the company, which is the one that run the business and prepares company's financial statements.

External users of financial statements encompass a wide range of interests but can be classified in three general groups. (1) Investors-both creditors and equity investors; (2) government-regulatory bodies, tax authorities, the executive and legislative branches; and (3) the general public and special interest groups-labor unions, consumer groups, and so on.

## **2.3. The Financial Reporting System**

The financial reporting system is not perfect. Economic events and accounting entries do not correspond precisely; they diverge across the dimensions of timing, recognition, and measurement. Financial analysis and investment decision are further complicated by variations in accounting treatment among countries in each of these dimensions (White, Sondhi and Fried, 1997).

Financial analysis process including research various kind of relevant formal and informal data is important for the analytical objective of understanding cash flows pattern more specifically. Several data are general for most financial analysis type, while other is given specific information.

According to Helfert (1993) the most general form of the basic published financial information of a company, except proprietorship company, is a series of

financial reporting under Certified Public Accountant guideline and under capital market commission surveillance, in Indonesia it is called Capital Market Supervisory Board (Bapepam). These series of report commonly consist of balance sheet for certain date, income statement for certain period, and statement of cash flows for the same period. Special reporting that explains about owners' equity is commonly presented.

Financial report is a basis for most analytical effort in a business. Thus, knowing the nature, scope and limitation of financial report is very important before using the data and observation for analysis estimation. Financial report, which is made based on Generally Accepted Accounting Principle, reflects the effect of decision made by management in past or present time, but it contains great ambiguity. Financial report is based on accounting principle which tries to consistently and naturally record business transaction by using historical cost principle in the time that transaction occur, and revenue-cost comparison principle through accrual and allocation which is important to be used as analyzing tool (Helfert, 1993).

According to White, Sondhi and Fried (1997) the accounting process or financial reporting system, which generates financial information for external user, encompasses four principal financial statements:

- Balance sheet (statement of financial position)
- Income statement (statement of earnings)
- Statement of cash flows
- Statement of stockholders' equity

These four financial statements, improved by footnotes and supplementary data, are interrelated. Collectively, they are intended to provide relevant, reliable, and timely information essential to making investment, credit, and similar decision, thus meeting the objectives of financial reporting.

### **2.3.1 General Principles and Measurement Rules**

Based on IAI-Ikatan Akuntan Indonesia (1994), financial reporting refers to financial report which consists of balance sheet, income statement, statement of cash flows and the description of financial reporting is to show the nature of company's development obviously. In every accounting period, company suggested to arrange comparative financial report, at least for the two years.

Based on Sutrisno (2000), financial report is as result of accounting process that covers two main reports, which are balance sheet and income statement, by the means of providing company's financial information to related parties as a consideration material in decision making process. Those related parties are management, shareholders, creditor, investor, and government.

According to Harnanto (1985) financial reporting is a final result of accounting process which held based on the concepts, principles, method and generally accepted procedures, which oriented in the objective of providing information to related parties. In limited accounting principles and accountant considerations, financial reporting is an effort to reflect, by accepted consistency, all transaction along the time, which results in net enhancement or reduces of economic benefit for the owners' equity.

Financial reporting is general in nature, and it is not made to fulfill certain parties' need. From basic concept of going concern assumption (Exposure Draft PAI, 1983) that the firm will continue in operating indefinitely, has follow consequences:

- (1) In determining periodical profit, financial reporting must be done by properly matched the interrelated revenues and costs in relatively short-term period (generally one year or less).

Each expenditure that affects in increasing the assets and it is useful for several years is allocated as cost or expense to be burdened to revenues, during it useful life.

- (2) Assets are recorded based on purchased price or historical price. In financial reporting (balance sheet), assets' purchased price which comes from several price levels is only totaled without any adjustment and ignoring that in fact the price is different in each purchase time.

Basic concept where all accounting process held, as stated in SAK-Standar Akuntansi Keuangan (1999), are:

1. Accrual Basis

In order to meet the 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 are received or paid) and they are recorded in the accounting records and reported in the financial statements in related period. Financial statements that are prepared on the accrual basis will inform users not only the past transaction involving the

payment and receipt of cash but also the obligation to pay cash in the future and also resources that represent cash receipt in the future. By the mean of that, financial statements provide kind of information of past transactions and other events that are most useful for the users in making the economic decision.

## **2. Going Concern**

Financial statements are usually prepared based on assumption that the company is going concern and keep on running the business indefinitely. Thus, company is assumed to have no intention or no willing to liquidate or to reduce materially the scale of its business operation. If such an intention or wants occurred, financial statements may have to be prepared with different basis and the basis that in used must be disclosed.

### **2.3.2 The Income Statement**

According to Helfert (1993) the income statement (statement of earnings) reflects management operating decision effect to company's performance and operating profit or loss of the shareholders for a certain period of time. Profit or loss calculated on the income statement will increase or decrease owner's equity on the balance sheet. Thus, income statement is an important additional for balance sheet in explaining main component that change owners' equity and in presenting information of basic performance estimation.

Income statement is also called as earning statement, profit and loss statement, and operating statement. It consists of revenue, cost of good sold for certain period, and expense needed by the company, including reduction of assets

value (depreciation and amortization) and tax. Revenue and expense involving several elements such as: cash or credit sales, goods or service purchase for resell or for manufacturing needs, salary payments, and others.

The combination of income statement and balance sheet will provide more basic information rather than balance sheet only (Helfert, 1993). However, because income statement consists of a period of time, while balance sheet shows final condition in a certain period, then it will be useful to have the beginning and ending of the balance sheet from the period that are ranged by income statement.

### **2.3.3 Inventory**

How a company classifies inventory depends on whether the firm is a merchandiser or a manufacturer. In a merchandising enterprise, inventory consists of many different items. For example, in a grocery store, canned goods, dairy products and meats, and produce are just a few of inventory items on hand. These items have two common characteristics: (1) they are owned by the company, and (2) they are in a form ready for sale to customers in the ordinary course of business. Thus, only one inventory classification, merchandise inventory, is needed to describe the many different items that make up the total inventory.

In a manufacturing enterprise, inventory is also owned by the company, but some goods may not yet be ready for sale. As a result, inventory is usually classified into three categories: finished good, work in process and raw material. For example, General Motor classifies automobiles completed and ready for sale as finished goods. The automobiles on the assembly line in various stages of

production are classified as work in process. The steel, glass, upholstery and other component that are on hand waiting to be used in the production of automobiles are identified as raw materials.

Inventory is one of the main elements of working capital, which is always cycling and changing overtime (Riyanto, 1989). The matter of how big the firm should invest their money on inventory, have a direct effect toward company's profitability. The argumentation is that, if investing in inventory were far exceeding the company's needs, the company will have a more liability on paying more interest, increasing inventory cost, broaden the possibility of damage of goods, decreasing in quality, obsolete, that in the end will pressing company's profitability.

On the other way around, if investing in inventory were too small, the companies will face the possibility of lack material that in the end will also pressing the company's profitability, because the company cannot produce anything without raw material.

According to Riyanto (1989), the amount of inventory invested depends on several factors:

1. Volume needed to protect firm's operation from the possibility of lack of raw material which in the end will burden the production process.
2. Planned volume of production, which also has a relation ship with planned sales volume.
3. The amount of raw material to get minimal purchasing cost
4. Estimation of the volatility of raw material price in the near future.



5. Government regulation
6. The risk and Inventory cost

The control of the amount invested in inventory is an important aspect of managing a business (Helmkamp, 1987)

#### **2.3.4 Valuation Methods**

Analysts use current share price to begin assessing the public's perception of value. They must relate a stock's market price to another measure to make the analysis meaningful. It is, in a certain respect, similar to the approach used to interpret earnings. Analysts have a better understanding of the meaning of income disclosures when they are reported on per share basis, for example, earnings per share which relates earnings to outstanding stock. However, analysts can compare stock prices with one or more measures.

##### **2.3.4.1 Discounted cash flow analysis (DCF)**

It is well accepted among financial theorists that the value of the firm should be equal to the present value of future dividends. Thus, all valuation approaches should ultimately be consistent with this principle. DCF analysis is the most popular way of operationalizing this principle. It focuses on discounting cash flows from operations after investment in working capital, less capital expenditure.

According to Palepu, Bernard and Healy (1996), valuation based on DCF analysis can be structured in either two ways:

- Forecast cash flows available to equity holders, and then discount the expected cash flows at the cost of equity capital. The result is an estimated value of equity.
- Forecast cash flows available to all providers of capital (debt and equity) and then discount the expected cash flows at the weighted average cost of (debt and equity) capital. Under this approach, one arrives at an estimated value of the firm, which must be reduced by the value of debt to arrive at an equity value.

Discounted cash flow analysis forecasts cash flows. Its seeming appeal is that it uses limited accounting: cash flows are said to be “real” and not affected by accounting rules and estimates. And DCF analysis is easily understood because investors think of cash as a payoff, not an accounting number. “Cash is king” is the cry, so forecast cash. The implication is that cash flows forecasts are better quality than earnings forecasts for capturing value. But we saw earlier in the book that free cash flow is doubtful as a value-added measure. It is the “dividend” from the operations, not the value created by the operations.

Discounted cash flow analysis always gives the same valuation as residual earnings techniques if the forecast horizon is enough. Again, the issue is a question of working with reasonable horizons. But there are also circumstances where the DCF valuation is the same as the residual earnings valuation with the same forecast horizon.

#### 2.3.4.2 Price to earnings approach

The price earnings ratio (P-E ratio) reflects investor's expectation about the future performance of a company. A relatively high ratio means the market expect future earnings to increase, but a low P-E ratio means investor project a decrease in earnings. P-E ratios vary among industries and are sensitive to economic conditions. Comparisons are only valid within an industry and at a particular point in time. The ratio is computed as follows:

$$\text{Price earnings ratio} = \frac{\text{Market price per share of stock}}{\text{earnings per share}}$$

All-inclusive income disclosures often report nonrecurring and unusual revenues and expenses. These items are unsustainable and influence earnings quality. The analysts could substitute alternative earnings per share (EPS) number (e.g., EPS before extraordinary items) for net earnings per share if he or she believes the alternative better measure the relationship between earnings and price.

#### 2.3.4.3 Price to cash flows approach

Alternative reporting methods, economic assumptions and account measurement are less likely to affect cash flows than income. Income statements that report unsustainable economic activities also complicate corporate valuation. If an analyst is unsettled about earnings management or quality issues, he or she can use the price to cash flow ratio to supplement the P-E ratio. The price to cash flow ratio is computed as follows

$$\frac{\text{Market price per share of stock}}{\text{cash flow per share}}$$

Price to cash flow = operating cash flows per share

Cash flow produced by operating activities represents the ongoing business activities. Therefore, it becomes a better point of comparison to market price than the net cash flow to market price.

#### 2.3.4.4 Price to equity approach

Both the price and cash flow to earnings ratio compare an amount realized overtime (income or operating cash flow) against the market's perception of value at a point in time (share price on a specific date). The price to book value ratio compares investors' assessment of a company's wealth at a particular moment with the firm's reported measure of corporate well being at the same instant. This ratio is computed as follows:

$$\text{Price to book value ratio} = \frac{\text{Market price per share of stock}}{\text{book value per share of stock}}$$

This ratio compares the financial reporting system's interpretation of corporate wealth (net assets at book value) with investors' perception of market value or capitalization. Market capitalization, or the total value of all of an entity's outstanding shares at a point in time, equals the value investors place on a company. If the price to book value measure yields a ratio slightly in excess of one, then the reported costs of net assets (primarily on historical cost basis) approximates the market's perception of the company's earnings power, according to the investors. If, however, market price substantially exceeds s book value, then the market thinks historical cost disclosures are irrelevant for

projecting future rates of returns. A book value that exceeds market price (a ratio of less than one) means the market considers firm assets as impaired, although unrecognized by the financial reporting system. Investors, by pricing a company's stock low, are stating that they think the discounted value of expected cash flows is less than the balance sheet report of net assets.

### **2.3.5 Inventory Signals**

Most of accounting research used the fundamental perspective to identify the fundamental variables. This research initially used fundamental signals driven approach by Lev and Thiagarajan (1993). One of the fundamental signals is Inventory signal, an increase in inventory relatives to sales is generally interpreted by financial analyst as a negative signal for two reasons. First, such an occurrence indicates a greater chance that inventory will become obsolete. Second, holding costs is an increasing function of the amount of inventory on hand. On the other hand, a higher level of inventory might be viewed as a positive signal, since it reduces the chances of experiencing an inventory shortage and could signal that manager expect an increase in future sales.

## **2.4 Previous Study**

Previous research is conducted by Chugh and Meador (1984), study estimated earning prediction model using pooled data set. The result of this study provides evidence for predictive link between non earning annual report number and future earning change and a valuation between predicted future earning

change and stock return. These findings suggest that a firm's non earnings number contain information concerning direction of its next year earnings change that is not reflected in current earnings. Stock returns respond to the prediction of future earnings change over and beyond its response to current earnings. These results imply that the disclosure of non earnings annual report influences investor revision on future earnings expectation.

A study conducted by Lev and Thiagarajan (1993) represents a significant contribution on fundamental approach. This study provides fundamental adds approximately 70% to the explanatory power of the traditional earnings model. The fundamental signal can be viewed as value relevant and explain why analysts typically search for information other than current earnings to properly value a firm and assess the quality of earnings. This study also finds the connection between the fundamental analysis and earnings persistence literature. Lev and Thiagarajan (1993) have searched and generated 12 signals for fundamental analysis. One of the signals is increase in inventory; measured by percentage change in inventory value minus percentage change in sales (referred to by Jiambalvo, Noreen and Shelvin (1997) as PCIS) their result shows that increase in inventory is negatively associated with 12 months excess stock returns, i.e., a result that is consistent with that implied in Bernard and Noel (1991).

Jiambalvo, Noreen and Shelvin (1997) have studied the association between cumulative abnormal return (CAR) over a 12 months windows with the increase in inventory, measured by the change in percentage of production added

to inventory (CPAI). Their result shows that CPAI is positively associated with CAR.

Research done by Sari Atmini (2002) tells about association of life cycle and incremental value-relevance of earning information and cash flows, gave proof that life cycle of the company affecting the incremental value relevance of earning information and cash flows. Earning and cash flows have value relevance on growth stage meanwhile cash flows of investment have value relevance on mature stage. In this research, researcher failed to have sample data of company in the start up stage and decline stage.

## **2.5 Hypothesis Formulation**

### **2.5.1 Earning**

The relationship between earnings and stock price refers to two sides, theoretically and empirically. Theoretically, the relationship is reflected on stock valuation model in fundamental analysis. Basically, stock valuation model in fundamental analysis is classified in to two models, which are discounted cash flows model and price earning ratio model.

According to discounted cash flow model, stock price is the present value of all future cash flow that will be received by the investors. Cash flow that will be received consists of dividend payment and capital gain. The amount of the dividend payment is based on the earning of the company. Earnings indirectly influence capital gain, because the change (increase) of stock price is influenced by performance and prospect of the company in producing earnings. This

valuation model is based on the assumption that the price of a security is affected by the strength of demand and supply of the related stock prices. The strength itself is the reflection of investor expectation toward stock performance in the future. Meanwhile, stock performance is related to its ability in giving the cash inflow to the investor in term of dividend or capital gain. Because of this fact, theoretically, stock price is the total present value of all cash flow received by investor in the holding period based on the rate of return.

Discounted cash flow model is an ideal stock valuation model to determine stock price, but it is rare to use because it is rather difficult to calculate (Gruber, 1995: 462). This situation happened because it is not easy to determine the informations required. First is the information about the estimation of cash flows received by investor in holding period. Second is the information about the estimation of required rate of return.

Cash flow received by the investor consists of dividend and capital gain. The amount of the dividend distributed depends on earning produced by the company. Theoretically, company distributes larger dividend only when the company is able to produce larger earning. So, the amount of dividend to be distributed is influenced by the company profitability. On the other side, capital gain is influenced by the change (increase) of stock price and stock price is influenced by performance and prospect of the company that issued the stock. It means that to be able to estimate the cash flow received, investor has to be able to identify factors that influence profitability and the prospect of the company.



Based on the explanation, the hypotheses have been established as follow:

**H01 = Earning positively influence stock price.**

### **2.5.2 Inventory**

According to Baumol (1952), to identify the need of inventory in a company is similar to the need of cash. If a company owned too large amount of inventory, the company will loose the chance to invest the capital on other investment that more profitable. But if the inventory is too low, company will experience problem in its liquidity. If a company buys a lot of inventory that sits on shelves for months before being used, then it can have cash outflows months before the corresponding expenses. When inventory grows, then the gap between cash paid out and expenses incurred during a given period also grows and this condition is bad for cash flows. Money tied up in inventory could have been used to earn interest or, if the company is actually borrowing money, the company must pay interest to fund that inventory. This is why companies keep inventory low to improve cash flow.

Inventory is one of the main elements of working capital, which is always cycling and changing overtime (Riyanto, 1989). The matter of how big the firm should invest their money on inventory has a direct effect toward company's profitability. The argumentation is that, if investing in inventory were far exceeding the company's needs, the company will have a more liability on paying more interest, increasing inventory cost, broaden the possibility of damage of goods, decreasing in quality, obsolete, that in the end will pressing company's

profitability. On the other way around, if investing in inventory were too small, the companies will face the possibility of lack material that in the end will also pressing the company's profitability, because the company cannot produce anything without raw material.

Based on the explanation, the hypotheses have been established as follow:

**H2 = Inventory provides significant incremental influence on stock price.**



## **CHAPTER III**

### **RESEARCH METHOD**

#### **3.1 Source of Data**

In this research, there are two firm valuation determinants that will be used. They are earnings and change in percentage added to inventory. The data is derived from Indonesian capital market directory and Jakarta stock exchange.

#### **3.2 Population and Sample**

Population is a group or a collection of data that becomes a target of the research regarding to the occurrence of a certain problems. The population of this research is 68 companies on average for each year from manufacturing sector of industry that listed at Jakarta Stock Exchange (JSX) in the period of 1997 to 2002. The total of 408 company's data are taken for six years of observation. The companies were chosen based on the availability and the completeness of data. Then 317 companies are selected for six years observation because they can fulfill the requirement of the data in this research.

Sample is a partial of population that becomes the object of the research. The method that used in this research is purposive sampling method. In this method, the sample is found based on the core variable representing this research. Purposive sampling method is a technique of taking the sample based on certain considerations, namely considerations on the basis of the purpose of the research (Sugiono, 1999). This research is emphasized on the relationship between

financial statement analysis of Inventory signal and earning toward stock price of a classified manufacturing companies listed at Jakarta Stock Exchange (JSX)

The companies that are chosen as the sample of this research are 68 companies per year observation that listed at Jakarta Stock Exchange in the period of 1997-2002.

The companies that are chosen as a sample are the companies that have the source of data as follows:

- a. Companies that listed and traded actively from 1997 to 2002 on Jakarta Stock Exchange (JSX).
- b. The companies are manufacturing companies.
- c. The averages of the beginning and ending balance of operating asset, net operating assets and common equity are positive (as balance sheet variables are measured in the analysis using annual averages).

### 3.3 Data Collection

The research is conducted by using all relevant data which collected from various reliable sources, such as website [www.jsx.co.id](http://www.jsx.co.id), [www.bes.co.id](http://www.bes.co.id), Indonesian Capital Market Directory 2003 and each company's website if available. The data was also taken from JSX database at Pojok BEJ FE UII Yogyakarta. Data that are chosen are as follows: earning per share, stock price, inventory method, cost of good sold, gross profit, and expenses. Most of these data derived from a certain calculation.

Data collection and the sources of data are taken from the company listed at JSX with consideration that JSX is the largest stock market in Indonesia, and also accessible in gathering the data and the completeness of the data.

### **3.4. Research Variables**

The researcher defines the dependent and independent variables that will be used in the regression analysis. Dependent variable is close price and independent variable is earnings and inventory. There is dummy variable to control the variance of the data. The detailed description of dependent and independent variables is described below.

#### **3.4.1 Dependent variable**

In this study stock price is the dependent variable. Stock price is the price of the stock that recorded at the end of the transaction date (*closing price*). According to SAK, stock price is the market price on transaction date for company that listed on stock market, or fair value that determined by end of board of directors meeting for stock that did not have market value.

#### **3.4.2 Independent variable**

##### **3.4.2.1 Earnings**

PSAK 25 stated that income statement is a main report to report the performance of a company for a certain period. In FASB *Statement of Financial Accounting Concept* No. 1 stated that the main target of the financial statement is the information of the achievement of the company that presented through earning

measurement and its component. Information that stated on income statement especially about profitability is needed by users in decision making. Income statement represents the financial information that useful for evaluating performance or progress made by the company, evaluating the efficiency of the management in running the business, evaluating the profitability of the capital that invested by the investor, and making an estimation of future earning.

#### **3.4.2.2 Inventory**

Inventory is merchandise owned by the company in a certain period, for the intention of resale, directly or through process of production in normal operation cycle; includes work in process inventory or raw material inventory (Jusup, 1987).

### **3.5. Research Procedures**

In order to answer the research problems, it is imperative to conduct research procedures. The procedures were arranged as follows.

- Identifying all of the companies that become the proper sample in this research
- Listing all of manufacturing companies all the Jakarta Stock exchange that listed in period of 1997-2002.
- Checking all of the data that will be used as variable in this research in all reliable sources and also at JSX database at the Pojok BEJ of FE UII Yogyakarta.

- Conducting calculation needed in this research
- Conducting statistical test to find out whether there was a significant variation on the relationship among variables.
- Analyzing and interpreting the data
- Deriving the analysis and other findings

### 3.6. Technique and Data Analyses

Statistical hypothesis test is done by two analyses, which are:

#### 1. Co-relation analyses

It is used to calculate the value of correlation ( $R^2$ ). This analysis discusses about the strength of each variable that stated in regression equation.

#### 2. Regression Co-efficient hypothesis

The analysis method that used to prove the hypothesis is multi linear regression. Regression analysis purpose is to investigate the relationship between dependent variable with one or more independent variable.

Steps required to analyst the data are:

##### a. Levels analyses

The levels approach can be represented by the following equation:

$$P_t = \alpha_2 + \beta_2 E_t + \varepsilon_t \quad (3-1)$$

Where  $P_t$  is close price per share at financial statement publication date on mass media that is nationally distributed for year  $t$ , and  $E_t$  is basic earnings per share excluding extraordinary items for year  $t$ .

b. Changes analyses

The changes approach can be represented by the following equation:

$$(P_t - P_{t-1}) = \alpha_3 + \beta_3(E_t - E_{t-1}) + \varepsilon_t \quad (3-2)$$

Both the dependent and the independent variables are normalized by beginning common equity per share.  $\beta_3$  is expected to be positive and significant, i.e., earnings change is positively and significantly associated with stock price change.

c. Combined and pooled regressions

The change approach can be represented by the following equation:

$$P_t = \alpha_4 + \beta_4 E_t + \beta_5 (D \times E_t) + \varepsilon_t \quad (3-3)$$

Where  $D$  is an indicator variable; it equals one for Group 1, and zero for Group 0.

Both the dependent and the independent variable are normalized by beginning common equity per share. The rationale for using the indicator variable is explained in Neter, Wasserman and Kutner (1985) as follows, for Group 1 firms ( $D=1$ ),  $E$  is the expectation operator and for Group 0 firms ( $D=0$ ).

The change approach, the regression equation is as follows:

$$(P_t - P_{t-1}) = \alpha_5 + \beta_6 (E_t - E_{t-1}) + \beta_7 (D \times (E_t - E_{t-1})) + \varepsilon_t \quad (3-4)$$

Both the dependent variable and the independent variables are normalized by beginning common equity per share.  $\beta_7$  should be



positive and statistically significant if Group 1 firms have a higher price-earnings multiple than Group 0 firms.

d. Analyses using inventory valuation method as a control variable

Following are the levels and the changes regressions by incorporating the second variable:-

$$P_t = \alpha_6 + \beta_8 E_t + \beta_9 InvM1 + \beta_{10} InvM2 + \varepsilon_t \quad (3-5)$$

$$(P_t - P_{t-1}) = \alpha_7 + \beta_{11} (E_t - E_{t-1}) + \beta_{12} InvM1 + \beta_{13} InvM2 + \varepsilon_t \quad (3-6)$$

Where InvM1 equals 1 if inventory method is FIFO and 0 otherwise, InvM2 equals 1 if inventory method is average cost and 0 otherwise.<sup>14</sup>

An indicator variable can also be included in the levels and the changes regressions:

$$P_t = \alpha_8 + \beta_{14} E_t + \beta_{15} InvM1 + \beta_{16} InvM2 + \beta_{17} (D \times E_t) + \varepsilon_t \quad (3-7)$$

$$(P_t - P_{t-1}) = \alpha_9 + \beta_{18} (E_t - E_{t-1}) + \beta_{19} InvM1 + \beta_{20} InvM2 + \beta_{21} (D \times (E_t - E_{t-1})) + \varepsilon_t \quad (3-8)$$

Price, price change, earnings, and earnings change are again normalized by beginning common equity per share.

e. Analyses by decomposing earnings

Earnings per share before extraordinary items are decomposed as following in this study:

$$E = GP - SA - Other \quad (3-9)$$

Where  $E$  is earnings per share before extraordinary,  $GP$  is profit per share,  $SA$  is selling and administrative expense per share, and other is other expense per share (i.e.,  $Other = GP - SA - E$ ).

$$P_t = \alpha_{10} + \beta_{22}GP_t + \beta_{23}SA_t + \beta_{24}Other_t + \varepsilon_t \quad (3-10)$$

$$P_t = \alpha_{11} + \beta_{25}GP_t + \beta_{26}SA_t + \beta_{27}Other_t + \beta_{28}(D \times GP_t) + \beta_{29}(D \times SA_t) + \beta_{30}(D \times Other_t) + \varepsilon_t \quad (3-11)$$

Changes analyses are also performed for each group, and for the combined sample using indicator variables:

$$(P_t - P_{t-1}) = \alpha_{12} + \beta_{31}(GP_t - GP_{t-1}) + \beta_{32}(SA_t - SA_{t-1}) + \beta_{33}(Other_t - Other_{t-1}) + \varepsilon_t \quad (3-12)$$

$$(P_t - P_{t-1}) = \alpha_{13} + \beta_{34}(GP_t - GP_{t-1}) + \beta_{35}(SA_t - SA_{t-1}) + \beta_{36}(Other_t - Other_{t-1}) + \beta_{37}(D \times (GP_t - GP_{t-1})) + \beta_{38} \times (D \times (SA_t - SA_{t-1})) + \beta_{39}(D \times (Other_t - Other_{t-1})) + \varepsilon_t \quad (3-13)$$

### 3.7. Formulated Hypothesis and Hypothesis Testing

#### 3.7.1. Formulated Hypothesis

Based on the problem statement and review of the related literature, the alternative hypothesis and the null hypothesis that are proposed in this research are:

1. Ho1 = Earning not positively influence stock price  
Ha2 = Earning is positively influence stock price
2. Ho2 = Inventory does not provide significantly incremental  
Influence on stock price

Ha2 = Inventory provides significant incremental Influence on stock price

### 3.7.2 Hypothesis Testing

The first hypothesis testing steps are as follows:

- Pooled data over firm and over years, 1997-2002 for manufacturing JSX firms.
- Calculate all variable needed which are close price as dependent variables and earning as independent variables.
- Make Pearson correlation analysis using 95% confidence interval or  $\alpha = 0,05$

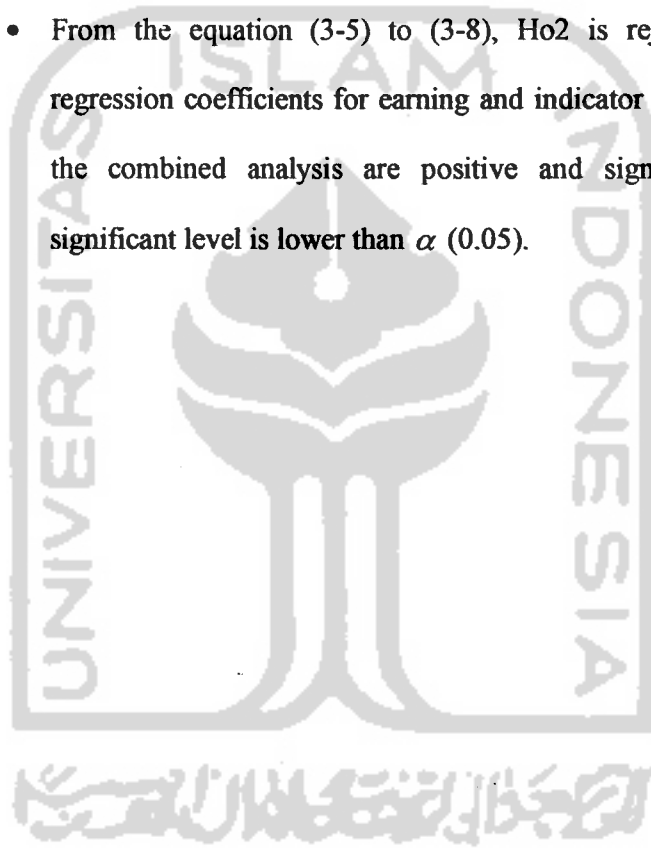
The second hypothesis steps are as follows

- Pooled data over firm and over years, 1997-2002 for manufacturing JSX firms.
- Calculate all variable needed which are change in close price as dependent variables and change in earning as independent variables
- Make Pearson correlation analysis using 95% confidence interval or  $\alpha = 0,05$

The data in this research will be processed by using SPSS version 11.0 computer software. The first hypothesis was tested by analyzing the close price to earning variables. For the second hypothesis, it was

tested by analyzing the coefficient of close price and inventory variables. The determinations of accepting and rejecting  $H_0$  are:

- From the equation (3-10) to (3-13),  $H_{01}$  is rejected when the regression coefficients for the indicator variable term for the combined analysis are positive and significant, and the significant level is lower than  $\alpha$  (0.05).
- From the equation (3-5) to (3-8),  $H_{02}$  is rejected when the regression coefficients for earning and indicator variable term for the combined analysis are positive and significant, and the significant level is lower than  $\alpha$  (0.05).



## **CHAPTER IV**

### **RESEARCH FINDINGS, DISCUSSION, AND IMPLICATIONS**

This chapter explains: the early process of data gathering, the measurement of variable used, data analysis, and data interpretation. Data interpretation mentioned before is taken from hypothesis testing which contains of research finding and its implication.

#### **4.1 Research Preparation**

This research was started by studying literatures, journals, and websites in order to get the relevant topic to conduct a research. Data that were needed in this research was gathered from the Indonesian Capital Market Directory (ICMD) 2003, Capital Market Data Base of Pojok Bursa Efek Jakarta at Faculty of Economics, Islamic University of Indonesia, and other relevant sources based on data criterion:

- a. As the sample of this research, 317 companies-years are selected and sorted based on the specific requirement. Those companies should fulfill research requirement. This final number of sample taken from the total of 408 manufacturing companies-years listed at Jakarta Stock Exchange (JSX) in 1997-2002. The average manufacturing company listed in JSX each year is 68 companies. Each year, companies that cannot fulfill data requirements were excluded from sample. Thus, for six years observation, there were 91 companies-years which are excluded from research sample.

- b. Data that were used in this research include the information of financial statement from 317 companies-years in the active day at JSX in 1997-2002. Data include: inventory method, Cost of Good Sold, close price, inventory and other data that can be seen in appendix 1.
- c. To measure research variables needed in this research; data obtained were processed by making several calculations using Microsoft Excel computer software. Variables that are used in this research were ten variables plus two dummy variables for all samples of those 317 companies-years data, not on the average number of data.

#### **4.2 Research Process**

Data used in this research are quantitative data that are obtained from Indonesian Capital Market Directory (ICMD) 1997-2003, Capital Market Data Base of JSX corner Islamic University of Indonesia, and also from other relevant sources such as JSX website and several companies' websites. Companies that become the object of this research are 317 companies-years manufacturing companies listed in Jakarta Stock Exchange in 1997-2002. Those 317 companies-years data are selected after fulfilling the data requirements of this research. The measurement of variables needed is done as the appropriate data gathered completely.

For measuring the variable, hypothesis testing is analyzed by statistical testing method. Microsoft Excel was used to calculate data. Then it was processed by using SPSS 11.0 for the statistical calculation.

### 4.3 Research Findings and Discussions

There are 317 data samples which are consistently listed in JSX from 1997-2002. In each analysis, several companies-years data were excluded based on Cook's distance criteria. Rule of thumbs stated identification of observations with cook's distance  $\geq 4/(n - k - 1)$ , where k is the number of independent variable and n is number of observation (Hair, J.F et al. 1998: 225).

#### 4.3.1 Level analysis

Regression are performed for each of the two samples groups. The result of earnings levels model by SPSS is presented below:

Table 4.1 (Equation 3.1)  
Earnings Levels Regressions

Group = 1				Group = 0			
Size	Const.	Earn	Adj.R <sup>2</sup>	Size	Const.	Earn	Adj.R <sup>2</sup>
54	1,151** (8,835)	0,215 (1,474)	0,022	262	1,206** (15,215)	0,113** (4,016)	0,055

Group= 1 for firms with a significant association ( $\alpha=0.10$ ) between percentage change in cost of good sold and lag one percentage of production added to inventory.

Group= 0 for other firms.

The dependent variable is stock price pershare normalized by beginning common equity pershare.

Earn is earning pershare normalized by beginning common equity pershare.

t-values are in the parentheses

\*\*Significant at  $\alpha = 0,01$  level

Table 4.1 shows that the earnings level regression coefficient is positive and statically significant on group 0 but not significant on group 1. The explanatory power, represented by the adjusted R<sup>2</sup> value, of earnings level for group 0 is higher than that for group 1 (0,055 vs 0,022). This condition means that there are sufficient evidence to reject Ho1 for level analysis.

Coefficient correlation shows degree of influence among independent variables and dependent variables. Determination coefficient (R<sup>2</sup>) for group 1

0,022 means that variation in close price can be explained by using variation in earning 2.2 % and remaining 97,8 % are unexplained due to other factors. On group 0 ( $R^2$ ) is 0,055 or variation in close price can be explained by using variation in earning 5.5 % and the remaining 95,5 % are unexplained due to other factors.

#### 4.3.2 Changes analyses

Regression are performed on each of the two sample groups by pooling data from 1998-2002. Result reported on table presented below:

Tabel 4.2 (Equation 3.2)  
Earnings Changes Regressions (pooled sample)

Group = 1				Group = 0			
Size	Const.	EarnC	Adj. $R^2$	Size	Const.	EarnC	Adj. $R^2$
53	0,100 (0,811)	0,531** (3,203)	0,151	261	0,080 (1,383)	0,155** (8,708)	0,223

Group= 1 for firms with a significant association ( $\alpha=0.10$ ) between percentage change in cost of good sold and lag one percentage of production added to inventory.

Group= 0 for other firms.

The dependent variable is stock price pershare normalized by beginning common equity pershare. Earn is earning pershare normalized by beginning common equity pershare.

t-values are in the parentheses

\*\*Significant at  $\alpha = 0,01$  level

Table 4.2 shows that regression coefficient for earnings change is positive and it is statistically significant on both sample groups, this condition means that there are sufficient evidence to reject  $H_0$  for the change analysis. The explanatory power, represented by adjusted  $R^2$ , of earning change for group 0 is higher than that for group 1 (0,223 vs 0,151).

Coefficient correlation shows the degree of influence among independent variables and dependent variables. Determination coefficient ( $R^2$ ) for group 1



0.151 means that variation in close price can be explained by using variation in earning change 15.1 % and remaining 84.9 % are unexplained due to other factors. On group 0 ( $R^2$ ) is 0.223 or variation in close price can be explained by using variation in earning change 22.3 % and the remaining 77.7 % are unexplained due to other factors.

#### 4.3.3 Combined and pooled regressions

Two combined and pooled regression are performed by including indicator as a *dummy variable*, it equals on for group 1 and zero for group 0. The interaction of indicator variable with earning reflects the effect of earning toward stock price. Positive means earning effect toward stock price on group 1 is higher than group 0 and contrary, negative means earning effect toward stock price on group 1 lower than group 0. the result is presented on table below:

Tabel 4.3 (Equation 3.3 and 3.4)  
Regressions with Combined and Pooled Samples

Size	Earning Level			Earning Change		Adj.R <sup>2</sup>
	Const.	Earn	DxEarn	EarnC	DxEarnC	
317	1,191** (17,164)	0,113** (4,173)	-0,050 (-0,321)			0,047
317	0,099 (1,565)			0,204** (9,727)	-0,193* (-2,041)	0,227

D= 1 for firms with a significant association ( $\alpha=0.10$ ) between percentage change in cost of good sold and lag one percentage of production added to inventory.

D= 0 for other firms.

The dependent variable is stock price pershare normalized by beginning common equity pershare.

Earn is earning pershare normalized by beginning common equity pershare.

EarnC is change in earnings pershare normalized by beginning common equity pershare

t-values are in the parentheses

\*Significant at  $\alpha = 0,05$  level, \*\*Significant at  $\alpha = 0,01$  level

Table 4.3 shows that earnings level dan earnings change coefficient regression are positive and it is statistically significant. Thus, earnings level is

positive and it is significant toward price level and earnings change is positive and it is significant toward price change. This condition shows that there are sufficient evidence to reject  $H_0$  for combined analysis. The coefficient regression for earning level and indicator variable term (DxEarn) shows negative result and it is not statistically significant at  $\alpha = 0,01$  or  $\alpha = 0,05$ . This fact means that the influence of earning level toward price level is the same or does not have any difference in both sample groups (group 1 and group 0). The coefficient regression for earning change and indicator variable term (DxEarnC) shows negative result and it is significant at  $\alpha = 0,05$ . This fact shows that the influence of earning change toward price change is higher in group 0 than that in group 1.

Coefficient correlation shows the degree of influence among independent variables and dependent variables. Coefficient determination ( $R^2$ ) for earning level is 0,047, which means that stock price can be explained by using earning level 4,7 % the remaining 95,3 % explained by others. In earnings change ( $R^2$ ) is 0,227 or stock price change is explained by using earning change 22,7 % and the remaining 87,3 % explained by other.

#### **4.3.4 Analyses using inventory valuation method as a control variable**

Group 1 has no variation on inventory method which makes it impossible to conduct analysis on group 1 (it is impossible to perform regression analysis of equation 3-5 and 3-6). Because of this fact, regression analysis perform only for data combined. The result is presented below:

Tabel 4.4 (Equation 3.7)  
Earnings Levels Regressions with Inventory Valuation .Method

Size	Const.	Earn	InvM1	InvM2	DxEarn	Adj.R <sup>2</sup>
Combined						
316	0,789 (1,578)	0,101** (4,613)	0,274 (0,535)	0,397 (0,786)	-0,038 (-0,296)	0,058

Group= 1 for firms with a significant association ( $\alpha=0.10$ ) between percentage change in cost of good sold and lag one percentage of production added to inventory.

Group= 0 for other firms.

D= 1 for firms with a significant association ( $\alpha=0.10$ ) between percentage change in cost of good sold and lag one percentage of production added to inventory.

D= 0 for other firms.

The dependent variable is stock price pershare normalized by beginning common equity pershare.

Earn is earning pershare normalized by beginning common equity pershare.

InvM1 is FIFO. InvM2 is Average cost

t-values are in the parentheses

\*\*Significant at  $\alpha = 0,01$  level

Table 4.4 shows that in a combined level regression, the coefficient regression of earnings level is positive and it is significant. This condition is consistent with that on analysis without using inventory valuation method as a variable control, which means that earning has positive and it is significant influence toward price level. The coefficient regression of earnings level and indicator variable term (DxEarn) is negative and not statistically significant at  $\alpha = 0,01$  or  $\alpha = 0,05$ . This condition means that by controlling the effect of inventory valuation, the influence earning level toward price level is the same between both sample groups. The coefficient regression of inventory method used is positive but it is not significant. This condition means that there are not sufficient evidence to reject Ho2.

And in change regression, regression is also performed only for data combined. The result of earnings change regressions with inventory valuation method as an indicator variable by SPSS is presented below:

Tabel 4.5 (Equation 3.8)  
Earnings Changes Regressions with Inventory Valuation Method

Size	Const.	EarnC	InvM1	InvM2	DxEarnC	Adj.R <sup>2</sup>
Combined						
316	-0,218 (-0,468)	0,154** (8,529)	0,260 (0,544)	0,325 (0,691)	-0,143 (-1,804)	0,178

Group= 1 for firms with a significant association ( $\alpha=0.10$ ) between percentage change in cost of good sold and lag one percentage of production added to inventory.

Group= 0 for other firms.

D= 1 for firms with a significant association ( $\alpha=0.10$ ) between percentage change in cost of good sold and lag one percentage of production added to inventory.

D= 0 for other firms.

The dependent variable is stock price pershare normalized by beginning common equity pershare.

Earn is earning pershare normalized by beginning common equity pershare.

InvM1 is FIFO. InvM2 is Average

t-values are in the parentheses

\*\*Significant at  $\alpha = 0,01$  level

Table 4.5 shows that in combined change regression, the coefficient regression of earnings change is positive and it is significant. This condition is consistent with that on analysis without using inventory valuation method as a variable control, which means that earning has positive and significant influence toward price change. The coefficient regression of earnings change and indicator variable (DxEarn) is negative and not statistically significant at  $\alpha = 0,01$  or  $\alpha = 0,05$ . This fact means by controlling the inventory valuation, the influence of earning change toward price change is the same or does not have any difference in both of sample groups. The coefficient regression of inventory method used is positive but it is not significant. This condition means that there are not sufficient evidence to reject  $H_0$ .

#### 4.3.5 Analyses by Decomposing Earnings

Additional analysis is also performed by decomposing earnings into their components that consist of GP, SA dan Other. Analysis performed to each of both

sample groups and combined and pooled both sample groups by using indicator variable as a *dummy variable*, where it equals one for group 1 and zero for group 0. The interaction of indicator variable toward each earning component reflect the different effect of each earning component (GP, SA, dan Other) toward price. Positive value means the effect of each earning component (GP, SA, dan Other) toward price on group 1 is higher compare to that on group 0 and contrary, negative value means effect of each earning components (GP, SA, dan Other) toward price on group 1 is lower than that on group 0. The result of levels regressions with earnings components using SPSS presented below:

Tabel 4.6 (Equation 3-10 and 3-11)  
Levels Regressions with Earnings Components

Size	Const.	GP	SA	Other	DxGP	DxSA	DxOther	Adj.R <sup>2</sup>
Group = 1								
53	0,941** (6,802)	0,474** (2,593)	-0,811** (-2,501)	0,072 (0,772)	-	-	-	0,105
Group = 0								
260	0,958** (13,828)	0,165** (3,807)	-0,043 (-0,579)	-0,074** (-3,887)	-	-	-	0,177
Combined								
314	0,947** (15,232)	0,166** (3,957)	-0,042 (-0,579)	-0,073** (-3,993)	0,535** (3,398)	1,077** (-3,130)	0,088 (0,814)	0,207

Group= 1 for firms with a significant association ( $\alpha=0.10$ ) between percentage change in cost of good sold and lag one percentage of production added to inventory.

Group= 0 for other firms.

D= 1 for firms with a significant association ( $\alpha=0.10$ ) between percentage change in cost of good sold and lag one percentage of production added to inventory.

D= 0 for other firms.

The dependent variable is stock price pershare normalized by beginning common equity pershare.

GP is gross profit pershare normalized by beginning common equity pershare.

SA is selling and administrative expense pershare normalized by beginning common equity pershare

Other is Other expense pershare normalized by beginning common equity pershare.

t-values are in the parentheses

\*\*Significant at  $\alpha = 0,01$  level

Based on the result of levels regression on tabel 4.6, it can be seen that, coefficient regression of Gross Profit is positive and it is statistically significant on both sample groups which means that gross profit has positive and significant

influence toward stock price on both sample groups. The coefficient regression of selling and administrative expense is negative and it is significant (SA) in group 1 but it is not significant on group 0, which means selling and administrative expense (SA) has negative and significant influence toward stock price on group 1 but has negative and not significant influence on group 0. Coefficient Regression of other expense is negative and it is not statistically significant in group 1 but negative and significant on group 0 which means other expense has negative and not significant influence toward stock price on group 1 but has negative and significant influence toward group 0.

In the combined level regression analysis, the coefficient regression of gross profit and indicator variable (DxGP) is positive and statistically significant. It means that gross profit influence toward stock price is significantly higher on group 1 than that on group 0. The coefficient regression of selling and administrative expense and indicator variable (DxSA) is negative and statistically significant which means that the influence of selling and administrative expense toward stock price is significantly higher on group 0 than that on group 1. The coefficient regression of other expense and indicator variable (DxOther) is positive but not statistically significant which means that the influence of other expense toward stock price is not significantly different or the same between both sample groups (group 1 dan group 0). The regression coefficients for gross profit are positive and significant, i.e., inventory change has a significant effect on firm value. The regression coefficients for selling and administrative expense are negative and significant only for group 1. The coefficient regressions of other

expense are negative and significant for group 0 and positive but not significant for group 1. The regression coefficients for the indicator variable terms are positive and significant, i.e., the explanatory power for group 1 is significantly higher than that for group 0. This result lead to a condition that there are sufficient evidences to reject Ho1 for the level regression.

The result of change regressions with earnings components by using SPSS is presented below:

Tabel 4.7 (Equation 3-12 and 3-13)  
Changes Regressions with Earnings Components

Size	Const.	GPC	SAC	OtherC	DxGPC	DxSAC	DxOtherC	Adj.R <sup>2</sup>
<b>Group = 1</b>								
55	0,076 (0,687)	0,511** (4,005)	-0,605 (-1,685)	0,025 (0,391)	—	—	—	0,259
<b>Group = 0</b>								
259	0,057 (1,031)	0,070** (3,815)	0,011 (0,135)	-0,097** (-8,275)	—	—	—	0,206
<b>Combined</b>								
314	0,060 (1,208)	0,070** (3,851)	-0,011 (-0,136)	-0,097** (-8,367)	0,443** (3,322)	-0,621 (-1,625)	0,120 (1,816)	0,215

Group= 1 for firms with a significant association ( $\alpha=0.10$ ) between percentage change in cost of good sold and lag one percentage of production added to inventory.

Group= 0 for other firms.

D= 1 for firms with a significant association ( $\alpha=0.10$ ) between percentage change in cost of good sold and lag one percentage of production added to inventory.

D= 0 for other firms.

The dependent variable is stock price pershare normalized by beginning common equity pershare.

GPC is change in gross profit pershare normalized by beginning common equity pershare.

SAC is change in selling and administrative expense pershare normalized by beginning common equity pershare

OtherC is Change in Other expense pershare normalized by beginning common equity pershare.

t-values are in the parentheses

\*\*Significant at  $\alpha = 0,01$  level

Table 4.7 shows that the coefficient regression of gross profit change is positive and statistically significant in both groups which means gross profit change has positive and significant influence toward stock price change on both sample groups. The coefficient regression of selling and administrative expense

change (SAC) is negative and not significant on group 1 and positive and not significant on group 0 which means selling and administrative expense change has no significant influence toward price change on both sample groups. The coefficient regression of other expense change is not statistically significant on group 1 but has negative and significant influence on group 0, which means that other expense change has no significant influence toward stock price change on group 1 but has negative and significant influence on group 0. Adjusted  $R^2$  value of group 1 is higher than on group 0 (0,259 vs 0,206) which means that the prediction power of group 1 is higher than that in group 0.

On combined change regression analysis, the coefficient regression of gross profit change and indicator variable (DxGPC) is positive and statistically significant which means the influence of gross profit change toward stock price change is significantly higher on group 1 than that on group 0. The coefficient regression of selling and administrative expense change and indicator variable (DxSAC) is negative but not statistically significant which means that the influence of selling and administrative expense change toward stock price change is not significantly different on both sample groups. The coefficient regression of other expense change dan indicator variable (DxOtherC) is positive but not statistically significant which means that the influence of other expense change toward stock price change is not statistically significant on both sample groups. The regression coefficients for gross profit change are positive and significant, i.e., inventory change has a significant effect on firm value. The regression coefficient for selling and administrative expense change are negative and not



significant for group 1, and positive and not significant for group 0. The coefficient regression of other expense are negative and significant for group 0 and positive but not significant for group 1. The regression coefficient for the indicator variable terms are positive and significant, i.e., the explanatory power for group 1 is significantly higher than that for group 0. This result lead to a condition that there are sufficient evidences to reject  $H_01$  for the level regression.

#### **4.4 Research Implication**

This analysisist result on earning level and earning change is positively correlated with stock price. It can be reffered by the positive sign on the coefficient of independent variable when earning level or earning change correlate on the stock price change in combined regression. This condition means that researcher can rely on earnings figures when analyzing firms. This analysisist is consistent with discounted cah flow analysis which stated that stock price is the present value of all future cash flow that will be received by the investors. Cash flow that will be received consists of dividend payment and capital gain. The amount of the dividend payment is based on the earning of the company. Earnings indirectly influence capital gain. It is because the change (increase) of stock price is influenced by performance and prospect of the company in producing earnings. This empirical result remains qualitatively the same by adding control variables such as inventory valuation method in this study. Therefore, the researcher finally realizes that earning can motivate the changing in inventory choice of a company.

For the management, Inventory is one of the main elements of working capital, which always cycle and change overtime (Riyanto, 1989). The matter on how big the firm should invest their money on inventory has a direct effect toward company's profitability. The argumentation of the statement mentioned previously is the condition that might be happened if the investments on inventory were far exceeding than what company is needed, it would bring more liability which resulted from more interest payment, increasing inventory cost, broaden the possibility of damage of goods, decreasing in quality, obsolete, that in the end will pressing company's profitability. On the other hand, if the investments on inventory were too small, the companies will face the possibility of lack material that in the end will also pressing the company's profitability, because the company cannot produce anything without raw material. But results also show that inventory methods are positively, in both levels and change analysis, affecting the stock price. Thus the management may seek one way or another to keep the inventory planning is proportionate. This analysis is consistent with Lev and Thiagarajan (1993). It is stated that good inventory planning can sustain future sales and cost of good, and higher quality of earnings result which are derived from subtracting cost of good sold and other expenses from sales.

Results in this analysis show the inconsistentcy association between stock price and earnings, in level and change form, is not higher for the firm with informative change in inventory. The implication is that investors and analyst cannot rely more heavily on earning figure when analyzing firms with informative change in inventory.

## **CHAPTER V**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1. Research Conclusion**

Based on the research purpose, the statistical and analysis that have been described in the earlier chapter, some conclusions are drawn as follows:

- a. The research has been done in the period of 1997-2002 with the total sample of 317 companies-years that were listed in Jakarta Stock Exchange concluded that there was sufficient evidence to prove the first hypothesis that the test is significant in result and the coefficient has positive sign. This result lead to a conclusion that there are sufficient evidences to prove the first hypothesis that earning positively correlated with stock price.
- b. There was not sufficient evidence to prove the second hypothesis that the test is significant in result and the coefficient has positive sign. This result leads to a conclusion that there are not sufficient evidences to prove the second hypothesis that inventory provide significant incremental influence on stock price that represented by the coefficient regression of inventory method used which is positive but not significant.

## **5.2 Research Recommendation**

After completing this research, the following recommendations are suggested as follows:

- a. Longer period of time is recommended for those who would like to conduct similar research
- b. In order to conduct further research in the future, it is expected that researcher may use different industrial sectors as the object of the analysis. However, it can also be conducted by compiling all the companies listed in Jakarta Stock Exchange, thus, it may give significant research result because of the ability to cover/mention all companies listed in Jakarta Stock Exchange.
- c. The result of this research can be used as reference for other researchers on behalf of further development on economic world.

## BIBLIOGRAPHY

- Baumol, William J, *Economic Theory and Operation Analysis*, fourth edition: Prentice-Hall of India Private Limited, 1977.
- Bernard, V. and J. Noel. "Do Inventory Disclosure Predict Sales and Earnings?" *Journal of Accounting, Auditing & Finance* 6, 145-181, (1991).
- Carmichael, D.R., Steven B. Lilien and Martin Mellman, *Accountant's Handbook Volume One: Financial Accounting and General Topics*, eight edition. United States: John Willey & Sons, 1996.
- Chugh, L. C. and J. W. Meador, "The stock Valuation Process: The Analysts' view." *Financial Analysts Journal* 40, 41-48 (1984).
- Harnanto, *Analisa Laporan Keuangan*, cetakan kedua, Jakarta: Salemba Empat, 1985.
- Helfert, Erich A. DBA., *Financial Analysis Tools and Technique : a guide for Manager*. Seventh edition: McGraw-Hill, 1993.
- Helkamp John G, *Managerial Accounting*. United States: John Willey & Sons, 1987.
- Jiambalvo, J., E. Noreen and T. Shelvin, "Incremental Information Content of the Change in the Percent of Production Added to Inventory." *Contemporary Accounting Research* 14, 67-97, (1997).
- Jogiyanto, H M. *Teori portfolio dan analisis investasi*. Edisi kedua. Yogyakarta: BPFE, 2003.
- Jusup, Al Haryono. Dra, M.B.A, Ak., *Dasar-Dasar Akuntansi*. Yogyakarta: Liberty, 1987.
- Krisnha G Palepu, Victor L Bernard, Paul M Healy, *Business Analysis and Valuation: Using Financial Statements: Text and Cases*: South Western College Publishing, 1996.
- Lev, B. and S.R Thiagarajan, "Fundamental Information Analysis." *Journal of Accounting Research* 31, 190-215, (1993).
- Martin J Gruber, Edwin J Elton, *Modern Portfolio Theory and Investment analysis*, fifth edition: John Wiley and Sons, 1995.

*Prinsip Akuntansi Indonesia*, edisi revisi II. 1994. Rineka Cipta: Ikatan Akuntan Indonesia (IAI).

Riyanto, Bambang, *Analisa Laporan Financial*. Yogyakarta: Liberty, 1989.

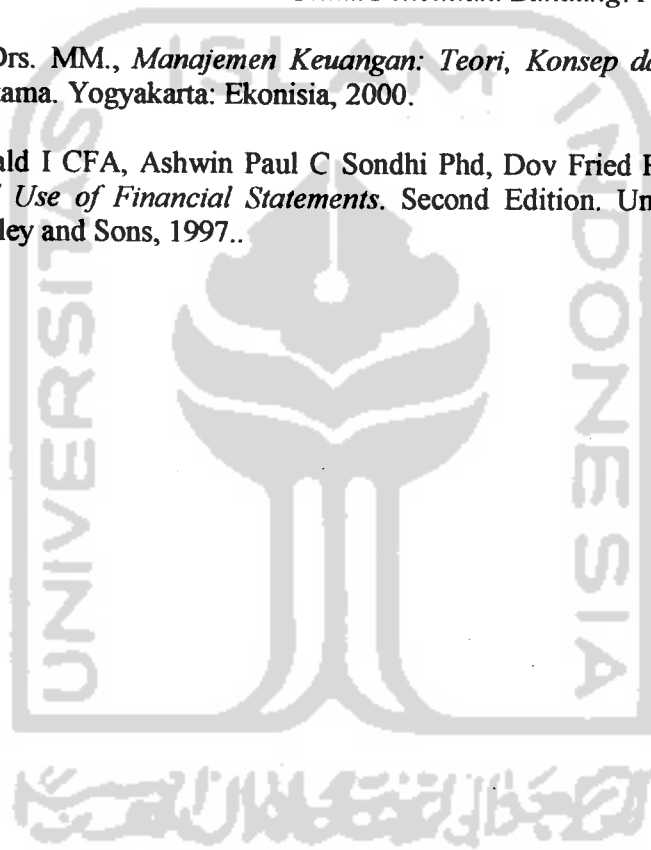
*Standar Akuntansi Keuangan*. 1999. Salemba Empat: Ikatan Akuntan Indonesia (IAI).

Sari Atmini, *Asosiasi Siklus Hidup Perusahaan dengan Incremental Value-Relevance Informasi Laba dan Arus Kas*. Universitas Brawijaya. 2002.

Sugiono, *Statistik Non Parametrik Untuk Penelitian*. Bandung: Alfabeta , 1998.

Sutrisno, Drs. MM., *Manajemen Keuangan: Teori, Konsep dan Aplikasi*, edisi pertama. Yogyakarta: Ekonisia, 2000.

White Gerald I CFA, Ashwin Paul C Sondhi Phd, Dov Fried Phd. *The Analysis and Use of Financial Statements*. Second Edition. United States: John Willey and Sons, 1997..



# *APPENDICES*



Appendix 1.1

Original Data for Year 1997

No.	Company name	Method	CGS	PAI	price	Inventory	Gross Profit	S&A	OTHER	Earnings	#shares
1	Alumindo Perkasa	Average	33,230	1.35349	---	12,223	4,925	6,624	22,487	6	21,450,000
2	Aqua Golden Mississippi	FIFO	186,365	-0.07659	4,900	3,885	34,468	22,986	(4,843)	591	13,162,473
3	Argo Pantes	Average	429,854	0.03596	675	188,928	145,035	44,162	466,310	-1381	264,705,000
4	Astra Graphia	Average	640,641	1.51128	1,200	172,895	224,598	126,457	147,210	-379	130,687,500
5	Astra Internasional	Average	10,917,326	0.14765	1,575	2,066,561	4,954,730	3,216,360	1,667,160	-120	2,325,662,474
6	BAT Indonesia	Average	276,535	0.11841	2,500	64,333	78,585	79,322	(4,791)	106	4,640,200
7	Bayer Indonesia	Average	53,691	1.10817	1,500	13,513	14,916	8,674	2,485	215	3,500,000
8	Berlina	Average	233,921	0.34998	675	139,459	107,671	40,266	48,383	49	450,000,000
9	Branta Mulia	FIFO	55,059	-0.20448	900	17,144	20,610	6,650	8,935	110	23,000,000
10	Century Textile Industry	Average	56,649	0.18121	20,600	27,190	57,996	16,180	(4,034)	1027	45,000,000
11	Citra Tubindo	FIFO	73,901	0.21951	475	26,491	83,248	52,390	29,455	7	125,575,000
12	Dankos Laboratoria	Average	38,145	0.17546	4,400	14,653	44,037	33,328	(12,615)	1414	2,940,819
13	Delta Djakarta	FIFO	25,798	-1.24174	600	5,707	20,360	7,640	(3,080)	302	34,600,500
14	Duta Pertiwi Nusantara	FIFO	90,625	-0.02361	600	19,997	34,253	17,425	(274)	104	299,719,440
15	Dynaplast	Average	29,001	2.40122	1,175	6,536	11,754	4,874	4,547	209	11,180,400
16	Ekadharma Tape Industries	Average	133,203	0.07451	1,600	56,234	57,377	18,074	64,009	-503	49,118,000
17	Eratex Djaja Limited	Average	1,281,697	0.21525	150	563,568	421,091	123,080	589,524	-251	3,168,000,000
18	Gajah Tunggal	Average	5,610,554	0.26032	11,900	3,252,588	1,907,355	543,098	78,802	471	900,000,000
19	Goodyear Indonesia	Average	234,602	1.07892	1,600	45,510	48,453	20,249	19,605	130	6,150,000
20	Great River International	Average	2,122,158	0.14398	5,225	1,278,015	145,035	373,831	561,800	23	1,924,088,000
21	Gudang Garam	Average	150,526	0.49963	425	212,013	145,481	100,749	58,466	-32	388,080,000
22	Hanjaya mandala Sampoerna	Average	210,969	-10.88357	---	61,710	24,266	15,212	44,983	55	36,000,000
23	Igarjaya	Average	1,520,252	0.38851	2,200	921,073	1,428,187	321,712	712,444	74	4,629,473,517
24	Iki Indah Kabel Indonesia	Average	903,786	0.16656	2,750	254,926	668,375	138,316	907,666	-156	2,414,450,320
25	Indah Kiat Pulp & paper Co	FIFO	63,321	-0.37445	400	18,599	16,946	15,713	15,584	-476	30,177,600
26	Indocement Tunggal Perkasa	FIFO	104,920	-1.37220	---	35,850	15,328	7,848	32,600	-449	56,000,000
27	Indospring	Average	37,234	0.13405	1,025	57,002	20,827	12,274	(22,596)	496	44,000,000
28	Intan Wijaya Internasional	Average	57,844	0.20000	1,000	71,463	24,496	8,755	12,485	71	37,500,000
29	Inter Delta	Average	51,632	0.46318	500	51,238	4,155	5,092	2,440	-90	75,000,000
30	Jaya Pari Steel	FIFO	237,943	0.23535	525	96,541	260,905	164,539	176,316	-190	432,000
31	Kabelindo	FIFO	64,708	0.15482	625	23,307	28,320	13,335	19,476	-77	100,000,000
32	Kalbe Fama	Average	45,322	-3.41434	---	14,129	27,676	10,614	37,330	610	15,250,000
33	Kumia Kapuas Utama Glue	Average	27,821	-0.36505	900	6,689	6,814	2,419	3,386	74	9,600,000
34	Lion Mesh Prima	Average	274,534	0.11748	675	49,184	84,531	52,104	8,299	27	766,584,000
35	Lippo Industries	Average	22,654	1.10290	19,000	12,638	46,871	30,906	2,091	1660	1,680,000
36	Mayora Indah	Average	1,354,119	0.25371	2,025	537,876	666,466	225,550	92,127	264	1,321,211,083
37	Merck	Average	670,966	0.25076	850	255,449	209,205	114,210	113,177	-194	266,769,600
38	Metrodata Electrics	FIFO	28,571	0.06195	525	11,454	3,428	2,420	22,471	-1073	20,000,000
39	Modern Photo Film Company	Average	383,700	-0.41083	1,400	74,311	76,593	37,689	16,985	675	18,351,026
40	Multi Bintang Indonesia	Average	120,515	2.02467	40,000	30,887	125,522	49,897	20,005	1784	3,520,012
41	Multipolar Corporation	Average	1,638,843	-0.19625	100	269,015	737,309	665,848	229,192	-94	1,782,768,000



42	Nipress	FIFO	41,574	1.19777	375	9,567	9,206	9,070	(14,943)	198	76,800,000
43	Pabrik Kertas Tjiwi Kimia	Average	213,870	-0.01360	875	98,627	52,750	9,324	46,650	-17	38,540,000
44	Pan Brothers Tex	FIFO	427,059	0.34804	225	261,356	99,434	42,865	265,352	-399	532,000,000
45	Panasia Indosyntec	FIFO	89,050	0.03769	450	22,087	21,902	10,276	(11,000)	55	52,500,000
46	Polysindo Eka Perkasa	Average	47,659	0.53452	425	77,526	23,474	6,472	26,626	-127	76,000,000
47	Prima Alloy Steel	Average	117,474	0.01335	19,000	22,798	73,113	55,234	5,134	2679	840,000
48	Procter & Gamble Indonesia	Average	1,539,748	0.08953	1,000	186,043	672,582	113,012	(539,536)	95	2,208,000,000
49	Roda Vivatex	FIFO	129,564	0.16593	650	33,373	31,272	13,376	406	90	268,800,000
50	Sari Husada	Average	590,973	-0.28050	400	135,480	246,337	62,305	452,482	-467	1,149,435,000
51	Schering-plough Indonesia	FIFO	23,918	-0.12874	9,000	7,597	21,202	14,321	(2,847)	1937	1,080,000
52	Semen Cibinong	Average	936,232	0.19184	5,400	264,937	703,809	319,006	109,237	392	593,152,000
53	Semen Gresik	Average	75,764	-0.07759	1,600	42,694	52,556	39,961	4,572	374	4,550,000
54	Sepatu Bata	Average	166,591	0.39997	29,500	175,379	165,477	111,556	28,715	848	6,600,000
55	Sorini Corporation	Average	100,576	0.28423	300	48,149	38,157	21,011	111,822	-503	180,000,000
56	Squibb Indonesia	FIFO	27,216	1.83845	7,200	10,325	35,795	18,603	10,569	-68	972,000
57	Suba Indah	Average	26,827	1.30843	525	8,210	1,666	23,591	(21,704)	-24	22,500,000
58	Supreme Cable Manufacturing Co	Average	123,126	-12.90469	4,400	21,209	102,675	42,260	8,556	625	119,355,500
59	Surya Toto Indonesia	Average	47,760	1.44832	---	34,636	11,990	11,126	10,613	-126	24,000,000
60	Teijin Indonesia Fiber Co	Average	83,592	-1.03585	2,350	56,095	70,917	23,102	(21,566)	530	33,620,625
61	Tembaga Mulia Semanan	Average	287,364	0.18659	250	122,015	40,637	38,385	311,275	-1484	205,583,400
62	Trafindo Perkasa	Average	310,725	-0.12938	500	101,496	25,244	9,484	31,040	-1479	3,367,000
63	Trias Sentosa	Average	155,733	-0.03226	250	137,092	50,839	14,199	61,314	-86	288,000,000
64	Ultra Jaya Milk Industry	FIFO	128,101	0.33095	1,100	70,001	56,946	21,143	33,690	7	220,067,200
65	Unggul Indah Cahaya	Average	325,900	-0.22009	1,700	141,959	128,751	31,445	88,258	22	290,400,056
66	Unilever Indonesia	Special ID	1,944,588	0.27435	1,250	739,082	563,954	213,572	605,313	-2160	138,000,000
67	United Tractor	Average	1,027,732	0.12622	44,000	200,747	808,046	602,089	(39,913)	2251	11,451,225
68	Voksel Electric	Average	198,770	1.40729	225	52,287	21,401	21,220	70,295	-552	63,000,000

Appendix 1.2 Original Data for Year 1998											
No.	Company name	Method	CGS	PAI	price	Inventory	Gross Profit	S&A	OTHER	Earnings	#shares
69	Alumindo Perkasa	Average	20,670	1.12434	100	6,634	9,638	8,350	(74,292)	-2928	21,450,000
70	Aqua Golden Mississippi	FIFO	304,246	-0.03148	2,700	4,575	55,799	29,610	643	1445	13,162,473
71	Argo Pantes	Average	964,201	0.07776	400	273,430	546,795	101,124	1,169	-2953	264,705,000
72	Astra Graphia	Average	822,345	0.18779	650	192,136	476,142	180,966	312,658	-244	130,687,500
73	Astra Internasional	Average	7,241	1.20803	2,525	2,007	2,966	1,265	3,491	-1586	2,325,662,474
74	BAT Indonesia	Average	440,081	0.08825	—	94,189	116,383	107,771	23,616	-434	4,648,200
75	Bayer Indonesia	Average	80,482	1.11712	8,000	25,110	50,730	15,068	1,414	2256	3,500,000
76	Berlina	Average	533,753	0.23986	175	193,538	353,356	78,288	504,861	291	450,000,000
77	Branta Mulia	FIFO	57,090	-0.67685	250	13,860	33,032	7,278	16,686	85	69,000,000
78	Century Textile Industry	Average	175,271	0.16199	20,600	51,594	140,098	38,635	(15,513)	341	45,000,000
79	Citra Tubindo	FIFO	115,087	0.19741	950	36,904	99,602	64,965	112,022	-98	127,575,000
80	Dankos Laboratoria	Average	84,663	0.12008	2,025	17,713	71,525	51,532	4,767	1164	2,940,819
81	Delta Djakarta	FIFO	37,687	-0.35956	600	8,597	59,904	10,660	1,613	858	80,734,500
82	Duta Peritiwi Nusantara	FIFO	110,613	-0.03730	675	18,564	39,300	12,937	3,990	38	299,719,440
83	Dynaplast	Average	81,291	2.90105	1,525	6,159	22,790	10,487	1,251	483	11,180,400
84	Ekadharna Tape Industries	Average	299,745	0.16538	450	130,211	179,707	47,187	110,327	223	49,118,000
85	Eratex Djaja Limited	Average	2,471,975	0.18653	725	792,783	1,170,954	262,259	1,462,125	-65	3,168,000,000
86	Gajah Tunggal	Average	7,352,018	0.32041	14,200	3,467,864	2,621,153	652,499	409,869	564	900,000,000
87	Goodyear Indonesia	Average	411,243	1.13773	2,300	70,817	108,564	27,405	9,347	1227	6,150,000
88	Great River International	Average	3,104	1.00254	11,200	1,827	1,544	469,291	1,234	-106	1,924,088,000
89	Gudang Garam	Average	296,756	0.39118	250	225,959	153,476	151,902	91,821	-153	388,080,000
90	Hanjaya mandala Sampoerna	Average	369,009	8.30205	—	35,289	25,276	18,091	(34,901)	-60	306,000,000
91	Igarjaya	Average	3,939,790	0.22549	3,375	1,228,300	4,282,805	821,896	1,589,122	122	4,656,182,918
92	Iki Indah Kabel Indonesia	Average	973,973	0.30359	3,100	454,833	615,906	178,941	1,498	-263	2,414,450,320
93	Indah Kiat Pulp & paper Co	FIFO	74,933	-0.03771	1,000	29,345	24,693	18,043	52,899	-1073	30,177,600
94	Indocement Tunggal Perkasa	FIFO	58,880	2.48428	—	32,068	3,916	5,841	51,944	-1092	56,000,000
95	Indospring	Average	67,565	-0.70860	550	4,432	22,730	10,338	14,907	396	101,200,000
96	Intan Wijaya Internasional	Average	27,711	0.73495	350	81,270	8,563	7,413	23,537	-410	37,500,000
97	Inter Delta	Average	90,055	0.22697	150	32,453	27,783	13,932	41,608	-383	75,000,000
98	Jaya Pari Steel	FIFO	259,246	0.23734	1,500	130,617	365,856	194,497	760,203	-234	432,000,000
99	Kabelindo	FIFO	136,160	0.19636	1,025	49,941	122,197	22,875	48,678	353	100,000,000
100	Kalbe Farma	Average	25,821	1.81880	—	14,756	18,469	9,406	(23,484)	-1180	15,250,000
101	Kumia Kapuas Utama Glue	Average	15,338	-1.32605	900	6,012	9,062	6,478	10,735	-665	9,600,000
102	Lion Mesh Prima	Average	364,418	0.13696	450	72,112	81,782	86,266	9,930	39	766,584,000
103	Lippo Industries	Average	40,885	1.14486	13,000	14,281	53,359	32,399	10,036	1211	1,680,000
104	Mayora Indah	Average	2,799,984	0.32687	2,600	1,442,131	1,682,892	616,713	285,882	212	1,325,050,789
105	Merck	Average	1,495,422	0.15816	700	337,411	450,967	117,266	386,251	-130	266,769,600
106	Metrodata Electrics	FIFO	53,049	0.05943	500	16,672	21,082	5,866	39,144	-903	20,000,000
107	Modern Photo Film Company	Average	406,476	-8.66833	750	30,246	87,815	48,660	115,500	-137	38,802,354
108	Multi Bintang Indonesia	Average	212,405	30.99223	40,000	56,450	87,366	44,555	12,894	832	3,520,012
109	Multipolar Corporation	Average	1,520,821	-3.28851	150	275,937	852,553	781,577	461,737	-124	1,782,768,000

110	Nipress	FIFO	110,571	1.53693	350	13,320	47,115	13,722	12,806	319	76,800,000
111	Pabrik Kertas Tjiwi Kimia	Average	574,662	0.51291	800	672,988	98,326	17,714	43,674	511	38,640,000
112	Pan Brothers Tex	FIFO	1,000,445	0.21897	225	329,821	216,985	146,476	543,397	-856	532,000,000
113	Panasia Indosyntec	FIFO	157,301	-0.04520	425	22,542	41,993	8,467	15,006	133	52,500,000
114	Polysindo Eka Perkasa	Average	78,138	0.22549	200	82,477	94,608	11,604	102,266	-176	76,000,000
115	Prima Alloy Steel	Average	121,112	0.13386	30,400	59,728	86,316	83,325	(17,092)	4555	840,000
116	Procter & Gamble Indonesia	Average	2,986,232	0.11007	575	394,680	695,545	572,989	(1,869,869)	-446	4,393,920,000
117	Roda Vivatex	FIFO	180,453	0.17960	850	49,330	117,632	35,951	27,337	158	268,800,000
118	Sari Husada	Average	811,383	-0.69105	850	265,379	68,890	32,761	2,313,855	-1627	1,149,435,000
119	Schering-plough Indonesia	FIFO	40,291	-0.30989	11,000	9,827	21,342	27,244	5,819	-183	1,080,000
120	Semen Cibinong	Average	1,276,776	0.29858	12,700	596,952	1,038,025	407,315	328,760	374	593,152,000
121	Semen Gresik	Average	85,547	-0.31175	1,575	53,457	95,801	53,794	2,752	1969	4,550,000
122	Sepatu Bata	Average	381,335	-0.15137	18,000	44,056	236,208	169,347	35,055	250	6,600,000
123	Sorini Corporation	Average	273,791	0.19572	150	73,788	150,482	55,113	537,935	-1912	180,000,000
124	Squibb Indonesia	FIFO	44,850	3.31209	7,300	19,359	28,803	33,682	(31,391)	339	972,000
125	Suba Indah	Average	36,679	1.57539	325	7,160	13,240	19,202	6,730	-294	22,500,000
126	Supreme Cable Manufacturing Co	Average	160,517	3.51389	1,800	41,010	80,459	34,206	30,612	59	176,049,363
127	Surya Toto Indonesia	Average	25,838	1.11625		25,329	9,627	16,764	(19,217)	-446	26,400,000
128	Teijin Indonesia Fiber Co	Average	132,466	1.27961	2,000	66,771	101,348	33,597	89,398	-320	33,620,625
129	Tembaga Mulia Semanan	Average	225,332	0.15335	275	107,585	68,182	52,253	485,220	-2103	205,583,400
130	Trafindo Perkasa	Average	301,913	-0.33875	975	67,863	112,901	16,460	86,724	337	3,367,000
131	Trias Sentosa	Average	304,203	-0.65046	175	144,257	123,144	22,942	189,732	-215	288,000,000
132	Ultra Jaya Milk Industry	FIFO	134,487	0.36233	775	83,607	54,404	21,625	30,980	32	220,067,200
133	Unggul Indah Cahaya	Average	858,139	-0.22542	1,200	264,146	389,600	41,407	285,083	199	290,400,056
134	Unilever Indonesia	Special ID	2,255,252	0.21706	475	629,810	1,427,684	359,344	2,081,512	-5207	138,000,000
135	United Tractor	Average	2,148,564	0.13005	27,000	422,006	998,153	625,611	73,524	2666	76,300,000
136	Voksel Electric	Average	264,386	1.99916	100	100,816	38,422	24,587	228,478	-1276	63,000,000

Appendix 1.3											
Original Data for Year 1999											
No.	Company name	Method	CGS	PAI	price	Inventory	Gross Profit	S&A	OTHER	Earnings	#shares
137	Alumindo Perkasa	Average	136,788	61.98440	650	7,189	8,928	6,459	(3,732)	-36	21,450,000
138	Aqua Golden Mississippi	FIFO	359,501	-0.03943	3,325	5,883	51,292	22,748	1,861	1356	13,162,400
139	Argo Pantes	Average	933,374	-0.03401	1,200	200,763	151,197	78,909	(11,214)	235	264,705,000
140	Astra Graphia	Average	995,430	2.94156	600	231,463	384,870	208,516	117,509	38	130,687,500
141	Astra Internasional	Average	11,130,624	0.10024	3,200	1,739,590	3,184,626	751,280	2,605,290	602	2,325,662,400
142	BAT Indonesia	Average	467,157	-0.45319	5,100	85,370	202,223	128,072	11,894	663	4,643,200
143	Bayer Indonesia	Average	161,990	1.23512	6,150	44,471	114,488	41,537	1,414	5073	3,500,000
144	Berlina	Average	521,614	0.16323	975	146,220	225,822	72,130	(46,608)	422	450,000,000
145	Branta Mulia	FIFO	70,964	-0.84865	1,100	19,520	45,413	8,449	888	305	69,000,000
146	Century Textile Industry	Average	110,999	0.66067	12,900	231,058	49,383	45,942	(28,654)	77	80,000,000
147	Citra Tubindo	FIFO	193,848	0.18732	800	52,097	182,182	109,413	158	79	637,875,000
148	Dankos Laboratoria	Average	112,704	0.03984	8,225	14,949	98,915	55,553	(10,975)	3561	3,361,100
149	Delta Djakarta	FIFO	34,858	-0.44651	850	7,415	29,865	10,976	954	255	104,954,800
150	Duta Pertiwi Nusantara	FIFO	142,981	-0.18482	1,075	18,175	53,831	18,941	(6,978)	97	299,719,400
151	Dynaplast	Average	71,534	20.16260	1,200	10,273	21,439	9,692	4,457	277	44,721,600
152	Ekadharma Tape Industries	Average	280,534	0.06049	700	85,540	67,457	43,277	3,258	145	49,118,000
153	Eratex Djaja Limited	Average	2,891,236	0.18627	725	895,423	1,078,606	303,819	1,409,160	-153	3,168,000,000
154	Gajah Tunggal	Average	8,943,319	0.18335	11,850	4,250,502	3,751,286	739,891	(144,212)	1183	928,000,000
155	Goodyear Indonesia	Average	381,538	1.10037	7,500	67,479	153,576	23,339	4,260	2150	6,150,000
156	Great River International	Average	4,715,521	0.07287	11,175	2,242,541	2,696,511	738,192	(73,593)	1522	1,924,088,000
157	Gudang Garam	Average	353,378	0.34389	625	233,608	123,372	183,698	9,932	13	388,080,000
158	Hanjaya mandala Sampoerna	Average	292,495	3.36539		48,393	12,750	12,415	(584)	10	306,000,000
159	Igarjaya	Average	5,457,905	0.24909	2,400	1,871,927	3,816,740	774,070	3,038,921	2	4,813,271,200
160	Iki Indah Kabel Indonesia	Average	1,123,913	0.28088	3,100	464,544	635,053	264,112	(385,348)	216	2,414,453,300
161	Indah Kiat Pulp & paper Co	FIFO	95,112	0.05921	375	31,585	22,845	18,530	(1,479)	288	30,177,600
162	Indocement Tunggul Perkasa	FIFO	47,535	1.23494	500	25,599	(7,326)	7,849	6,137	-320	56,000,000
163	Indospring	Average	49,077	-0.01374	875	5,550	42,645	9,132	5,453	197	101,200,000
164	Intan Wijaya Internasional	Average	56,988	0.49513	1,225	61,438	20,368	8,324	2,824	101	37,500,000
165	Inter Delta	Average	78,608	0.01453	275	6,215	9,272	7,822	51	16	75,000,000
166	Jaya Pari Steel	FIFO	729,039	0.24267	725	275,463	832,800	441,893	367,471	97	2,160,000,000
167	Kabelindo	FIFO	101,003	0.20794	475	41,860	57,593	17,346	18,803	55	250,000,000
168	Kalbe Farma	Average	47,818	8.73504		15,434	38,543	11,656	2,922	391	15,250,000
169	Kurnia Kapuas Utama Glue	Average	23,968	-0.76365	1,300	5,056	3,905	1,724	381	98	9,600,000
170	Lion Mesh Prima	Average	421,486	0.07715	625	69,434	122,625	81,449	(15,228)	59	766,584,000
171	Lippo Industries	Average	75,394	1.40029	7,500	34,197	108,416	53,151	(15,042)	1029	18,480,000
172	Mayora Indah	Average	4,163,982	0.25151	1,500	1,450,368	2,000,621	695,211	567,461	194	1,335,226,000
173	Merck	Average	1,274,254	0.16142	1,750	297,940	246,429	147,878	75,526	44	266,765,000
174	Metrodata Electrics	FIFO	56,799	0.04853	1,075	15,344	20,002	7,142	3,130	285	20,000,000
175	Modern Photo Film Company	Average	562,078	-2.32701	925	25,549	114,646	46,154	8,006	77	388,020,000
176	Multi Bintang Indonesia	Average	246,983	0.12991	40,000	52,658	160,265	77,047	(5,995)	2958	3,520,000,000
177	Multipolar Corporation	Average	152,093	1.11859	650	15,782	87,792	62,375	14,385	5	1,782,760,000

178	Nipress	FIFO	137,495	0.00495	850	12,447	30,201	15,922	(737)	189	76,800,000
179	Pabrik Kertas Tjiwi Kimia	Average	601,088	0.14302	800	182,991	54,903	16,520	31,793	25	38,640,000
180	Pan Brothers Tex	FIFO	890,486	-0.04953	---	11,763	186,958	94,335	216,973	-172	532,000,000
181	Panasia Indosyntec	FIFO	170,664	0.04953	175	40,479	58,530	11,612	(1,990)	275	1,050,000,000
182	Polysindo Eka Perkasa	Average	126,283	0.18113	475	51,141	28,710	9,232	16,024	27	76,000,000
183	Prima Alloy Steel	Average	203,132	-0.37938	45,500	23,207	254,720	11,260	36,764	-11783	840,000
184	Procter & Gamble Indonesia	Average	2,899,580	0.12086	260	418,683	(546,647)	329,853	964,122	-480	4,593,920,000
185	Roda Vivatex	FIFO	186,780	0.16636	1,200	53,790	57,548	23,444	592	92	268,800,000
186	Sari Husada	Average	1,141,161	-0.28968	545	281,771	47,355	84,235	(52,779)	13	1,149,435,000
187	Schering-plough Indonesia	FIFO	56,830	-0.10080	12,000	16,516	32,174	29,971	7,243	-1801	1,080,000
188	Semen Cibinong	Average	1,864,895	0.19891	8,500	538,093	1,226,765	483,805	362,491	406	593,152,000
189	Semen Gresik	Average	145,678	0.09891	10,900	75,038	141,044	68,585	(1,494)	3877	4,550,000
190	Sepatu Bata	Average	613,446	0.40301	40,000	499,487	401,908	270,876	71,765	1257	6,600,000
191	Sorini Corporation	Average	270,760	0.15970	300	59,048	97,644	43,124	81,448	-396	180,000,000
192	Squibb Indonesia	FIFO	76,750	-2.14575	7,500	21,720	40,103	39,443	4,950	-1304	972,000
193	Suba Indah	Average	47,769	-0.60509	675	7,591	19,180	15,522	4,468	-43	45,000,000
194	Supreme Cable Manufacturing Co	Average	254,718	-3.89626	4,200	79,076	174,053	51,915	(2,366)	493	176,049,363
195	Surya Toto Indonesia	Average	19,480	1.12084	500	20,080	1,756	14,836	1,913	-416	26,400,000
196	Teijin Indonesia Fiber Co	Average	146,013	-4.67482	5,400	62,708	66,036	31,926	28,534	74	33,620,625
197	Tembaga Mulia Semanan	Average	47,535	-3.55927	750	25,599	(7,326)	7,849	6,137	832	205,583,400
198	Trafindo Perkasa	Average	474,967	-0.08615	2,750	82,673	44,170	20,303	20,864	259	3,367,000
199	Trias Sentosa	Average	351,714	-1.09011	600	120,346	65,774	24,822	(151,972)	506	288,000,000
200	Ultra Jaya Milk Industry	FIFO	191,354	0.25769	975	74,072	63,678	26,091	30,166	6	385,117,600
201	Unggul Indah Cahaya	Average	844,254	-0.14807	2,200	303,785	292,962	54,223	106,751	51	348,481,474
202	Unilever Indonesia	Special ID	2,796,095	0.16310	6,775	550,796	1,031,953	260,747	100,731	827	138,000,000
203	United Tractor	Average	2,594,253	0.11080	88,500	412,673	2,276,719	1,258,157	(122,824)	6986	76,300,000
204	Voksel Electric	Average	261,094	2.30352	550	89,403	27,082	23,320	(4,351)	47	63,000,000

Appendix 1.4												
Original Data for Year 2000												
No.	Company name	Method	CGS	PAI	price	Inventory	Gross Profit	S&A	OTHER	Earnings	#shares	
205	Alumindo Perkasa	Average	285,229	5.08936	90	7,645	7,651	7,842	72,235	-2025	21,450,000	
206	Aqua Golden Mississippi	FIFO	478,251	-0.03414		9,453	72,333	20,800	4,161	2922	13,162,473	
207	Argo Pantes	Average	813,407	0.16292	825	268,510	276,413	73,132	800,098	-1599	264,705,000	
208	Astra Graphia	Average	386,560	1.15209	175	110,193	248,063	204,191	(28,345)	13	1,306,875,000	
209	Astra Internasional	Average	23,284,363	0.09927	1,300	3,038,371	5,119,407	2,542,617	3,168,148	-95	2,506,643,396	
210	BAT Indonesia	Average	411,958	0.10160	4,600	100,686	210,893	112,399	9,551	851	4,648,200	
211	Bayer Indonesia	Average	156,126	1.16979	5,600	41,709	59,198	32,661	116	1915	3,500,000	
212	Berlina	Average	787,594	0.28950	500	362,623	427,734	119,598	300,239	48	450,000,000	
213	Branta Mulia	FIFO	104,965	-0.65174	850	25,243	51,871	10,095	1,867	341	69,000,000	
214	Century Textile Industry	Average	160,172	0.17289	9,150	54,100	47,017	41,654	(7,138)	9	80,000,000	
215	Citra Tubindo	FIFO	263,224	0.16678	525	66,660	268,621	152,538	50,948	51	893,025,000	
216	Dankos Laboratoria	Average	129,143	0.05003	8,000	20,619	129,910	61,179	18,157	2148	16,013,181	
217	Delta Jakarta	FIFO	38,850	-1.23417	475	13,971	24,949	11,837	(11,491)	138	125,945,820	
218	Duta Pertiwi Nusantara	FIFO	217,722	-0.12932	500	35,432	90,150	31,835	9,522	98	299,719,440	
219	Dynaplast	Average	66,048	1.96463	500	13,818	15,992	8,427	(637)	136	44,721,600	
220	Ekadharma Tape Industries	Average	326,149	0.14309	350	148,336	125,138	44,232	71,378	54	98,236,000	
221	Eratex Djaja Limited	Average	3,970,806	0.17550	245	1,117,379	1,107,626	361,658	5,476,610	-970	3,168,000,000	
222	Gajah Tunggal	Average	10,837,213	0.39895	12,950	7,197,500	4,127,461	872,798	72,268	1166	928,000,000	
223	Goodyear Indonesia	Average	438,026	1.06571	5,500	93,875	77,638	33,075	(8,729)	908	6,150,000	
224	Great River International	Average	6,932	1.00235	11,250	4,125	3,097	1,044	528	219	1,924,088,000	
225	Gudang Garam	Average	542,178	0.29246	550	272,162	81,008	204,216	27,605	13	388,080,000	
226	Hanjaya mandala Sampoerna	Average	542,271	-18.20631		48,053	12,195	11,988	(3,661)	16	306,000,000	
227	Igarjaya	Average	9,707,468	0.22937	240	2,864,001	5,109,847	1,385,500	7,160,930	-183	5,470,981,240	
228	Iki Indah Kabel Indonesia	Average	1,439,388	0.24950	1,100	562,090	1,008,585	303,186	1,958,744	-353	2,414,453,320	
229	Indah Kiat Pulp & paper Co	FIFO	80,749	-0.54884	125	36,753	24,957	21,648	35,391	-1033	30,177,600	
230	Indocement Tunggal Perkasa	FIFO	401,005	-0.51701	210	65,367	60,661	26,009	90,321	-1844	56,000,000	
231	Indospring	Average	49,124	-0.01721	500	8,493	30,062	9,752	(8,307)	198	101,200,000	
232	Intan Wijaya Internasional	Average	108,096	0.37978	650	74,683	37,507	11,705	45,598	-364	37,500,000	
233	Inter Delta	Average	117,642	0.02751	120	9,324	9,080	12,303	21,459	-59	150,000,000	
234	Jaya Pari Steel	FIFO	543,920	0.22284	220	202,033	575,318	313,195	(76,273)	-7	4,060,800,000	
235	Kabelindo	FIFO	116,491	0.19279	300	46,073	54,960	21,392	16,064	45	250,000,000	
236	Kalbe Farma	Average	29,195	1.39335		10,044	7,037	8,009	46,362	-1274	21,250,000	
237	Kurnia Kapuas Utama Glue	Average	36,590	-0.12439	625	5,996	6,630	1,785	5,584	-91	9,600,000	
238	Lion Mesh Prima	Average	502,612	0.15360	440	113,461	181,946	91,540	120,738	-30	766,584,000	
239	Lippo Industries	Average	54,253	1.23709	8,000	22,248	71,577	41,229	(3,073)	2204	22,400,000	
240	Mayora Indah	Average	7,360,334	0.22643	360	2,213,998	594,333	1,186,038	2,656,040	-629	1,335,702,240	
241	Merck	Average	1,430,988	0.14630	625	305,326	302,739	194,325	185,738	-213	266,769,900	
242	Metrodata Electrics	FIFO	71,644	-0.01603	875	18,251	16,234	8,161	22,198	-530	20,000,000	
243	Modern Photo Film Company	Average	729,218	-1.79458	240	83,583	138,423	77,639	6,482	61	66,951,391	
244	Multi Bintang Indonesia	Average	275,858	0.09937	24,000	60,105	232,391	86,445	12,149	4448	3,520,012	
245	Multipolar Corporation	Average	285,010	1.15006	220	29,668	90,873	49,391	(85,255)	68	1,871,768,000	



246	Nipress	FIFO		200,705	3,247,666	1,400	19,381	41,064	23,849	(3,824)	195	73,800,000
247	Pabrik Kertas Tjiwi Kimia	Average		1,647,131	0.09700	375	259,616	163,739	46,982	152,684	-28.2	193,200,000
248	Pan Brothers Tex	FIFO		1,043,158	0.20030	650	309,381	221,367	114,711	590,813	-441	532,000,000
249	Panasia Indosyntec	FIFO		226,772	0.09430	85	60,364	62,606	14,315	9,170	20	1,050,000,000
250	Polysindo Eka Perkasa	Average		131,553	0.19271	340	59,577	43,452	12,578	28,257	54	76,000,000
251	Prima Alloy Steel	Average		229,947	0.06598	46,000	28,174	138,440	103,124	(80,251)	25772	840,000
252	Procter & Gamble Indonesia	Average		3,628,104	0.12542	130	551,861	(326,938)	373,738	4,366,403	-1097	4,593,920,000
253	Roda Vivatex	FIFO		162,531	0.16157	900	48,098	36,790	26,861	22,494	90	268,800,000
254	Sari Husada	Average		1,430,366	-0.38233	385	290,183	62,003	90,258	6,371,612	-6017	1,149,435,000
255	Schering-plough Indonesia	FIFO		56,175	-0.55111	25,000	16,778	25,547	34,892	(1,657)	-1227	1,080,000
256	Semen Cibinong	Average		2,202,978	0.21315		685,798	1,393,432	611,877	335,374	578	593,152,000
257	Semen Gresik	Average		192,373	-0.17163	13,100	89,030	175,669	83,630	(537)	4871	13,000,000
258	Sepatu Bata	Average		479,702	0.43649	9,900	472,260	394,500	268,015	50,867	871	66,000,000
259	Sorini Corporation	Average		314,731	0.26287	160	117,211	117,592	48,185	377,004	1729	180,000,000
260	Squibb Indonesia	FIFO		76,958	-6.29529	10,500	36,737	61,568	45,858	29,597	-3740	972,000
261	Suba Indah	Average		68,839	-0.36903	50	4,971	25,482	22,621	6,494	-5	720,000,000
262	Supreme Cable Manufacturing Co	Average		373,362	-2.92558	5,200	11,931	232,879	63,627	18,925	716	183,523,172
263	Surya Toto Indonesia	Average		107,818	1.83514	500	31,591	12,954	13,103	(15,215)	521	26,400,000
264	Teijin Indonesia Fiber Co	Average		226,008	-2.67254	5,500	95,148	112,988	46,759	(118,500)	-1111	49,536,000
265	Tembaga Mulia Semanan	Average		46,234	2.82117	900	23,527	(12,325)	8,061	10,157	2388	205,583,400
266	Trafindo Perkasa	Average		678,040	-0.14305	2,100	82,673	85,510	22,729	59,449	386	3,367,000
267	Trias Sentosa	Average		337,277	-2.09576	55	167,526	189,917	34,256	399,612	-75	2,160,000,000
268	Ultra Jaya Milk Industry	FIFO		243,579	0.27496	275	103,146	79,948	29,518	15,753	16	385,117,600
269	Unggul Indah Cahaya	Average		1,276,116	-0.03454	1,050	395,855	327,635	71,394	145,114	77	383,331,363
270	Unilever Indonesia	Special ID		3,919,681	0.20139	295	997,909	1,273,851	334,338	936,710	4	1,545,600,000
271	United Tractor	Average		2,357,092	0.12171	15,200	438,466	1,810,301	1,019,589	7,812	1066	763,000,000
272	Voksel Electric	Average		332,291	1.60004	250	111,836	28,279	27,144	115,230	146	63,000,000

Appendix 1.5 Original Data for Year 2001											
No.	Company name	Method	CGS	PAI	price	Inventory	Gross Profit	S&A	OTHER	Earnings	#shares
273	Alumindo Perkasa	Average	414,253	-1.52376	185	10,771	9,189	8,816	33,001	-2095	21,450,000
274	Aqua Golden Mississippi	FIFO	694,647	-0.02384	54,000	9,129	99,005	31,925	(3,334)	3648	13,162,473
275	Argo Pantes	Average	1,038,445	0.16519	700	368,059	163,632	68,916	335,149	-633	264,705,000
276	Astra Graphia	Average	457,582	1.18996	525	162,571	255,698	200,799	25,535	20	1,306,875,000
277	Astra Internasional	Average	24,465,854	0.09728	3,900	3,028,927	5,656,869	2,980,008	736,832	333	2,540,292,178
278	BAT Indonesia	Average	490,571	0.08011	3,800	109,017	175,253	134,958	15,102	374	4,648,200
279	Bayer Indonesia	Average	180,660	1.18946	6,050	48,795	76,101	36,420	170	2792	3,500,000
280	Berlina	Average	944,438	0.18338	825	260,883	390,446	131,816	124,498	158	450,000,000
281	Branta Mulia	FIFO	137,919	-0.70125	1,600	25,306	73,751	14,901	2,803	526	69,000,000
282	Century Textile Industry	Average	341,456	0.08872	7,900	66,296	65,270	50,835	(7,250)	41	80,000,000
283	Citra Tubindo	FIFO	420,380	0.14470	725	82,156	343,244	225,871	34,407	66	893,025,000
284	Dankos Laboratoria	Average	120,143	0.18011	10,000	33,052	149,593	79,393	4,770	2785	16,013,181
285	Delta Djakarta	FIFO	54,816	-0.75237	500	11,035	24,346	14,500	(4,822)	86	125,945,820
286	Duta Periwati Nusantara	FIFO	278,795	-0.07714	1,175	34,570	104,846	34,549	15,947	111	299,719,440
287	Dynaplast	Average	66,159	2.07064	575	6,660	14,185	9,090	(2,748)	134	44,721,600
288	Ekadharma Tape Industries	Average	399,351	0.12869	500	134,613	101,342	55,120	33,736	67	98,236,000
289	Eratex Djaja Limited	Average	4,656,310	0.16614	265	1,182,990	1,085,810	424,030	2,265,618	-390	3,168,000,000
290	Gajah Tunggal	Average	13,519,452	0.40227	10,900	9,103,779	4,450,998	1,061,021	404,885	1085	1,924,088,000
291	Goodyear Indonesia	Average	545,630	1.06432	5,200	75,630	47,415	40,226	(10,101)	286	41,000,000
292	Great River International	Average	9,993	1.00533	4,250	5,294	4,072	1,419	434,332	212	4,500,000,000
293	Gudang Garam	Average	535,312	0.27486	465	255,284	111,297	172,897	17,184	26	388,080,000
294	Hanjaya mandala Sampoerna	Average	657,806	6.58101		52,374	43,254	21,750	7,922	52	306,000,000
295	Igaraya	Average	9,405,736	0.16127	155	1,889,719	2,036,637	1,286,542	3,309,234	-83	5,470,892,941
296	Iki Indah Kabel Indonesia	Average	2,370,743	0.24096	900	828,045	1,082,668	410,602	778,116	-17	3,681,223,519
297	Indah Kiat Pulp & paper Co	FIFO	96,268	-0.26436	200	23,724	5,736	20,546	(21,428)	141	30,177,600
298	Indocement Tunggal Perkasa	FIFO	587,716	-1.01901	100	43,852	60,910	32,583	7,365	-53	1,120,000,000
299	Indospring	Average	62,571	-0.20013	525	7,524	37,818	10,893	(3,152)	175	126,500,000
300	Intan Wijaya Internasional	Average	144,954	0.33689	575	81,166	47,001	13,540	23,122	169	37,500,000
301	Inter Delta	Average	78,573	0.10998	145	17,958	16,315	11,007	(10,118)	66	150,000,000
302	Jaya Pari Steel	FIFO	1,059,022	0.21754	405	340,477	987,477	651,054	228,477	8	4,060,800,000
303	Kabelindo	FIFO	136,159	0.15971	245	46,043	49,677	29,704	9,652	19	250,000,000
304	Kalbe Fama	Average	33,014	1.59014		15,569	5,134	6,837	11,508	-640	21,250,000
305	Kurnia Kapuas Utama Glue	Average	44,030	-0.19940	1,125	8,249	6,596	2,228	2,670	100	9,600,000
306	Lion Mesh Prima	Average	643,532	0.09384	525	104,526	190,445	89,750	55,576	41	766,584,000
307	Lippo Industries	Average	88,254	1.51252	15,250	37,881	135,819	65,550	(10,007)	2518	22,400,000
308	Mayora Indah	Average	5,746,102	0.21894	210	1,671,572	1,642,240	1,370,734	1,049,388	-94	1,335,702,240
309	Merck	Average	1,619,032	0.12718	750	298,330	293,964	221,426	64,168	6	266,769,900
310	Metrodata Electrics	FIFO	81,150	0.05071	825	20,164	19,433	8,252	15,219	-161	20,000,000
311	Modern Photo Film Company	Average	986,705	-1.38266	205	75,447	152,428	101,176	(73,182)	53	1,991,854,173
312	Multi Bintang Indonesia	Average	315,399	-0.08403	35,000	62,420	254,522	108,042	(16,826)	5403	21,070,000
313	Multipolar Corporation	Average	508,855	1.47298	345	86,869	122,783	59,913	(99,743)	84	1,871,768,000



314	Nipress	FIFO	239,318	2,70910	1,150	15,829	48,660	30,440	(7,037)	236	76,800,000
315	Pabrik Kertas Tjiwi Kimia	Average	1,644,632	0.07425	300	256,011	116,895	45,700	66,029	7.6	930,000,000
316	Pan Brothers Tex	FIFO	1,131,681	0.23261	150	395,173	177,386	103,683	194,623	-77	532,000,000
317	Panasia Indosyntec	FIFO	282,304	0.09841	130	54,537	47,106	19,939	16,892	8	1,050,000,000
318	Polysindo Eka Perkasa	Average	146,144	0.09091	270	60,859	33,702	11,575	21,754	13	76,000,000
319	Prima Alloy Steel	Average	418,397	-0.15532		46,244	106,423	76,981	2,076	6218	2,800,000
320	Procter & Gamble Indonesia	Average	4,187,990	0.13168	35	648,033	(175,926)	568,465	(1,275,830)	71	4,393,920,000
321	Roda Vivatex	FIFO	196,071	0.14496	1,350	52,135	19,109	23,251	(140,840)	26	268,800,000
322	Sari Husada	Average	1,771,215	-0.45065	325	219,720	33,353	190,149	(1,127,838)	152	7,662,900,000
323	Schering-plough Indonesia	FIFO	73,217	-0.04454	13,000	18,893	28,341	32,775	5,274	-2678	3,600,000
324	Semen Cibinong	Average	2,860,884	0.19222	10,300	769,957	1,798,318	816,577	509,848	535	593,152,000
325	Semen Gresik	Average	218,872	-0.18986	22,000	89,193	189,016	92,879	3,011	4882	13,000,000
326	Sepatu Bata	Average	334,430	0.45880	9,400	392,531	379,556	198,114	37,648	1718	66,000,000
327	Sorini Corporation	Average	380,671	0.23295	1,025	124,117	158,063	68,955	(780,549)	5019	180,000,000
328	Squibb Indonesia	FIFO	93,229	-5.60636	10,500	22,015	81,944	57,435	9,240	1397	972,000
329	Suba Indah	Average	103,222	-0.14475	40	8,508	35,894	45,625	(16,633)	2	2,160,000,000
330	Supreme Cable Manufacturing Co	Average	577,314	-0.25480	12,000	102,492	355,628	88,076	(4,962)	1225	183,523,172
331	Surya Toto Indonesia	Average	252,053	3.44462		12,901	20,419	23,760	(17,143)	220	56,100,000
332	Teijin Indonesia Fiber Co	Average	271,673	-1.21063	5,500	107,232	145,947	71,215	(45,449)	312	49,536,000
333	Tembaga Mulia Semanan	Average	71,817	6.18347	1,000	21,560	(8,759)	8,733	78,500	66	205,583,400
334	Trafindo Perkasa	Average	1,039,916	-0.04264	2,750	124,112	82,160	28,418	24,390	1056	18,367,000
335	Trias Sentosa	Average	544,428	-3.93651	170	166,638	219,641	46,108	162,735	138	2,160,000,000
336	Ultra Jaya Milk Industry	FIFO	380,185	0.19578	775	101,132	98,218	42,037	29,427	16	1,925,588,000
337	Unggul Indah Cahaya	Average	1,479,695	0.16832	1,525	600,780	400,573	78,976	105,874	49	383,331,363
338	Unilever Indonesia	Special ID	5,638,475	0.16307	550	1,107,784	1,419,921	486,081	574,546	154	1,545,600,000
339	United Tractor	Average	3,256,098	0.05901	22,800	301,318	2,756,513	1,612,913	(114,656)	1162	763,000,000
340	Voksel Electric	Average	402,628	1.66220	135	97,140	30,142	38,366	37,694	-153	63,000,000

Appendix 1.6

## Original Data for Year 2002

No.	Company name	Method	CGS	PAI	price	Inventory	Gross Profit	S&A	OTHER	Earnings	#shares
341	Alumindo Perkasa	Average	228,586	-15.18766	105	8,577	10,188	7,052	(71,669)	-47	21,450,000
342	Aqua Golden Mississippi	FIFO	897,846	-0.02456	38,000	7,561	124,053	39,228	(12,119)	5023	13,162,473
343	Argo Pantes	Average	976,267	0.19408	700	337,625	57,197	68,143	(239,543)	2062	264,705,000
344	Astra Graphia	Average	572,663	1.29895	295	102,516	256,825	194,394	(44,154)	55	1,315,871,000
345	Astra Internasional	Average	24,059,817	0.08372	2,600	2,590,775	6,625,216	3,814,649	(2,724,618)	1394	2,608,068,910
346	BAT Indonesia	Average	793,546	0.01992	4,206	104,367	296,356	198,834	(131,000)	306	4,648,200
347	Bayer Indonesia	Average	200,082	1.26463	5,100	57,018	60,507	36,065	(2,117)	1714	3,500,000
348	Berlina	Average	985,897	0.14413	550	223,042	318,471	184,666	(36,439)	244	450,000,000
349	Branta Mulia	FIFO	150,833	-0.79399	1,400	29,082	75,078	19,299	6,825	434	69,000,000
350	Century Textile Industry	Average	327,411	0.14629	8,050	88,240	48,524	48,311	(7,314)	149	80,000,000
351	Citra Tubindo	FIFO	547,510	0.13193	500	95,838	517,912	321,888	68,175	104	893,025,000
352	Dankos Laboratoria	Average	140,841	0.13938	9,000	32,136	136,796	78,848	(4,648)	2800	16,013,181
353	Delta Djakarta	FIFO	40,449	-1.36835	200	12,630	17,853	11,903	3,244	21	125,945,820
354	Duta Pertiwi Nusantara	FIFO	312,688	-0.06788	1,000	36,000	133,526	45,674	7,654	155	302,594,440
355	Dynaplast	Average	60,397	2.00652	485	9,327	15,052	9,581	(3,879)	140	44,721,600
356	Ekadharma Tape Industries	Average	320,662	0.12973	200	129,730	43,141	57,163	(21,210)	44	98,236,000
357	Eratex Daja Limited	Average	4,712,962	0.13621		1,013,196	848,140	496,814	(1,463,190)	1202	3,618,000,000
358	Gajah Tunggal	Average	16,108,007	0.36793	7,500	9,381,700	4,831,077	1,376,047	448,318	1085	192,408,800
359	Goodyear Indonesia	Average	499,826	1.05680	4,500	81,928	63,421	37,839	2,660	371	41,000,000
360	Great River International	Average	10,540,856	-0.32309	2,950	5,333	4,587,808	1,860,313	160,693	371	4,500,000,000
361	Gudang Garam	Average	276,748	0.44174	575	270,016	147,027	144,718	687,045	2384	388,080,000
362	Hanjaya mandala Sampoerna	Average	527,124	2.77053		51,027	33,195	21,830	11,100	-15	306,000,000
363	Igarjaya	Average	9,209,454	0.21371	300	2,579,359	1,510,065	970,679	3,196,533	-433	5,470,982,941
364	Iki Indah Kabel Indonesia	Average	2,648,367	0.23777	825	875,872	1,299,915	369,971	(511,082)	283	3,681,223,519
365	Indah Kiat Pulp & paper Co	FIFO	63,800	0.06702	205	21,526	7,885	19,738	(3,397)	-633	30,177,600
366	Indocement Tunggal Perkasa	FIFO	91,063	1.40982	50	16,943	(4,461)	9,912	1,943	-38	1,120,000,000
367	Indospring	Average	56,951	-0.54775	270	12,094	28,020	12,802	8,337	29	168,666,667
368	Intan Wijaya Internasional	Average	173,024	0.27050	750	76,253	40,574	17,349	(18,920)	824	37,500,000
369	Inter Delta	Average	218,974	0.10122	140	32,249	34,063	13,364	(2,191)	106	150,000,000
370	Jaya Pari Steel	FIFO	1,202,975	0.19421	310	330,208	1,358,827	844,420	76,486	66	4,060,800,000
371	Kabelindo	FIFO	129,266	0.12561	90	40,272	42,886	26,776	16,999	-7	250,000,000
372	Kalbe Farma	Average	29,834	1.67705		14,324	4,872	6,279	(21,874)	189	21,250,000
373	Kumia Kapuas Utama Glue	Average	53,344	-0.14450	350	7,589	4,119	3,330	(1,556)	154	9,600,000
374	Lion Mesh Prima	Average	724,448	0.05394	365	88,223	274,109	122,309	(16,565)	156	766,584,000
375	Lippo Industries	Average	88,546	1.42053	9,300	46,920	132,372	81,219	(3,301)	1671	22,400,000
376	Mayora Indah	Average	5,493,661	0.23462	285	1,742,156	1,473,894	876,892	1,258,281	-300	1,335,702,240
377	Merck	Average	169,987	0.62754	445	346,026	319,727	209,997	2,865	86	266,769,900
378	Metrodata Electrics	FIFO	102,650	-0.08802	900	21,702	20,448	10,304	(1,991)	399	20,000,000
379	Modern Photo Film Company	Average	859,685	-1.20011	80	49,721	135,118	109,002	52,690	-19	2,020,689,173
380	Multi Bintang Indonesia	Average	285,962	-0.08505	30,000	59,628	256,432	134,926	(1,874)	4073	21,070,000
381	Multipolar Corporation	Average	399,186	1.31658	205	82,043	102,255	65,200	1,096	17	1,871,768,000

382	Nipress	FIFO	240,748	4,68403	305	30,006	59,370	32,886	3,815	210	76,800,000
383	Pabrik Kertas Tjiwi Kimia	Average	1,548,731	0.03786	165	202,344	30,035	62,708	18,703	-29.6	930,000,000
384	Pan Brothers Tex	FIFO	1,138,231	0.20172	200	336,103	25,896	100,037	(154,616)	191	532,000,000
385	Panasia Indosyntec	FIFO	308,799	0.10010	75	55,876	81,787	30,036	(13,800)	18	1,050,000,000
386	Polysindo Eka Perkasa	Average	178,770	0.22546	210	58,143	13,701	12,587	(53)	301	76,000,000
387	Prima Alloy Steel	Average	303,870	-0.48990		6,105	125,892	117,693	4,775	1684	2,800,000
388	Procter & Gamble Indonesia	Average	3,999,511	0.11075	25	518,660	(203,576)	518,218	(1,178,674)	109	4,393,920,000
389	Roda Vivatex	FIFO	196,699	0.14931	1,000	48,473	160	1,969	(3,391)	-34	268,800,000
390	San Husada	Average	1,977,100	-0.48217	150	210,665	1,832	212,560	(651,854)	66	7,662,900,000
391	Schering-plough Indonesia	FIFO	69,690	-0.16636	6,750	13,948	40,235	35,174	5,521	-291	3,600,000
392	Semen Cibinong	Average	3,536,030	0.17901	7,900	853,838	1,641,513	881,148	424,367	331	593,152,000
393	Semen Gresik	Average	222,817	-0.21208	13,500	82,828	188,212	110,726	5,718	3720	13,000,000
394	Sepatu Bata	Average	338,023	0.46022	8,800	392,566	405,832	236,624	(2,917)	1791	66,000,000
395	Sorini Corporation	Average	424,776	0.19371	390	121,815	108,656	67,553	(25,901)	145	180,000,000
396	Squibb Indonesia	FIFO	99,946	-3.86616	9,800	23,888	105,677	66,442	7,943	1944	972,000
397	Suba Indah	Average	80,231	-5.89388	30	19,766	32,404	36,678	40,645	-83	2,160,000,000
398	Supreme Cable Manufacturing Co	Average	583,232	-0.21865	10,000	106,022	438,619	125,842	(59,918)	941	188,352,433
399	Surya Toto Indonesia	Average	250,059	4.73011		20,528	31,555	12,297	791	215	56,100,000
400	Teijin Indonesia Fiber Co	Average	280,340	-0.46797	5,500	112,975	134,363	61,839	(3,696)	1390	49,536,000
401	Tembaga Mulia Semanan	Average	472,402	-0.05497	1,000	88,359	71,155	36,235	(43,279)	298	205,583,400
402	Tratindo Perkasa	Average	913,366	-0.01314	2,600	141,408	39,737	34,658	(36,011)	1147	18,367,000
403	Trias Sentosa	Average	570,744	-1.15826	165	153,250	210,893	52,301	13,800	102	2,160,000,000
404	Ultra Jaya Milk Industry	FIFO	278,154	0.27080		103,295	130,640	66,268	40,645	10	1,925,588,000
405	Unggul Indah Cahaya	Average	1,237,250	0.05762	1,100	459,548	303,630	83,267	57,375	209	383,331,363
406	Unilever Indonesia	Special ID	5,742,914	0.14459	295	978,261	1,138,973	455,023	(206,604)	194	1,545,600,000
407	United Tractor	Average	3,646,380	0.07340	18,000	383,902	3,368,801	2,048,646	(64,349)	1282	763,000,000
408	Voksel Electric	Average	478,412	2.18183	110	95,044	37,651	44,143	(25,742)	86	126,000,000

Appendix 2.1 Data Excluded from Sample for Year 1998-2002

No.	Company name	year	Method	CGS	PAI	price	Inventory	Gross Profit	S&A	OTHER	Earnings	#shares
1	Alumindo Perkasa	1997	Average	33,230	0.20059	---	12,223	4,925	6,624	22,487	6	21,450,000
2	Aqua Golden Mississippi	1997	FIFO	186,365	-139.97201	4,900	3,885	34,468	22,986	(4,843)	591	13,162,473
3	Argo Pantes	1997	Average	429,854	0.03596	675	188,928	145,035	44,162	466,310	-1381	264,705,000
4	Astra Graphia	1997	Average	640,641	1.51128	1,200	172,895	224,598	126,457	147,210	-379	130,687,500
5	Astra Internasional	1997	Average	10,917,326	0.15498	1,575	2,066,561	4,954,730	3,216,360	1,667,160	-120	2,325,662,474
6	BAT Indonesia	1997	Average	276,535	0.15524	2,500	64,333	78,585	79,322	(4,791)	106	4,640,200
7	Bayer Indonesia	1997	Average	53,691	1.74308	1,500	13,513	14,916	8,674	2,485	215	3,500,000
8	Berlina	1997	Average	233,921	0.34335	675	139,459	107,671	40,266	48,383	49	450,000,000
9	Branta Mulia	1997	FIFO	55,059	-0.22318	900	17,144	20,610	6,650	8,935	110	23,000,000
10	Century Textile Industry	1997	Average	56,649	0.01219	20,600	27,190	57,996	16,180	(4,034)	1027	45,000,000
11	Citra Tubindo	1997	FIFO	73,901	0.13807	475	26,491	83,248	52,390	29,455	7	125,575,000
12	Dankos Laboratoria	1997	Average	38,145	0.18997	4,400	14,653	44,037	33,328	(12,615)	1414	2,940,819
13	Delta Djakarta	1997	FIFO	25,798	-1.24174	600	5,707	20,360	7,640	(3,080)	302	34,600,500
14	Duta Pertiwi Nusantara	1997	FIFO	90,625	0.12933	600	19,997	34,253	17,425	(274)	104	299,719,440
15	Dynaplast	1997	Average	29,001	2.40122	1,175	6,536	11,754	4,874	4,547	209	11,180,400
16	Ekadharma Tape Industries	1997	Average	133,203	1.35603	1,600	56,234	57,377	18,074	64,009	-503	49,118,000
17	Eratex Djaja Limited	1997	Average	1,281,697	1.91073	150	563,568	421,091	123,080	589,524	-251	3,168,000,000
18	Gajah Tunggal	1997	Average	5,610,554	0.36371	11,900	3,252,588	1,907,355	543,098	78,802	471	900,000,000
19	Goodyear Indonesia	1997	Average	234,602	1.23509	1,600	45,510	48,453	20,249	19,605	130	6,150,000
20	Great River International	1997	Average	2,122,158	0.33436	5,225	1,278,015	145,035	373,831	561,800	23	1,924,088,000
21	Gudang Garam	1997	Average	150,526	0.49963	425	212,013	145,481	100,749	58,466	-32	388,080,000
22	Hanjaya mandala Sampoerna	1997	Average	210,969	1.32537	---	61,710	24,266	15,212	44,983	55	36,000,000
23	Igarjaya	1997	Average	1,520,252	0.30468	2,200	921,073	1,428,187	321,712	712,444	74	4,629,473,517
24	Iki Indah Kabel Indonesia	1997	Average	903,786	0.20728	2,750	254,926	668,375	138,316	907,666	-156	2,414,450,320
25	Indah Kiat Pulp & paper Co	1997	FIFO	63,321	-0.37445	400	18,599	16,946	15,713	15,584	-476	30,177,600
26	Indocement Tunggul Perkasa	1997	FIFO	104,920	-0.25251	---	35,850	15,328	7,848	32,600	-449	56,000,000
27	Indospring	1997	Average	37,234	-0.63501	1,025	57,002	20,827	12,274	(22,596)	496	44,000,000
28	Intan Wijaya Internasional	1997	Average	57,844	0.25907	1,000	71,463	24,496	8,755	12,485	71	37,500,000
29	Inter Delta	1997	Average	51,632	-7.15800	500	51,238	4,155	5,092	2,440	-90	75,000,000
30	Jaya Pari Steel	1997	FIFO	237,943	0.23535	525	96,541	260,905	164,539	176,316	-190	432,000
31	Kabelindo	1997	FIFO	64,708	0.12422	625	23,307	28,320	13,335	19,476	-77	100,000,000
32	Kalbe Farma	1997	Average	45,322	0.14101	---	14,129	27,676	10,614	37,330	610	15,250,000
33	Kurnia Kapuas Utama Glue	1997	Average	27,821	2.89594	900	6,889	6,814	2,419	3,386	74	9,600,000
34	Lion Mesh Prima	1997	Average	274,534	0.11748	675	49,184	84,531	52,104	8,299	27	766,584,000
35	Lippo Industries	1997	Average	22,654	1.04508	19,000	12,638	46,871	30,906	2,091	1660	1,680,000
36	Mayora Indah	1997	Average	1,354,119	0.17258	2,025	537,876	666,466	225,550	92,127	264	1,321,211,083
37	Merck	1997	Average	670,966	0.26667	850	255,449	209,205	114,210	113,177	-194	266,769,600
38	Metrodata Electrics	1997	FIFO	28,571	1.83331	525	11,454	3,428	2,420	22,471	-1073	20,000,000
39	Modern Photo Film Company	1997	Average	383,700	0.10167	1,400	74,311	76,593	37,689	16,985	675	18,351,026

40	Multi Bintang Indonesia	1997	Average	120,515	2,02467	40,000	30,887	125,522	49,897	20,005	1784	3,520,012
41	Multipolar Corporation	1997	Average	1,638,843	0.13667	100	269,015	737,309	665,848	229,192	-94	1,782,768,000
42	Nipress	1997	FIFO	41,574	1.87550	375	9,567	9,206	9,070	(14,943)	198	76,800,000
43	Pabrik Kertas Tjiwi Kimia	1997	Average	213,870	-3.18197	875	98,627	52,750	9,324	46,650	-17	38,640,000
44	Pan Brothers Tex	1997	FIFO	427,059	0.35909	225	261,356	99,434	42,865	265,352	-399	532,000,000
45	Panasia Indosyntec	1997	FIFO	89,050	-1.64943	450	22,087	21,902	10,276	(11,000)	55	52,500,000
46	Polysindo Eka Perkasa	1997	Average	47,659	0.53452	425	77,526	23,474	6,472	26,626	-127	76,000,000
47	Prima Alloy Steel	1997	Average	117,474	3.56656	19,000	22,798	73,113	55,234	5,134	2679	840,000
48	Procter & Gamble Indonesia	1997	Average	1,539,748	0.09021	1,000	186,043	672,582	113,012	(539,536)	95	2,208,000,000
49	Roda Vivatex	1997	FIFO	129,564	-3.71880	650	33,373	31,272	13,376	406	90	268,800,000
50	Sari Husada	1997	Average	590,973	0.17790	400	135,480	246,337	62,305	452,482	-467	1,149,435,000
51	Scheiring-plough Indonesia	1997	FIFO	23,918	1.10247	9,000	7,597	21,202	14,321	(2,847)	1937	1,080,000
52	Semen Cibinong	1997	Average	936,232	0.19184	5,400	264,937	703,809	319,006	109,237	392	593,152,000
53	Semen Gresik	1997	Average	75,764	2.33104	1,600	42,894	52,556	39,961	4,572	374	4,550,000
54	Sepatu Bata	1997	Average	166,591	0.43302	29,500	175,379	165,477	111,556	28,715	848	6,600,000
55	Sorini Corporation	1997	Average	100,576	0.27329	300	48,149	38,157	21,011	111,822	-503	180,000,000
56	Squibb Indonesia	1997	FIFO	27,216	0.07211	7,200	10,325	35,795	18,603	10,569	-68	972,000
57	Suba Indah	1997	Average	26,827	-0.94005	525	8,210	1,666	23,591	(21,704)	-24	22,500,000
58	Supreme Cable Manufacturing Co	1997	Average	123,126	-0.12240	4,400	21,209	102,675	42,260	8,556	625	119,355,500
59	Surya Toto Indonesia	1997	Average	47,760	-0.81590	---	34,636	11,990	11,126	10,613	-126	24,000,000
60	Teijin Indonesia Fiber Co	1997	Average	83,592	-3.73019	2,350	56,095	70,917	23,102	(21,566)	530	33,620,625
61	Tembaga Mulia Seimanan	1997	Average	287,364	0.06665	250	122,015	40,637	38,385	311,275	-1484	205,583,400
62	Trafindo Perkasa	1997	Average	310,725	-0.12938	500	101,496	25,244	9,484	31,040	-1479	3,367,000
63	Trias Sentosa	1997	Average	155,733	0.30109	250	137,092	50,839	14,199	61,314	-86	288,000,000
64	Ultra Jaya Milk Industry	1997	FIFO	128,101	-1.28169	1,100	70,001	56,946	21,143	33,690	7	220,067,200
65	Unggul Indah Cahaya	1997	Average	325,900	2.20159	1,700	141,959	128,751	31,445	88,258	22	290,400,056
66	Unilever Indonesia	1997	Special ID	1,944,588	0.21682	1,250	739,082	563,954	213,572	605,313	-2160	138,000,000
67	United Tractor	1997	Average	1,027,732	0.12622	44,000	200,747	808,046	602,089	(39,913)	2251	11,451,225
68	Voksel Electric	1997	Average	198,770	0.18678	225	52,287	21,401	21,220	70,295	-552	63,000,000
69	Alumindo Perkasa	1998	Average	20,670	-0.37060	100	6,634	9,638	8,350	(74,292)	-2928	21,450,000
70	Bayer Indonesia Tbk	1998	Average	80,482	-0.31677	8,000	25,110	50,730	15,088	1,414	2256	3,500,000
71	Iki Indah Kabel Indonesia Tbk	1998	Average	973,973	0.29364	3,100	454,833	615,906	178,941	1,498	-263	2,414,450,320
72	Kabelindo Tbk	1998	FIFO	136,160	0.19636	1,025	49,941	122,197	22,875	48,678	353	100,000,000
73	Metrodata Electrics Tbk	1998	FIFO	53,049	0.02442	500	16,672	21,082	5,866	39,144	-903	20,000,000
74	Trafindo Perkasa Tbk	1998	Average	301,913	0.07191	975	67,863	112,901	16,460	86,724	337	3,367,000
75	Bayer Indonesia Tbk	1999	Average	161,990	0.01676	6,150	44,471	114,488	41,537	1,414	5073	3,500,000
76	Iki Indah Kabel Indonesia Tbk	1999	Average	1,123,913	0.27330	3,100	464,544	635,053	284,112	(385,348)	216	2,414,453,320
77	Kabelindo Tbk	1999	FIFO	101,003	-0.04353	475	41,860	57,593	17,346	18,803	55	250,000,000
78	Metrodata Electrics Tbk	1999	FIFO	56,799	-0.05394	1,075	15,344	20,002	7,142	3,130	285	20,000,000
79	Panasia Indosyntec Tbk	1999	FIFO	170,664	-0.32843	175	40,479	58,530	11,612	(1,990)	275	1,050,000,000
80	Trafindo Perkasa Tbk	1999	Average	474,967	0.00000	2,750	82,673	44,170	20,303	20,864	259	3,367,000

81	Iki Indah Kabel Indonesia Tbk	2000	Average	1,439,388	0.27422	1,100	562,090	1,008,585	303,186	1,958,744	-353	2,414,453,320
82	Metrodata Electrics Tbk	2000	FIFO	71,644	-0.02743	875	18,251	16,234	8,161	22,198	-530	20,000,000
83	Panasia Indosyntec Tbk	2000	FIFO	226,772	-0.17340	85	60,364	62,606	14,315	9,170	20	1,050,000,000
84	Aqua Golden Mississippi Tbk	2001	FIFO	694,647	-0.23095	54,000	9,129	99,005	31,925	(3,334)	3648	13,162,473
85	Iki Indah Kabel Indonesia Tbk	2001	Average	2,370,743	0.25416	900	828,045	1,082,668	410,602	778,116	-17	3,681,223,519
86	Metrodata Electrics Tbk	2001	FIFO	81,150	-0.01932	825	20,164	19,433	8,252	15,219	-161	20,000,000
87	Semen Gresik (Porsiro) Tbk	2001	Average	218,872	-3.51758	22,000	89,193	189,016	92,879	3,011	4882	13,000,000
88	Iki Indah Kabel Indonesia Tbk	2002	Average	2,648,367	0.18733	825	875,872	1,299,915	369,971	(511,082)	283	3,681,223,519
89	Metrodata Electrics Tbk	2002	FIFO	102,650	-0.09079	900	21,702	20,448	10,304	(1,991)	399	20,000,000
90	Procter & Gamble Indonesia Tbk	2002	Average	3,999,511	0.09199	25	518,660	(203,576)	518,218	(1,178,674)	109	4,393,920,000
91	Trafindo Perkasa Tbk	2002	Average	913,366	0.06735	2,600	141,408	39,737	34,658	(36,011)	1147	18,367,000





1998

No.	Company name	Method	CGS	PAI	price	Inventory	Gross Profit	S&A	OTHER	Earnings	#shares
1	Aqua Golden Mississippi	FIFO	304,246	-0.03148	2,700	4,575	55,799	29,610	643	1445	13,162,473
2	Argo Pantes	Average	964,201	0.07776	400	273,430	546,795	101,124	1,169	-2953	264,705,000
3	Astra Graphia	Average	822,345	0.18779	650	192,136	476,142	180,966	312,658	-244	130,687,500
4	Astra Internasional	Average	7,241	1.20803	2,525	2,007	2,966	1,265	3,491	-1586	2,325,662,474
5	BAT Indonesia	Average	440,081	0.08825	--	94,189	116,383	107,771	23,616	-434	4,648,200
6	Berlina	Average	533,753	0.23986	175	193,538	353,356	78,288	504,861	291	450,000,000
7	Branta Mulia	FIFO	57,090	-0.67685	250	13,860	33,032	7,278	16,686	85	69,000,000
8	Century Textile Industry	Average	175,271	0.16199	20,600	51,594	140,098	38,635	(15,513)	341	45,000,000
9	Citra Tubindo	FIFO	115,087	0.19741	950	36,904	99,602	64,965	112,022	-98	127,575,000
10	Dankos Laboratoria	Average	84,663	0.12008	2,025	17,713	71,525	51,532	4,767	1164	2,940,819
11	Delta Djakarta	FIFO	37,687	-0.35956	600	8,597	59,904	10,660	1,613	858	80,734,500
12	Duta Pertiwi Nusantara	FIFO	110,613	-0.03730	675	18,564	39,300	12,937	3,990	38	299,719,440
13	Dynaplast	Average	81,291	2.90105	1,525	6,159	22,790	10,487	1,251	483	11,180,400
14	Ekadharma Tape Industries	Average	299,745	0.16538	450	130,211	179,707	47,187	110,327	223	49,118,000
15	Eratex Djaja Limited	Average	2,471,975	0.18653	725	792,783	1,170,954	262,259	1,462,125	-65	3,168,000,000
16	Gajah Tunggal	Average	7,352,018	0.32041	14,200	3,467,864	2,621,153	652,499	409,869	564	900,000,000
17	Goodyear Indonesia	Average	411,243	1.13773	2,300	70,817	108,564	27,405	9,347	1227	6,150,000
18	Great River International	Average	3,104	1.00254	11,200	1,527	1,544	469,291	1,234	-106	1,924,088,000
19	Gudang Garam	Average	296,756	0.39118	250	225,959	153,476	151,902	91,821	-153	388,080,000
20	Hanjaya mandala Sampoerna	Average	369,009	8.30205	--	35,289	25,276	18,091	(34,901)	-60	306,000,000
21	Igarjaya	Average	3,939,790	0.22549	3,375	1,228,300	4,282,805	821,896	1,589,122	122	4,656,182,918
22	Indah Kiat Pulp & paper Co	FIFO	74,933	-0.03771	1,000	29,345	24,693	18,043	52,899	-1073	30,177,600
23	Indocement Tungal Perkasa	FIFO	58,880	2.48428	--	32,068	3,916	5,841	51,944	-1092	56,000,000
24	Indospring	Average	67,565	-0.70860	550	4,432	22,730	10,338	14,907	396	101,200,000
25	Intan Wijaya Internasional	Average	27,711	0.73495	350	81,270	8,563	7,413	23,537	-410	37,500,000
26	Inter Delta	Average	90,055	0.22697	150	32,453	27,783	13,932	41,608	-383	75,000,000
27	Jaya Pari Steel	FIFO	259,246	0.23734	1,500	130,617	365,856	194,497	760,203	-234	432,000,000
28	Kalbe Farma	Average	25,821	1.81880	--	14,756	18,469	9,406	(23,484)	-1180	15,250,000
29	Kumia Kapuas Utama Glue	Average	15,338	-1.32605	900	6,012	9,062	6,478	10,735	-665	9,600,000
30	Lion Mesh Prima	Average	364,418	0.13696	450	72,112	81,782	86,266	9,930	39	766,584,000
31	Lippo Industries	Average	40,885	1.14486	13,000	14,281	53,359	32,399	10,036	1211	1,680,000
32	Mayora Indah	Average	2,799,984	0.32687	2,600	1,442,131	1,682,892	616,713	285,882	212	1,325,050,789
33	Merck	Average	1,495,422	0.15816	700	337,411	450,967	117,266	386,251	-130	266,769,600
34	Modern Photo Film Company	Average	406,476	-8.66833	750	30,246	87,815	48,660	115,500	-137	38,802,354
35	Multi Bintang Indonesia	Average	212,405	30.99223	40,000	56,450	87,366	44,555	12,894	832	3,520,012
36	Multipolar Corporation	Average	1,520,821	-3.28851	150	275,937	852,553	781,577	461,737	-124	1,782,768,000
37	Nipress	FIFO	110,571	1.53693	350	13,320	47,115	13,722	12,806	319	76,800,000

38	Pabrik Kertas Tjiwi Kimia	Average	574,662	0.51291	800	672,988	98,326	17,714	43,674	511	38,640,000
39	Pan Brothers Tex	FIFO	1,000,445	0.21897	225	329,821	216,985	146,476	543,397	-856	532,000,000
40	Panasia Indosyntec	FIFO	157,301	-0.04520	425	22,542	41,993	8,467	15,006	133	52,500,000
41	Polysindo Eka Perkasa	Average	78,138	0.22549	200	82,477	94,608	11,604	102,266	-176	76,000,000
42	Prima Alloy Steel	Average	121,112	0.13386	30,400	59,728	86,316	83,325	(17,092)	4555	840,000
43	Procter & Gamble Indonesia	Average	2,986,232	0.11007	575	394,680	695,545	572,989	(1,969,869)	-446	4,393,920,000
44	Roda Vivatex	FIFO	180,453	0.17960	850	49,330	117,632	35,951	27,337	158	268,800,000
45	Sari Husada	Average	811,383	-0.69105	850	265,379	68,890	32,761	2,313,855	-1627	1,149,435,000
46	Schering-plough Indonesia	FIFO	40,291	-0.30989	11,000	9,827	21,342	27,244	5,819	-183	1,080,000
47	Semen Cibinong	Average	1,276,776	0.29858	12,700	596,952	1,038,025	407,315	328,760	374	593,152,000
48	Semen Gresik	Average	85,547	-0.31175	1,575	53,457	95,801	53,794	2,752	1969	4,550,000
49	Sepatu Bata	Average	381,335	-0.15137	18,000	44,056	236,208	169,347	35,055	250	6,600,000
50	Sorini Corporation	Average	273,791	0.19572	150	73,788	150,482	55,113	537,935	-1912	180,000,000
51	Squibb Indonesia	FIFO	44,850	3.31209	7,300	19,359	28,803	33,682	(31,391)	339	972,000
52	Suba Indah	Average	36,679	1.57539	325	7,160	13,240	19,202	6,730	-294	22,500,000
53	Supreme Cable Manufacturing Co	Average	160,517	3.51389	1,800	41,010	80,459	34,206	30,612	59	176,049,363
54	Surya Toto Indonesia	Average	25,838	1.11625		25,329	9,627	16,764	(19,217)	-446	26,400,000
55	Teijin Indonesia Fiber Co	Average	132,466	1.27961	2,000	66,771	101,348	33,597	89,398	-320	33,620,625
56	Tembaga Mulia Semarang	Average	225,332	0.15335	275	107,585	68,182	52,253	485,220	-2103	205,583,400
57	Trias Sentosa	Average	304,203	-0.65046	175	144,257	123,144	22,942	189,732	-215	288,000,000
58	Ultra Jaya Milk Industry	FIFO	134,487	0.36233	775	83,607	54,404	21,625	30,980	32	220,067,200
59	Unggul Indah Cahaya	Average	858,139	-0.22542	1,200	264,146	389,600	41,407	285,083	199	290,400,056
60	Unilever Indonesia	Special ID	2,255,252	0.21706	475	629,810	1,427,684	359,344	2,081,512	-5207	138,000,000
61	United Tractor	Average	2,148,564	0.13005	27,000	422,006	998,153	625,611	73,524	2666	76,300,000
62	Voksel Electric	Average	264,386	1.99916	100	100,816	38,422	24,587	228,478	-1276	63,000,000

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63	Alumindo Perkasa	Average	136,788	61.98440	650	7,189	8,928	6,459	(3,732)	-36	21,450,000
64	Aqua Golden Mississippi	FIFO	359,501	-0.03943	3,325	5,883	51,292	22,748	1,861	1356	13,162,473
65	Argo Pantes	Average	933,374	-0.03401	1,200	200,763	151,197	78,909	(11,214)	235	264,705,000
66	Astra Graphia	Average	995,430	2.94156	600	231,463	384,870	208,516	117,509	38	130,687,500
67	Astra Internasional	Average	11,130,624	0.10024	3,200	1,739,590	3,184,626	751,280	2,605,290	602	2,325,662,474
68	BAT Indonesia	Average	467,157	-0.45319	5,100	85,370	202,223	128,072	11,894	663	4,648,200
69	Berlina	Average	521,614	0.16323	975	146,220	225,822	72,130	(46,608)	422	450,000,000
70	Branta Mulia	FIFO	70,964	-0.84865	1,100	19,520	45,413	8,449	888	305	69,000,000
71	Century Textile Industry	Average	110,999	0.66067	12,900	231,058	49,383	45,942	(28,654)	77	80,000,000
72	Citra Tubindo	FIFO	193,848	0.18732	800	52,097	182,182	109,413	158	79	637,875,000
73	Dankos Laboratoria	Average	112,704	0.03984	8,225	14,949	98,915	55,553	(10,975)	3561	3,361,166
74	Delta Djakarta	FIFO	34,858	-0.44651	850	7,415	29,865	10,976	954	255	104,954,850
75	Duta Peritiwi Nusantara	FIFO	142,981	-0.18482	1,075	18,175	53,831	18,941	(6,978)	97	299,719,440
76	Dynaplast	Average	71,534	20.16260	1,200	10,273	21,439	9,692	4,457	277	44,721,600



77	Ekadharma Tape Industries	Average	280,534	0.06049	700	85,540	67,457	43,277	3,258	145	49,118,000
78	Eratex Djaja Limited	Average	2,891,236	0.18627	725	895,423	1,078,606	303,819	1,409,160	-153	3,168,000,000
79	Gajah Tunggal	Average	8,943,319	0.18335	11,850	4,250,502	3,751,286	739,891	(144,212)	1183	928,000,000
80	Goodyear Indonesia	Average	381,538	1.10037	7,500	67,479	153,576	23,339	4,260	2150	6,150,000
81	Great River International	Average	4,715,521	0.07287	11,175	2,242,541	2,696,511	738,192	(73,593)	1522	1,924,088,000
82	Gudang Garam	Average	353,378	0.34389	625	233,608	123,372	183,698	9,932	13	388,080,000
83	Hanjaya mandala Sampoerna	Average	292,495	3.36539		48,393	12,750	12,415	(584)	10	306,000,000
84	Igarjaya	Average	5,457,905	0.24909	2,400	1,871,927	3,816,740	774,070	3,038,921	2	4,813,271,272
85	Indah Kiat Pulp & paper Co	FIFO	95,112	0.05921	375	31,585	22,845	18,530	(1,479)	288	30,177,600
86	Indocement Tunggul Perkasa	FIFO	47,535	1.23494	500	25,599	(7,326)	7,849	6,137	-320	56,000,000
87	Indospring	Average	49,077	-0.01374	875	5,550	42,645	9,132	5,453	197	101,200,000
88	Intan Wijaya Internasional	Average	56,988	0.49513	1,225	61,438	20,368	8,324	2,824	101	37,500,000
89	Inter Delta	Average	78,608	0.01453	275	6,215	9,272	7,822	51	16	75,000,000
90	Jaya Pari Steel	FIFO	729,039	0.24267	725	275,463	832,800	441,893	367,471	97	2,160,000,000
91	Kalbe Farma	Average	47,818	8.73504		15,434	38,543	11,656	2,922	391	15,250,000
92	Kurnia Kapuas Utama Glue	Average	23,968	-0.76365	1,300	5,056	3,905	1,724	381	98	9,600,000
93	Lion Mesh Prima	Average	421,486	0.07715	625	69,434	122,625	81,449	(15,228)	59	766,584,000
94	Lippo Industries	Average	75,394	1.40029	7,500	34,197	108,416	53,151	(15,042)	1029	18,480,000
95	Mayora Indah	Average	4,163,982	0.25151	1,500	1,450,368	2,000,621	695,211	567,461	194	1,335,226,070
96	Merck	Average	1,274,254	0.16142	1,750	297,940	246,429	147,878	75,526	44	266,769,900
97	Modem Photo Film Company	Average	562,078	-2.32701	925	25,549	114,646	46,154	8,006	77	388,023,540
98	Multi Bintang Indonesia	Average	246,983	0.12991	40,000	52,658	160,265	77,047	(5,995)	2958	3,520,012
99	Multipolar Corporation	Average	152,093	1.11859	650	15,782	87,792	62,375	14,385	5	1,782,768,000
100	Nipress	FIFO	137,495	0.00495	850	12,447	30,201	15,922	(737)	189	76,800,000
101	Pabrik Kertas Tjiwi Kimia	Average	601,088	0.14302	800	182,991	54,903	16,520	31,793	25	38,640,000
102	Pan Brothers Tex	FIFO	890,486	-0.04953	—	11,763	186,958	94,335	216,973	-172	532,000,000
103	Polysindo Eka Perkasa	Average	126,283	0.18113	475	51,141	28,710	9,232	16,024	27	76,000,000
104	Prima Alloy Steel	Average	203,132	-0.37938	45,500	23,207	254,720	11,260	36,764	-11783	840,000
105	Procter & Gamble Indonesia	Average	2,899,580	0.12086	260	418,683	(546,647)	329,853	964,122	-480	4,593,920,000
106	Roda Vivatex	FIFO	186,780	0.16636	1,200	53,790	57,548	23,444	592	92	268,800,000
107	Sari Husada	Average	1,141,161	-0.28968	545	281,771	47,355	84,235	(52,779)	13	1,149,435,000
108	Schering-plough Indonesia	FIFO	56,830	-0.10080	12,000	16,516	32,174	29,971	7,243	-1801	1,080,000
109	Semen Cibinong	Average	1,864,895	0.19891	8,500	538,093	1,226,765	483,805	362,491	406	593,152,000
110	Semen Gresik	Average	145,678	0.09891	10,900	75,038	141,044	68,585	(1,494)	3877	4,550,000
111	Sepatu Bata	Average	613,446	0.40301	40,000	499,487	401,908	270,876	71,765	1257	6,600,000
112	Sonni Corporation	Average	270,760	0.15970	300	59,048	97,644	43,124	81,448	-396	180,000,000
113	Squibb Indonesia	FIFO	76,750	-2.14575	7,500	21,720	40,103	39,443	4,950	-1304	972,000
114	Suba Indah	Average	47,769	-0.60509	675	7,591	19,180	15,522	4,468	-43	45,000,000
115	Supreme Cable Manufacturing Co	Average	254,718	-3.89626	4,200	79,076	174,053	51,915	(2,366)	493	176,049,363
116	Surya Toto Indonesia	Average	19,480	1.12084	500	20,080	1,756	14,836	1,913	-416	26,400,000

117	Teijin Indonesia Fiber Co	Average	146,013	-4.67482	5,400	62,708	66,036	31,926	28,534	74	33,620,625
118	Tembaga Mulia Semanan	Average	47,535	-3.55927	750	25,599	(7,326)	7,849	6,137	832	205,583,400
119	Trias Sentosa	Average	351,714	-1.09011	600	120,346	65,774	24,822	(151,972)	506	288,000,000
120	Ultra Jaya Milk Industry	FIFO	191,354	0.25769	975	74,072	63,678	26,091	30,166	6	385,117,600
121	Unggul Indah Cahaya	Average	844,254	-0.14807	2,200	303,785	292,962	54,223	106,751	51	348,481,474
122	Unilever Indonesia	Special ID	2,796,095	0.16310	6,775	550,796	1,031,953	260,747	100,731	827	138,000,000
123	United Tractor	Average	2,594,253	0.11080	88,500	412,673	2,276,719	1,258,157	(122,824)	6986	76,300,000
124	Voksel Electric	Average	261,094	2.30352	550	89,403	27,082	23,320	(4,351)	47	63,000,000

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125	Alumindo Perkasa	Average	285,229	5.08936	90	7,645	7,651	7,842	72,235	-2025	21,450,000
126	Aqua Golden Mississippi	FIFO	478,251	-0.03414		9,453	72,333	20,800	4,161	2922	13,162,473
127	Argo Pantes	Average	813,407	0.16292	825	268,510	276,413	73,132	800,098	-1599	264,705,000
128	Astra Graphia	Average	386,560	1.15209	175	110,193	248,063	204,191	(28,345)	13	1,306,875,000
129	Astra Internasional	Average	23,284,363	0.09927	1,300	3,038,371	5,119,407	2,542,617	3,168,148	-95	2,506,643,396
130	BAT Indonesia	Average	411,958	0.10160	4,600	100,686	210,893	112,399	9,551	851	4,648,200
131	Bayer Indonesia	Average	156,126	1.16979	5,600	41,709	59,198	32,661	116	1915	3,500,000
132	Berlina	Average	787,594	0.28950	500	362,623	427,734	119,598	300,239	48	450,000,000
133	Branta Mulia	FIFO	104,965	-0.65174	850	25,243	51,871	10,095	1,867	341	69,000,000
134	Century Textile Industry	Average	160,172	0.17289	9,150	54,100	47,017	41,654	(7,138)	9	80,000,000
135	Citra Tubindo	FIFO	263,224	0.16678	525	66,660	268,621	152,538	50,948	51	893,025,000
136	Dankos Laboratoria	Average	129,143	0.05003	8,000	20,619	129,910	61,179	18,157	2148	16,013,181
137	Delta Jakarta	FIFO	38,850	-1.23417	475	13,971	24,949	11,837	(11,491)	138	125,945,820
138	Duta Pertiwi Nusantara	FIFO	217,722	-0.12932	500	35,432	90,150	31,835	9,522	98	299,719,440
139	Dynaplast	Average	66,048	1.96463	500	13,818	15,992	8,427	(637)	136	44,721,600
140	Ekadharma Tape Industries	Average	326,149	0.14309	350	148,336	125,138	44,232	71,378	54	98,236,000
141	Eratex Djaja Limited	Average	3,970,806	0.17550	245	1,117,379	1,107,626	361,658	5,476,610	-970	3,168,000,000
142	Gajah Tunggal	Average	10,837,213	0.39895	12,950	7,197,500	4,127,461	872,798	72,268	1166	928,000,000
143	Goodyear Indonesia	Average	438,026	1.06571	5,500	93,875	77,638	33,075	(8,729)	908	6,150,000
144	Great River International	Average	6,932	1.00235	11,250	4,125	3,097	1,044	528	219	1,924,088,000
145	Gudang Garam	Average	542,178	0.29246	550	272,162	81,008	204,216	27,605	13	388,080,000
146	Hanjaya mandala Sampoerna	Average	542,271	-18.20631		48,053	12,195	11,988	(3,661)	16	306,000,000
147	Igarjaya	Average	9,707,468	0.22937	240	2,984,001	5,109,847	1,385,500	7,160,930	-183	5,470,981,240
148	Indah Kiat Pulp & paper Co	FIFO	80,749	-0.54884	125	36,753	24,957	21,648	35,391	-1033	30,177,600
149	Indocement Tunggul Perkasa	FIFO	401,005	-0.51701	210	65,367	60,661	26,009	90,321	-1844	56,000,000
150	Indospring	Average	49,124	-0.01721	500	8,493	30,062	9,752	(8,307)	198	101,200,000
151	Intan Wijaya Internasional	Average	108,096	0.37978	650	74,683	37,507	11,705	45,598	-364	37,500,000
152	Inter Delta	Average	117,642	0.02751	120	9,324	9,080	12,303	21,459	-59	150,000,000
153	Jaya Pari Steel	FIFO	543,920	0.22284	220	202,033	575,318	313,195	(76,273)	-7	4,060,800,000
154	Kabelindo	FIFO	116,491	0.19279	300	46,073	54,960	21,392	16,064	45	250,000,000
155	Kalbe Farma	Average	29,195	1.39335		10,044	7,037	8,009	46,362	-1274	21,250,000

156	Kurnia Kapuas Utama Glue	Average	36,590	-0.12439	625	5,996	6,630	1,785	5,584	-91	9,600,000
157	Lion Mesh Prima	Average	502,612	0.15360	440	113,461	181,946	91,540	120,738	-30	766,584,000
158	Lippo Industries	Average	54,253	1.23709	8,000	22,248	71,577	41,229	(3,073)	2204	22,400,000
159	Mayora Indah	Average	7,360,334	0.22643	360	2,213,998	594,333	1,186,038	2,656,040	-629	1,335,702,240
160	Merck	Average	1,430,988	0.14630	625	305,326	302,739	194,325	185,738	-213	266,769,900
161	Modern Photo Film Company	Average	729,218	-1.79458	240	83,583	138,423	77,639	6,482	61	66,951,391
162	Multi Bintang Indonesia	Average	275,858	0.09937	24,000	60,105	232,391	86,445	12,149	4448	3,520,012
163	Multipolar Corporation	Average	285,010	1.15006	220	29,668	90,873	49,391	(85,255)	68	1,871,768,000
164	Nipress	FIFO	200,705	3.24766	1,400	19,381	41,064	23,849	(3,824)	195	76,800,000
165	Pabrik Kertas Tjiwi Kimia	Average	1,647,131	0.09700	375	259,616	163,739	46,982	152,684	-28.2	193,200,000
166	Pan Brothers Tex	FIFO	1,043,158	0.20030	650	309,381	221,367	114,711	590,813	-441	532,000,000
167	Polysindo Eka Perkasa	Average	131,553	0.19271	340	59,577	43,452	12,578	28,257	54	76,000,000
168	Prima Alloy Steel	Average	229,947	0.06598	46,000	28,174	138,440	103,124	(80,251)	25772	840,000
169	Procter & Gamble Indonesia	Average	3,628,104	0.12542	130	551,861	(326,938)	373,738	4,366,403	-1097	4,593,920,000
170	Roda Vivatex	FIFO	162,531	0.16157	900	48,098	36,790	26,861	22,494	90	268,800,000
171	Sari Husada	Average	1,430,366	-0.38233	385	290,183	62,003	90,258	6,371,612	-6017	1,149,435,000
172	Schening-plough Indonesia	FIFO	56,175	-0.55111	25,000	16,778	25,547	34,892	(1,657)	-1227	1,080,000
173	Semen Cibinong	Average	2,202,978	0.21315		685,798	1,393,432	611,877	335,374	578	593,152,000
174	Semen Gresik	Average	192,373	-0.17163	13,100	89,030	175,669	83,630	(537)	4871	13,000,000
175	Sepatu Bata	Average	479,702	0.43649	9,900	472,260	394,500	268,015	50,867	871	66,000,000
176	Sorini Corporation	Average	314,731	0.26287	160	117,211	117,592	48,185	377,004	1729	180,000,000
177	Squibb Indonesia	FIFO	76,958	-6.29529	10,500	36,737	61,568	45,858	29,597	-3740	972,000
178	Suba Indah	Average	68,839	-0.36903	50	4,971	25,482	22,621	6,494	-5	720,000,000
179	Supreme Cable Manufacturing Co	Average	373,362	-2.92558	5,200	11,931	232,879	63,627	18,925	716	183,523,172
180	Surya Toto Indonesia	Average	107,818	1.83514	500	31,591	12,954	13,103	(15,215)	521	26,400,000
181	Teijin Indonesia Fiber Co	Average	226,008	-2.67254	5,500	95,148	112,988	46,759	(118,500)	-1111	49,536,000
182	Tembaga Mulia Semanan	Average	46,234	2.82117	900	23,527	(12,325)	8,061	10,157	2388	205,583,400
183	Trafindo Perkasa	Average	678,040	-0.14305	2,100	82,673	85,510	22,729	59,449	386	3,367,000
184	Trias Sentosa	Average	337,277	-2.09576	55	167,526	189,917	34,256	399,612	-75	2,160,000,000
185	Ultra Jaya Milk Industry	FIFO	243,579	0.27496	275	103,146	79,948	29,518	15,753	16	385,117,600
186	Unggul Indah Cahaya	Average	1,276,116	-0.03454	1,050	395,855	327,635	71,394	145,114	77	383,331,363
187	Unilever Indonesia	Special ID	3,919,681	0.20139	295	997,909	1,273,851	334,338	936,710	4	1,545,600,000
188	United Tractor	Average	2,357,092	0.12171	15,200	438,466	1,810,301	1,019,589	7,812	1066	763,000,000
189	Voksel Electric	Average	332,291	1.60004	250	111,836	28,279	27,144	115,230	146	63,000,000

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190	Alumindo Perkasa	Average	414,253	-1.52376	185	10,771	9,189	8,816	33,001	-2095	21,450,000
191	Argo Pantes	Average	1,038,445	0.16519	700	368,059	163,632	68,916	335,149	-633	264,705,000
192	Astra Graphia	Average	457,582	1.18996	525	162,571	255,698	200,799	25,535	20	1,306,875,000
193	Astra Internasional	Average	24,465,854	0.09728	3,900	3,028,927	5,656,869	2,980,008	736,832	333	2,540,292,178
194	BAT Indonesia	Average	490,571	0.08011	3,800	109,017	175,253	134,958	15,102	374	4,648,200

195	Bayer Indonesia	Average	180,660	1.18946	6.050	48,795	76,101	36,420	170	2792	3,500,000
196	Berlina	Average	944,438	0.18338	825	260,883	390,446	131,816	124,498	158	450,000,000
197	Branta Mulia	FIFO	137,919	-0.70125	1,600	25,306	73,751	14,901	2,803	526	69,000,000
198	Century Textile Industry	Average	341,456	0.08872	7,900	66,296	65,270	50,835	(7,250)	41	80,000,000
199	Citra Tubindo	FIFO	420,380	0.14470	725	82,156	343,244	225,871	34,407	66	893,025,000
200	Dankos Laboratona	Average	120,143	0.18011	10,000	33,052	149,593	79,393	4,770	2785	16,013,181
201	Delta Djakarta	FIFO	54,816	-0.75237	500	11,035	24,346	14,500	(4,822)	86	125,945,820
202	Duta Pertiwi Nusantara	FIFO	278,795	-0.07714	1,175	34,570	104,846	34,549	15,947	111	299,719,440
203	Dynaplast	Average	66,159	2.07064	575	6,660	14,185	9,090	(2,748)	134	44,721,500
204	Ekadharna Tape Industries	Average	399,351	0.12869	500	134,613	101,342	55,120	33,736	67	98,236,000
205	Eratex Djaja Limited	Average	4,656,310	0.16614	265	1,182,990	1,085,810	424,030	2,265,618	-390	3,168,000,000
206	Gajah Tunggal	Average	13,519,452	0.40227	10,900	9,103,779	4,450,998	1,061,021	404,885	1085	1,924,088,000
207	Goodyear Indonesia	Average	545,630	1.06432	5,200	75,630	47,415	40,226	(10,101)	286	41,000,000
208	Great River International	Average	9,993	1.00533	4,250	5,294	4,072	1,419	434,332	212	4,500,000,000
209	Gudang Garam	Average	535,312	0.27486	465	255,284	111,297	172,897	7,922	26	388,080,000
210	Hanjaya mandala Sampoerna	Average	657,806	6.58101		52,374	43,254	21,750	7,922	52	306,000,000
211	Igarjaya	Average	9,405,736	0.16127	155	1,889,719	2,036,637	1,286,542	3,309,234	-83	5,470,892,941
212	Indah Kiat Pulp & paper Co	FIFO	96,268	-0.26436	200	23,724	5,736	20,546	(21,428)	141	30,177,600
213	Indocement Tungal Perkasa	FIFO	587,716	-1.01901	100	43,852	60,910	32,583	7,365	-53	1,120,000,000
214	Indospring	Average	62,571	-0.20013	525	7,524	37,818	10,893	(3,152)	175	126,500,000
215	Intan Wijaya Internasional	Average	144,954	0.33689	575	81,166	47,001	13,540	23,122	169	37,500,000
216	Inter Delta	Average	78,573	0.10998	145	17,958	16,315	11,007	(10,118)	66	150,000,000
217	Jaya Pari Steel	FIFO	1,059,022	0.21754	405	340,477	987,477	651,054	228,477	8	4,060,800,000
218	Kabelindo	FIFO	136,159	0.15971	245	46,043	49,677	29,704	9,652	19	250,000,000
219	Kalbe Farma	Average	33,014	1.59014		15,569	5,134	6,837	11,508	-640	21,250,000
220	Kurnia Kapuas Utama Glue	Average	44,030	-0.19940	1,125	8,249	6,596	2,228	2,670	100	9,600,000
221	Lion Mesh Prima	Average	643,532	0.09384	525	104,526	190,445	89,750	55,576	41	766,584,000
222	Lippo Industries	Average	88,254	1.51252	15,250	37,881	135,819	65,550	(10,007)	2518	22,400,000
223	Mayora Indah	Average	5,746,102	0.21894	210	1,671,572	1,642,240	1,370,734	1,049,388	-94	1,335,702,240
224	Merck	Average	1,619,032	0.12718	750	298,330	293,964	221,426	64,168	6	266,769,900
225	Modern Photo Film Company	Average	986,705	-1.38266	205	75,447	152,428	101,176	(73,182)	53	1,991,854,173
226	Multi Bintang Indonesia	Average	315,399	-0.08403	35,000	62,420	254,522	108,042	(16,826)	5403	21,070,000
227	Multipolar Corporation	Average	508,855	1.47298	345	86,869	122,783	59,913	(99,743)	84	1,871,768,000
228	Nipress	FIFO	239,318	2.70910	1,150	15,829	48,660	30,440	(7,037)	236	76,800,000
229	Pabrik Kertas Tjiwi Kimia	Average	1,644,632	0.07425	300	256,011	116,895	45,700	66,029	7.6	930,000,000
230	Pan Brothers Tex	FIFO	1,131,681	0.23261	150	395,173	177,386	103,683	194,623	-77	532,000,000
231	Panasia Indosyntec	FIFO	282,304	0.09841	130	54,537	47,106	19,939	16,892	8	1,050,000,000
232	Polysindo Eka Perkasa	Average	146,144	0.09091	270	60,859	33,702	11,575	21,754	13	76,000,000
233	Prima Alloy Steel	Average	418,397	-0.15532		46,244	106,423	76,981	2,076	6218	2,800,000
234	Procter & Gamble Indonesia	Average	4,187,990	0.13168	35	648,033	(175,926)	568,465	(1,275,830)	71	4,393,920,000

235	Roda Vivatex	FIFO		196,071	0.14496	1,350	52,135	19,109	23,251	(140,840)	26	268,800,000
236	Sari Husada	Average		1,771,215	-0.45065	325	219,720	33,353	190,149	(1,127,838)	152	7,662,900,000
237	Schering-plough Indonesia	FIFO		73,217	-0.04454	13,000	18,893	28,341	32,775	5,274	-2678	3,600,000
238	Semen Cibinong	Average		2,860,884	0.19222	10,300	769,957	1,798,318	816,577	509,848	535	593,152,000
239	Sepatu Bata	Average		334,430	0.45880	9,400	392,531	379,556	198,114	37,648	1718	66,000,000
240	Sorini Corporation	Average		380,671	0.23295	1,025	124,117	158,063	68,955	(780,549)	5019	180,000,000
241	Squibb Indonesia	FIFO		93,229	-5.60636	10,500	22,015	81,944	57,435	9,240	1397	972,000
242	Suba Indah	Average		103,222	-0.14475	40	8,508	35,894	45,625	(16,633)	2	2,160,000,000
243	Supreme Cable Manufacturing Co	Average		577,314	-0.25480	12,000	102,492	355,628	88,076	(4,962)	1225	183,523,172
244	Surya Toto Indonesia	Average		252,053	3.44462		12,901	20,419	23,760	(17,143)	220	56,100,000
245	Teijin Indonesia Fiber Co	Average		271,673	-1.21063	5,500	107,232	145,947	71,215	(45,449)	312	49,536,000
246	Tembaga Mulia Semanan	Average		71,817	6.18347	1,000	21,560	(8,759)	8,733	78,500	66	205,583,400
247	Trafindo Perkasa	Average		1,039,916	-0.04264	2,750	124,112	82,160	28,418	24,390	1056	18,367,000
248	Trias Sentosa	Average		544,428	-3.93651	170	166,638	219,641	46,108	162,735	138	2,160,000,000
249	Ultra Jaya Milk Industry	FIFO		380,185	0.19578	775	101,132	98,218	42,037	29,427	16	1,925,588,000
250	Unggul Indah Cahaya	Average		1,479,695	0.16832	1,525	600,780	400,573	78,976	105,874	49	383,331,363
251	Unilever Indonesia	Special ID		5,638,475	0.16307	550	1,107,784	1,419,921	486,081	574,546	154	1,545,600,000
252	United Tractor	Average		3,256,098	0.05901	22,800	301,318	2,756,513	1,612,913	(114,656)	1162	763,000,000
253	Voksel Electric	Average		402,628	1.66220	135	97,140	30,142	38,366	37,694	-153	63,000,000

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254	Alumindo Perkasa	Average		228,586	-15.18766	105	8,577	10,188	7,052	(71,669)	-47	21,450,000
255	Aqua Golden Mississippi	FIFO		897,846	-0.02456	38,000	7,561	124,053	39,228	(12,119)	5023	13,162,473
256	Argo Pantes	Average		976,267	0.19408	700	337,625	57,197	68,143	(239,543)	2062	264,705,000
257	Astra Graphia	Average		572,663	1.29895	295	102,516	256,825	194,394	(44,154)	55	1,315,871,000
258	Astra Internasional	Average		24,059,817	0.08372	2,600	2,590,775	6,625,216	3,814,649	(2,724,618)	1394	2,608,068,910
259	BAT Indonesia	Average		793,546	0.01992	4,206	104,367	296,356	198,834	(131,000)	306	4,648,200
260	Bayer Indonesia	Average		200,082	1.26463	5,100	57,018	60,507	36,065	(2,117)	1714	3,500,000
261	Berlina	Average		985,897	0.14413	550	223,042	318,471	184,666	(36,439)	244	450,000,000
262	Branta Mulia	FIFO		150,833	-0.79399	1,400	29,082	75,078	19,299	6,825	434	69,000,000
263	Century Textile Industry	Average		327,411	0.14629	8,050	88,240	48,524	48,311	(7,314)	149	80,000,000
264	Citra Tubindo	FIFO		547,510	0.13193	500	95,838	517,912	321,888	68,175	104	893,025,000
265	Dankos Laboratoria	Average		140,841	0.13938	9,000	32,136	136,796	78,848	(4,648)	2800	16,013,181
266	Delta Djakarta	FIFO		40,449	-1.36835	200	12,630	17,853	11,903	3,244	21	125,945,820
267	Duta Pertiwi Nusantara	FIFO		312,688	-0.06788	1,000	36,000	133,526	45,674	7,654	155	302,594,440
268	Dynaplast	Average		60,397	2.00652	485	9,327	15,052	9,581	(3,879)	140	44,721,600
269	Ekadharma Tape Industries	Average		320,662	0.12973	200	129,730	43,141	57,163	(21,210)	44	98,236,000
270	Eratex Djaja Limited	Average		4,712,962	0.13621		1,013,196	848,140	496,814	(1,463,190)	1202	3,618,000,000
271	Gajah Tunggal	Average		16,108,007	0.36793	7,500	9,381,700	4,831,077	1,376,047	448,318	1085	192,408,800
272	Goodyear Indonesia	Average		499,826	1.05680	4,500	81,928	63,421	37,839	2,660	371	41,000,000
273	Great River International	Average		10,540,856	-0.32309	2,950	5,333	4,587,808	1,860,313	160,693	371	4,500,000,000

274	Gudang Garam	Average	276,748	0.44174	575	270,016	147,027	144,718	687,045	2384	388,080,000
275	Hanjaya mandala Sampoerna	Average	527,124	2.77053		51,027	33,195	21,830	11,100	-15	306,000,000
276	Igarjaya	Average	9,209,454	0.21371	300	2,579,359	1,510,065	970,679	3,196,533	-433	5,470,982,941
277	Indah Kiat Pulp & paper Co	FIFO	63,800	0.06702	205	21,526	7,885	19,738	(3,397)	-633	30,177,600
278	Indocement Tunggul Perkasa	FIFO	91,063	1.40982	50	16,943	(4,461)	9,912	1,943	-38	1,120,000,000
279	Indospring	Average	56,951	-0.54775	270	12,094	28,020	12,802	8,337	29	168,666,667
280	Intan Wijaya Internasional	Average	173,024	0.27050	750	76,253	40,574	17,349	(18,920)	824	37,500,000
281	Inter Delta	Average	218,974	0.10122	140	32,249	34,063	13,364	(2,191)	106	150,000,000
282	Jaya Pari Steel	FIFO	1,202,975	0.19421	310	330,208	1,358,827	844,420	76,486	66	4,060,800,000
283	Kabelindo	FIFO	129,266	0.12561	90	40,272	42,886	26,776	16,999	-7	250,000,000
284	Kalbe Farma	Average	29,834	1.67705		14,324	4,872	6,279	(21,874)	189	21,250,000
285	Kurnia Kapuas Utama Glue	Average	53,344	-0.14450	350	7,589	4,119	3,330	(1,556)	154	9,600,000
286	Lion Mesh Prima	Average	724,448	0.05394	365	88,223	274,109	122,309	(16,565)	156	766,584,000
287	Lippo Industries	Average	88,546	1.42053	9,300	46,920	132,372	81,219	(3,301)	1671	22,400,000
288	Mayora Indah	Average	5,493,661	0.23462	285	1,742,156	1,473,894	876,892	1,258,281	-300	1,335,702,240
289	Merck	Average	169,987	0.62754	445	346,026	319,727	209,997	2,865	86	266,769,900
290	Modern Photo Film Company	Average	859,685	-1.20011	80	49,721	135,118	109,002	52,690	-19	2,020,689,173
291	Multi Bintang Indonesia	Average	285,962	-0.08505	30,000	59,628	256,432	134,926	(1,874)	4073	21,070,000
292	Multipolar Corporation	Average	399,186	1.31658	205	82,043	102,255	65,200	1,096	17	1,871,768,000
293	Nipress	FIFO	240,748	4.68403	305	30,006	59,370	32,886	3,815	210	76,800,000
294	Pabrik Kertas Tjiwi Kimia	Average	1,548,731	0.03786	165	202,344	30,035	62,708	18,703	-29.6	930,000,000
295	Pan Brothers Tex	FIFO	1,138,231	0.20172	200	336,103	25,896	100,037	(154,616)	191	532,000,000
296	Panasia Indosyntec	FIFO	308,799	0.10010	75	55,876	81,787	30,036	(13,800)	18	1,050,000,000
297	Polysindo Eka Perkasa	Average	178,770	0.22546	210	58,143	13,701	12,587	(53)	301	76,000,000
298	Prima Alloy Steel	Average	303,870	-0.48990		6,105	125,892	117,693	4,775	1684	2,800,000
299	Roda Vivatex	FIFO	196,699	0.14931	1,000	48,473	160	1,969	(3,391)	-34	268,800,000
300	Sari Husada	Average	1,977,100	-0.48217	150	210,665	1,832	212,560	(651,854)	66	7,662,900,000
301	Schering-plough Indonesia	FIFO	69,690	-0.16636	6,750	13,948	40,235	35,174	5,521	-291	3,600,000
302	Semen Cibinong	Average	3,536,030	0.17901	7,900	853,838	1,641,513	881,148	424,367	331	593,152,000
303	Semen Gresik	Average	222,817	-0.21208	13,500	82,828	188,212	110,726	5,718	3720	13,000,000
304	Sepatu Bata	Average	338,023	0.46022	8,800	392,566	405,832	236,624	(2,917)	1791	66,000,000
305	Sorini Corporation	Average	424,776	0.19371	390	121,815	108,656	67,553	(25,901)	145	180,000,000
306	Squibb Indonesia	FIFO	99,946	-3.86616	9,800	23,888	105,677	66,442	7,943	1944	972,000
307	Suba Indah	Average	80,231	-5.89388	30	19,766	32,404	36,678	40,645	-83	2,160,000,000
308	Supreme Cable Manufacturing Co	Average	583,232	-0.21865	10,000	106,022	438,619	125,842	(59,918)	941	188,352,433
309	Surya Toto Indonesia	Average	250,059	4.73011		20,528	31,555	12,297	791	215	56,100,000
310	Teijin Indonesia Fiber Co	Average	280,340	-0.46797	5,500	112,975	134,363	61,839	(3,696)	1390	49,536,000
311	Tembaga Mulia Semanan	Average	472,402	-0.05497	1,000	88,359	71,155	36,235	(43,279)	298	205,583,400
312	Trias Sentosa	Average	570,744	-1.15826	165	153,250	210,893	52,301	13,800	102	2,160,000,000
313	Ultra Jaya Milk Industry	FIFO	278,154	0.27080		103,295	130,640	66,268	40,645	10	1,925,588,000



314	Unggul Indah Cahaya	Average	1,237,250	0.05762	1,100	459,548	303,630	83,267	57,375	209	383,331,363
315	Unilever Indonesia	Special ID	5,742,914	0.14459	295	978,261	1,138,973	455,023	(206,604)	194	1,545,600,000
316	United Tractor	Average	3,646,380	0.07340	18,000	383,902	3,368,801	2,048,646	(64,349)	1282	763,000,000
317	Voksel Electric	Average	478,412	2.18183	110	95,044	37,651	44,143	(25,742)	86	126,000,000



## Appendix 3.1

### Regression for Equation 3-1 for group 0

**Model Summary(b,c)**

Model	R			Adjusted R Square	Std. Error of the Estimate	Durbin-Watson Statistic	
	GROUP = 0 (Selected)	GROUP ~= 0 (Unselected)	R Square			GROUP = 0 (Selected)	GROUP ~= 0 (Unselected)
1	.242(a)	.072	.058	.055	1.2832604 01247404	2.384	2.318

a Predictors: (Constant), E

b Unless noted otherwise, statistics are based only on cases for which GROUP = 0.

c Dependent Variable: P

**ANOVA(b,c)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.561	1	26.561	16.129	.000(a)
	Residual	428.157	260	1.647		
	Total	454.717	261			

a Predictors: (Constant), E

b Dependent Variable: P

c Selecting only cases for which GROUP = 0

**Coefficients(a,b)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.206	.079		15.215	.000
	E	.113	.028	.242	4.016	.000

a Dependent Variable: P

b Selecting only cases for which GROUP = 0



## Appendix 3.2

### Regression for Equation 3-1 for group 1

Model Summary(b,c)

Model	R			Adjusted R Square	Std. Error of the Estimate	Durbin-Watson Statistic	
	GROUP = 1 (Selected)	GROUP ~= 1 (Unselected)	R Square			GROUP = 1 (Selected)	GROUP ~= 1 (Unselected)
1	.200(a)	.177	.040	.022	.95534940 701	1.743	1.334

a Predictors: (Constant), E

b Unless noted otherwise, statistics are based only on cases for which GROUP = 1.

c Dependent Variable: P

ANOVA(b,c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.983	1	1.983	2.173	.147(a)
	Residual	47.460	52	.913		
	Total	49.443	53			

a Predictors: (Constant), E

b Dependent Variable: P

c Selecting only cases for which GROUP = 1

Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.151	.130		8.835	.000
	E	.215	.146	.200	1.474	.147

a Dependent Variable: P

b Selecting only cases for which GROUP = 1

### Appendix 3.3

#### Regression for Equation 3-2 for group 0

Model Summary(b,c)

Model	R		Adjusted R Square	Std. Error of the Estimate	Durbin-Watson Statistic	
	GROUP = 0 (Selected)	GROUP ~= 0 (Unselected)			GROUP = 0 (Selected)	GROUP ~= 0 (Unselected)
1	.476(a)	.014	.226	.92032741 4534870	1.887	2.227

a Predictors: (Constant), ETMET1

b Unless noted otherwise, statistics are based only on cases for which GROUP = 0.

c Dependent Variable: PTMPT1

ANOVA(b,c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64.230	1	64.230	75.832	.000(a)
	Residual	219.374	259	.847		
	Total	283.603	260			

a Predictors: (Constant), ETMET1

b Dependent Variable: PTMPT1

c Selecting only cases for which GROUP = 0

Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.080	.058		1.383	.168
	ETMET1	.155	.018	.476	8.708	.000

a Dependent Variable: PTMPT1

b Selecting only cases for which GROUP = 0

## Appendix 3.4

### Regression for Equation 3-2 for group 1

#### Model Summary(b,c)

Model	R			Adjusted R Square	Std. Error of the Estimate	Durbin-Watson Statistic	
	GROUP = 1 (Selected)	GROUP ~= 1 (Unselected)	R Square			GROUP = 1 (Selected)	GROUP ~= 1 (Unselected)
1	.409(a)	.280	.167	.151	.89137246 4340472	1.170	1.426

a Predictors: (Constant), ETMET1

b Unless noted otherwise, statistics are based only on cases for which GROUP = 1.

c Dependent Variable: PTMPT1

#### ANOVA(b,c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.150	1	8.150	10.258	.002(a)
	Residual	40.522	51	.795		
	Total	48.672	52			

a Predictors: (Constant), ETMET1

b Dependent Variable: PTMPT1

c Selecting only cases for which GROUP = 1

#### Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.100	.124		.811	.421
	ETMET1	.531	.166	.409	3.203	.002

a Dependent Variable: PTMPT1

b Selecting only cases for which GROUP = 1

## Appendix 3.5

### Regression for Equation 3-3

**Model Summary(b)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.230(a)	.053	.047	1.2350702 87847950	2.359

a Predictors: (Constant), DE, E

b Dependent Variable: P

**ANOVA(b)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.817	2	13.409	8.790	.000(a)
	Residual	478.975	314	1.525		
	Total	505.793	316			

a Predictors: (Constant), DE, E

b Dependent Variable: P

**Coefficients(a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.191	.069		17.164	.000		
	E	.113	.027	.233	4.173	.000	.970	1.031
	DE	-.050	.157	-.018	-.321	.749	.970	1.031

a Dependent Variable: P

## Appendix 3.6

### Regression for Equation 3-4

Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.481(a)	.232	.227	1.1125706 55210176	1.350

a Predictors: (Constant), DETMET1, ETMET1

b Dependent Variable: PTMPT1

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	117.119	2	58.560	47.309	.000(a)
	Residual	388.673	314	1.238		
	Total	505.793	316			

a Predictors: (Constant), DETMET1, ETMET1

b Dependent Variable: PTMPT1

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.099	.063		1.565	.119		
	ETMET1	.204	.021	.492	9.727	.000	.957	1.045
	DETMET1	-.193	.094	-.103	-2.041	.042	.957	1.045

a Dependent Variable: PTMPT1

## Appendix 3.7

### Regression for Equation 3-7

Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.264(a)	.070	.058	1.0000118 57019022	1.083

a Predictors: (Constant), DE, M2, E, M1

b Dependent Variable: P

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.381	4	5.845	5.845	.000(a)
	Residual	311.007	311	1.000		
	Total	334.388	315			

a Predictors: (Constant), DE, M2, E, M1

b Dependent Variable: P

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.789	.500		1.578	.116		
	E	.101	.022	.256	4.613	.000	.969	1.032
	M1	.274	.513	.116	.535	.593	.064	15.700
	M2	.397	.505	.170	.786	.433	.064	15.705
	DE	-.038	.127	-.016	-.296	.768	.970	1.031

a Dependent Variable: P

## Appendix 3.8

### Regression for Equation 3-8

Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.440(a)	.194	.184	.93091060 815	1.296

a Predictors: (Constant), DETMET1, M1, ETMET1, M2

b Dependent Variable: PTMPT1

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64.878	4	16.219	18.716	.000(a)
	Residual	269.511	311	.867		
	Total	334.388	315			

a Predictors: (Constant), DETMET1, M1, ETMET1, M2

b Dependent Variable: PTMPT1

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.218	.466		-.468	.640
	ETMET1	.154	.018	.446	8.529	.000
	M1	.260	.477	.110	.544	.587
	M2	.325	.470	.139	.691	.490
	DETMET1	-.143	.079	-.094	-1.804	.072

a Dependent Variable: PTMPT1

## Appendix 3.9

### Regression for Equation 3-10 for group 0

Model Summary(b,c)

Model	R			Adjusted R Square	Std. Error of the Estimate	Durbin-Watson Statistic	
	GROUP = 0 (Selected)	GROUP ~= 0 (Unselected)	R Square			GROUP = 0 (Selected)	GROUP ~= 0 (Unselected)
1	.432(a)	.506	.187	.177	.94822528 185	1.687	1.647

a Predictors: (Constant), OTHR, SA, GP

b Unless noted otherwise, statistics are based only on cases for which GROUP = 0.

c Dependent Variable: P

ANOVA(b,c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52.795	3	17.598	19.572	.000(a)
	Residual	230.178	256	.899		
	Total	282.972	259			

a Predictors: (Constant), OTHR, SA, GP

b Dependent Variable: P

c Selecting only cases for which GROUP = 0

Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.958	.069		13.828	.000
	GP	.165	.043	.437	3.807	.000
	SA	-.043	.074	-.067	-.579	.563
	OTHR	-.074	.019	-.221	-3.887	.000

a Dependent Variable: P

b Selecting only cases for which GROUP = 0



## Appendix 3.11

### Regression for Equation 3-11

Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.472(a)	.222	.207	.91918031866	1.679

a Predictors: (Constant), DOTHR, SA, OTHR, DGP, GP, DSA

b Dependent Variable: P

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	74.176	6	12.363	14.632	.000(a)
	Residual	259.382	307	.845		
	Total	333.558	313			

a Predictors: (Constant), DOTHR, SA, OTHR, DGP, GP, DSA

b Dependent Variable: P

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.947	.062		15.232	.000
	GP	.166	.042	.421	3.957	.000
	SA	-.042	.072	-.061	-.579	.563
	OTHR	-.073	.018	-.205	-3.993	.000
	DGP	.535	.157	.446	3.398	.001
	DSA	-1.077	.344	-.408	-3.130	.002
	DOTHR	.088	.108	.047	.814	.416

a Dependent Variable: P

## Appendix 3.12

### Regression for Equation 3-12 for group 0

#### Model Summary(b,c)

Mode l	R			Adjusted R Square	Std. Error of the Estimate	Durbin-Watson Statistic	
	GROUP = 0	GROUP ~= 0	R Square			GROUP = 0	GROUP ~= 0
	(Selected)	(Unselected)				(Selected)	(Unselected)
1	.464(a)	.149	.215	.206	.88046656 026	1.553	1.588

a Predictors: (Constant), OTMOT1, SATMSAT1, GPTMGPT1

b Unless noted otherwise, statistics are based only on cases for which GROUP = 0.

c Dependent Variable: PTMPT1

#### ANOVA(b,c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	54.293	3	18.098	23.345	.000(a)
	Residual	197.681	255	.775		
	Total	251.975	258			

a Predictors: (Constant), OTMOT1, SATMSAT1, GPTMGPT1

b Dependent Variable: PTMPT1

c Selecting only cases for which GROUP = 0

#### Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.057	.055		1.031	.304
	GPTMGPT1	.070	.018	.276	3.815	.000
	SATMSAT1	.011	.084	.009	.135	.893
	OTMOT1	-.097	.012	-.528	-8.275	.000

a Dependent Variable: PTMPT1

b Selecting only cases for which GROUP = 0

## Appendix 3.13

### Regression for Equation 3-12 for group 1

#### Model Summary(b,c)

Model	R			Adjusted R Square	Std. Error of the Estimate	Durbin-Watson Statistic	
	GROUP = 1	GROUP ~= 1	R Square			GROUP = 1	GROUP ~= 1
	(Selected)	(Unselected)				(Selected)	(Unselected)
1	.548(a)	.019	.300	.259	.83444510 143	1.595	1.642

a Predictors: (Constant), OTMOT1, SATMSAT1, GPTMGPT1

b Unless noted otherwise, statistics are based only on cases for which GROUP = 1.

c Dependent Variable: PTMPT1

#### ANOVA(b,c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.206	3	5.069	7.279	.000(a)
	Residual	35.511	51	.696		
	Total	50.717	54			

a Predictors: (Constant), OTMOT1, SATMSAT1, GPTMGPT1

b Dependent Variable: PTMPT1

c Selecting only cases for which GROUP = 1

#### Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.076	.115		.657	.514
	GPTMGPT1	.511	.128	.736	4.005	.000
	SATMSAT1	-.605	.359	-.309	-1.685	.098
	OTMOT1	.025	.063	.047	.391	.698

a Dependent Variable: PTMPT1

b Selecting only cases for which GROUP = 1

## Appendix 3.14

### Regression for Equation 3-13

#### Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.479(a)	.230	.215	.87156992 281	1.664

a Predictors: (Constant), DOTMOT1, SATMSAT1, OTMOT1, DGPTMGPT, GPTMGPT1, DSATMSAT

b Dependent Variable: PTMPT1

#### ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	69.490	6	11.582	15.246	.000(a)
	Residual	233.208	307	.760		
	Total	302.698	313			

a Predictors: (Constant), DOTMOT1, SATMSAT1, OTMOT1, DGPTMGPT, GPTMGPT1, DSATMSAT

b Dependent Variable: PTMPT1

#### Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.060	.050		1.208	.228
	GPTMGPT1	.070	.018	.254	3.851	.000
	SATMSAT1	.011	.084	.008	.136	.892
	OTMOT1	-.097	.012	-.487	-8.367	.000
	DGPTMGPT	.443	.133	.262	3.322	.001
	DSATMSAT	-.621	.382	-.130	-1.625	.105
	DOTMOT1	.120	.066	.094	1.816	.070

a Dependent Variable: PTMPT1