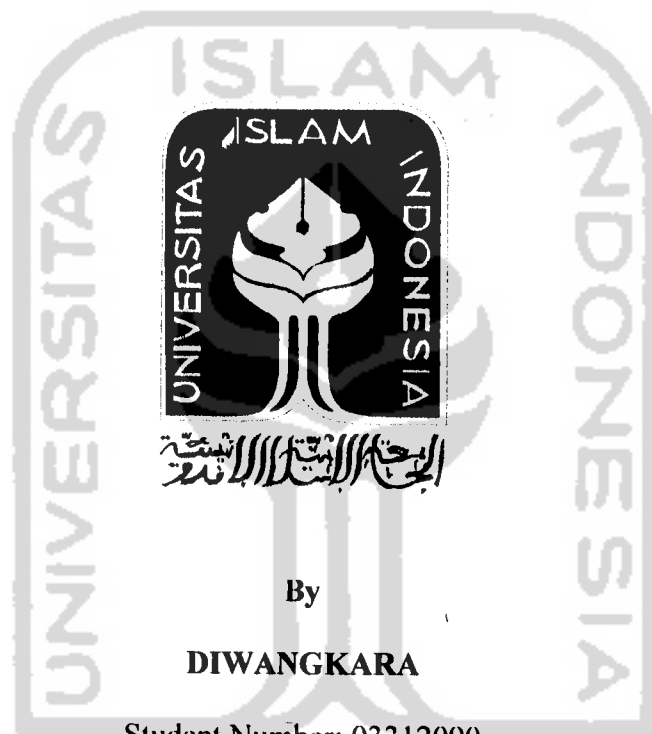


**LAST-CHANCE EARNINGS MANAGEMENT: USING THE TAX EXPENSE  
TO MEET COMPANY'S FORECAST**

**A THESIS**

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



By

**DIWANGKARA**

Student Number: 03312090


**DEPARTMENT OF ACCOUNTING  
INTERNATIONAL PROGRAM  
FACULTY OF ECONOMICS  
ISLAMIC UNIVERSITY OF INDONESIA  
YOGYAKARTA  
2006**

## STATEMENT OF FREE PLAGIARISM

Herein I declare the originality of this thesis; thesis is no other work which has ever presented to obtain any university degree, and in my concern there is neither one else's opinion nor published written work, except acknowledged quotation relevant to the topic of this thesis which have been stated or listed on the thesis bibliography.

If in the future this statement is not proven as it supposed to be, I am willing to accept any sanction complying to the determined regulation for its consequence.

Yogyakarta, November 9<sup>th</sup>, 2006



Diwangkara

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By

**DIWANGKARA**

Student Number: 03312090

Approved by

Content Advisor,



**Dr. Hadri Kusuma MBA**

**November 9<sup>th</sup>, 2006**

Language Advisor



**Kusworo, S.Pd, M.Hum**

**November 9<sup>th</sup>, 2006**

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Boards of Examiners

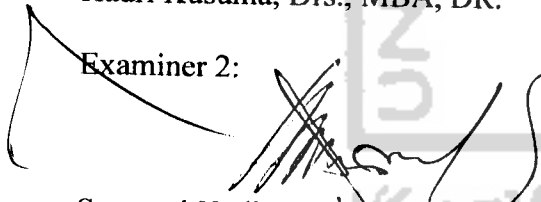
Examiner 1:



Hadri Kusuma, Drs., MBA, DR.

November 28<sup>th</sup>, 2006

Examiner 2:



Syamsul Hadi, Drs., MS., Ak.

November 28<sup>th</sup>, 2006

Yogyakarta, November 28<sup>th</sup>, 2006

International Program  
Faculty of Economics  
Islamic University of Indonesia  
Dean



  
H. H. H. H. H., M.Bus., Ph.D



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*This Thesis is dedicated to  
My Father Setyoso Hardjowisastro  
My Mother Sri mulyani  
My Brothers Mas "Tio" Prahastya and Bagaskara*

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*Also dedicated to*

*My Friends in International Program Accounting year 2003*

*Faculty of Economics Islamic University of Indonesia*

*My comrades, peers, companions, partners, mates, protégé, people who loved me, people whom I loved, people who will love me, and people whom I will love*

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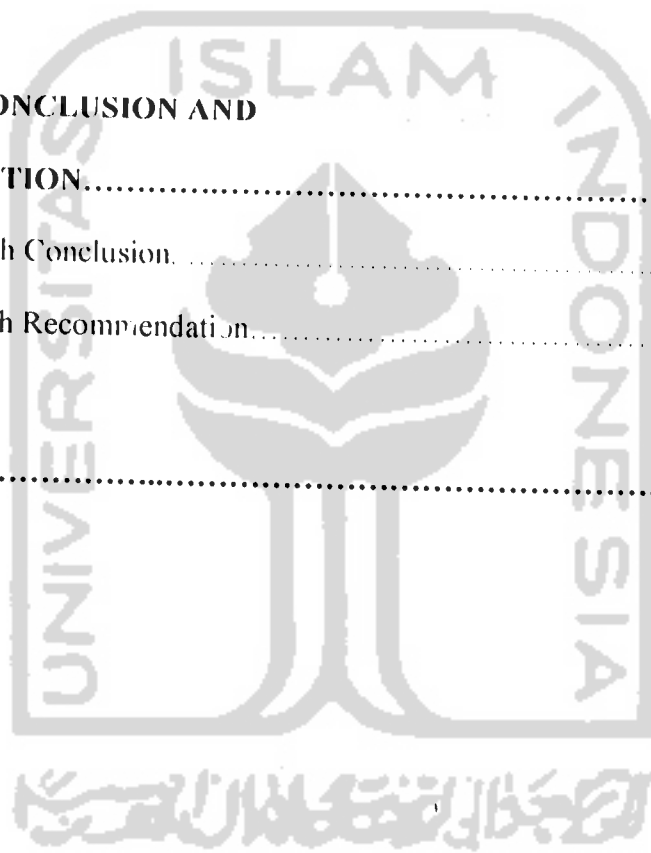
Diwangkara

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## Abstract

**Diwangkara (2006). Last Chance Earnings Management: Using the Tax Expense To Meet Company's Forecast. Yogyakarta, International Program, Accounting Department, Faculty of Economics, Islamic University of Indonesia.**

The research asserts that the tax expense is a powerful context in which to study earnings management, because it is one of the last accounts closed prior to earnings announcements. Although many pre-tax accruals must be posted in the year-end general ledger, managers estimate and negotiate tax expense with their auditors immediately prior to earnings announcements. The researcher hypothesizes that changes from last year and current year *effective tax rates* are negatively related to whether and how much a firm's *earnings absent tax expense management* miss company's consensus forecast, a proxy for target earnings. The researcher measures *earnings absent tax expense management* as current year actual tax minus last year actual tax then divided by current year pretax income.

The researcher examines and provides general evidence that the firms that are below the target will decrease their *ETR* to reach the target, which is consistent with firms decreasing their tax expense if non-tax sources of earnings management are not able to achieve targets. The researcher also finds that firms have a greater incentive to avoid missing the target. By studying the tax expense in total, the results provide general evidence that reported tax is not used to manage earnings in Indonesian firms listed in JSX for year 1996-2000.

*Keywords: Earnings Management, Target Earnings, Tax expense.*



## Abstraksi

**Diwangkara (2006). Kesempatan Terakhir Manajemen Laba: Menggunakan Beban Pajak Untuk Mencapai Perkiraan Perusahaan. Yogyakarta, Program Internasional, Departemen Akuntansi, Fakultas Ekonomi, Universitas Islam Indonesia.**

Penelitian ini menegaskan bahwa beban pajak merupakan alasan kuat dalam hal mempelajari manajemen laba, karena beban pajak merupakan nilai terakhir yang dilaporkan pada pengumuman laba. Walaupun banyak akrual sebelum pajak yang harus di posting pada buku besar akhir tahun, manajer segera memperkirakan dan bernegosiasi tentang beban pajak dengan para auditornya sebelum pengumuman laba. Peneliti memberikan hipotesa bahwa perubahan *Effective Tax Rate* pada tahun lalu dan tahun kini berbanding negatif terhadap seberapa besar *earnings absent tax expense* mencapai perkiraan perusahaan, yang mewakili target laba. Peneliti mengukur *earnings absent tax expense* sebagai pembayaran pajak tahun kini dikurangi pembayaran pajak tahun sebelumnya kemudian dibagi dengan laba sebelum pajak tahun kini.

Peneliti memeriksa dan menyediakan bukti bahwa perusahaan-perusahaan yang labanya dibawah target akan menurunkan nilai *Effective Tax Rate* nya, hal ini sesuai dengan perusahaan-perusahaan menurunkan nilai beban pajak mereka apabila sumber bukan pajak pada manajemen laba tidaklah mampu mencapai target. Peneliti juga menemukan bahwa perusahaan-perusahaan mempunyai inisiatif yang tinggi untuk menghindari tidak tercapainya target. Dengan mempelajari beban pajak secara menyeluruh, hasilnya membuktikan bahwa beban pajak yang dilaporkan tidak digunakan untuk mengelola laba pada perusahaan-perusahaan di Indonesia yang terdaftar pada Bursa Efek Jakarta pada tahun 1996-2000.

*Kata Kunci: Manajemen Laba, Target Laba, Beban Pajak.*

# CHAPTER I

## INTRODUCTION

### 1.1 Background of Study

Financial report is the information media to the external stakeholders. Financial reporting hopefully can give the information to investors and creditors in economic decision-making related with their fund to invest. In arranging financial report, accrual basis is chosen because it is rational or makes sense and fair in reflecting the financial performance of the companies. Accrual basis can give the management a flexibility to choose the accounting method as long as the method is not biased from Generally Accepted Accounting Principle. The option in choosing the method deliberately by management for certain purpose known as earnings management (Halim, Meiden, Tobing, 2005).

The basis of building the company is profit. We can recognize profit from many aspects, the concrete one is from earnings. Earnings are the reason of the company to exist and sometime as the important factor to determine the stock price. Earnings also give the investor a consideration or indication of the company's expected future dividends. In other word, earnings are the important factor in the company. By the above reasons company should manage earnings because it relates with the performance of the company with consideration to some benchmark. The benchmark here means the comparisons by the previous period performance that

explicitly in order to enhance current period to improve the performance or may meet the company's forecast or just make either improve or worse. If the company is very close to the target, the incentives to make earnings just over the target become very strong. Related to this case, the companies probably will try and make rising earnings management by increase earnings to meet company's forecast. Because of that, the earnings should be managed. There are various ways to manage earnings. The most common methods involve changing the assumptions for accounting standards. Most of this arises from the flexibility that GAAP usually allows; it is difficult to determine the changes represent manipulation or the genuine application of managerial discretion (Mohanram, 2003).

“Earnings management occurs when manager uses judgment in financial reporting and in structuring transaction to alter financial reports to either mislead some stakeholder about the underlying economic performance of the company or to influence contractual outcome that depend on reported accounting number” (Heally and Wahlen, 1999).

Management can raise the company value with expressing the additional information in financial information. But raising the expression of financial reporting will make the chance for management to do earnings management become a little. It shows that earnings management and the degree of expression the financial reporting has a negative correlation based on the previous research by Lobo and Zhou (2001) and Veronica and Bachtiar (2003). The company that does earnings management will

less express their information in financial reporting with an expectation that what they have done is difficult to be detected. In the other word, if there is a possibility, earnings management is done to communicate the information and to increase the company value, so they have positive relation between them.

Based on Marquardt and Wiedman (2004), earnings could be managed by the use of specific accruals in three earnings management contexts: equity offering, management buyouts, and companies avoiding the decrease on earnings. Marquardt and Wiedman measured the earnings management for specific accruals through measuring the performance by catching unexpected component of account receivable, inventory, and account payable, accrued liabilities, depreciation expense and special items.

There are three reasons why today a lot of companies do earnings management that based on accrual basis. First, it is because accrual basis is the main product of Generally Accepted Accounting Principle and also earnings management is easier to happen in financial reporting which apply accrual basis rather than financial reporting which apply cash basis. The second is the accrual basis will decrease the problem that occurs in measuring the earnings by various accounting methods. The third is the investor could not disclose the effect from earnings management done by manager if he did not use accrual basis when it is reported in financial report (Beneish, 2001).

Basically earnings is the revenues minus cost of sales, operating expenses, and tax expense. In this case, the importance of earnings management is about how to make the earnings meet the company's forecast, one factor that affect in managing earnings is tax expense. Tax expense is difficult to estimate for large companies because of the complex information that managers must collect between the end of the fiscal year and the earnings announcement date (Dhaliwal, Gleason, Mills, 2003). It is complex because there are several tax rate planning that build in foreign tax rate planning, tax credits, state and local tax rate planning, export tax incentives, and goodwill capitalization and subsequent amortization. Because of the complexity and dynamically of tax expense, it makes the tax expense recognition become the significant influence in earnings management, and also the tax expense is the last opportunity for earnings management, because tax expense is the last thing that is closed before earnings announcement that have significant influence to earnings target.

Prior studies found that companies were willing to gain the tax expense related with raising the earnings or upward to meet earnings management in order to avoid the financial reporting costs of reporting lower earnings. Levitt (1998) also defined tax cushion, valuation allowances, and reinvested earnings are three examples of tax-related cookie jar. He assert that the combination of judgment in estimating the fund and the complexity of the tax rules make the financial statement users have obstacle in evaluating managers' discretionary accruals for tax expense that result

asymmetry information. Perhaps the auditor and the assistance could do better but not perfectly to evaluate the reasonableness of the tax accrual than the shareholders and analysts could.

Marquardt and Wiedman (2004) also explained the company's motivation to do earnings management is related with equity offering in order to increase the stock price. In their perspectives, by issuing equity the company will obtain high cost for earnings management and therefore they were willing to accelerate revenue recognition. By extending the "firms issuing equity" argument, Marquardt and Wiedman predicted that these companies should be willing to delay revenue recognition to achieve their goal. For companies avoiding the earnings decreasing should use special items as a relatively low cost that indicate achieving their objective.

Phillips, Pincus and Sonja (2002) found no evidence that deferred tax expense or the abnormal accrual metrics detect earnings management to avoid failing to meet or beat analysts' earnings forecasts. None of the accrual-based metrics or deferred tax expense more accurately classifies firm-years as successfully (or unsuccessfully) avoiding failing to meet or beat analysts' forecasts. In short, they concluded that total accrual is incrementally useful in detecting earnings management activity for each of our three earnings targets, while the abnormal accrual measures do so less consistently.

Dhaliwal, Gleason and Mills (2003) measured earnings management as the difference between the annual ETR at year-end or fourth quarter and the estimated annual ETR at the third quarter ( $Etr4\_Etr3$ ). Because the third quarter ETR is an annual estimate that already incorporates tax planning anticipated for the fourth quarter, they assert that it is a reasonable proxy for the unmanaged ETR.

This research studies how the tax expense as the tools to achieve the company's target, where the companies want to initiate the earnings management. This makes this research little bit different from the other researches. The researcher examines whether tax expense is measured to reach earnings targets in order to meet the company's forecast to avoid the financial reporting cost or to avoid the failing of company's earnings forecast. The researcher uses the difference between the annual ETR at current year and the estimated annual ETR at the end of year before ( $Etr_t - Etr_{(t-1)}$ ) as the measurement for earnings management. Because the ETR at the end of year before is an annual estimate that already incorporates tax planning anticipated for the next year, the researcher asserts that it is a reasonable proxy for the unmanaged ETR. The researcher examines only companies that nearly miss or beat (within 1.000 Rupiah) the last net income is proxy for the forecast to construct a more powerful test of earnings management. Focusing on companies, we believe that we are most likely to manage earnings. It is also based on PSAK No.46, to explain the relationship between tax expense and earnings. Companies use the valid tax rate to present the useful information to the financial statement users. The relationship

between tax expense and earnings can be explained by the reconciliation between the tax expenses with the multiplication of earnings and valid tax rate, by expressing the calculation of valid tax rate or by the reconciliation between average effective rate and valid tax rate by expressing the calculation of valid tax rate. The researcher uses the last year net income in the prior income statement as proxy for the earnings target. Then the proxy for earnings absent tax expense management is the earnings the company would report if it uses actual pre-tax earnings and the unmanaged. The researcher also controls for other factors that can explain earnings management or change in tax expense.

The researcher finds that companies decrease their annual ETR from the first year to the next year as earnings absent tax expense management fall short of the consensus forecast. The decrease in ETR is larger than the corresponding increase in ETR when companies would beat the forecast without managing tax expense. This finding is consistent with companies using tax expense to manage earnings when management of pre-tax accruals fails to achieve the target. The researcher also uses tax-return data to controls for changes in the next year ETR due to changes in tax planning or earnings changes.

Regarding the previous studies, the researcher does not find any researches conducted about earnings management related with the tax expense especially in Indonesia, besides the difference in method, which used tax expense. This research does not use the I/B/E/S consensus forecast, Compustat and quarterly data, because in



Indonesia I/B/E/S consensus forecast, Compustat and quarterly data does not exist. It makes the writer have incentive to use annually data.

### **1.2 Problem Identification**

There are several methods that could be used by company to manage earnings. Many researches are observed how to detect and identify the reason earnings management is done. Thus, the research is focused on the method that could be used to measure the earnings management. Many researches conducted the measurement methods of earnings management, such as bad debt, loan loss provisions and claim loss reserves. This research is focused on the tax expense in measuring the earnings management. The basic problem in having the research is whether the companies manage earnings using tax expense in order to meet the earnings targets.

### **1.3 Problem Formulation**

Based on the problem identification, the problems can be formulated as: Is the tax expense used to manage earnings in order to meet the analyst's forecast regarding to its earnings absent tax expense of Indonesian companies that listed in JSX for the period 1996-2000?

#### **1.4 Research Objective**

The objective of this research is to examine and provide general evidence whether reported tax expense are used to manage earnings to meet earnings targets or in other words, the companies use tax expense as the last chance to manage the earnings in order to meet the company's forecast, regarding to its earnings absent tax expense management in Indonesia.

#### **1.5 Contribution of Study**

This research is about the determination of earnings management on the Indonesia companies. It can give several contributions. First, for the researcher, this research can give more knowledge and the perspective about the tax expense role in the company related with the earnings management, so that the writer can finds and proves the aspects that affect to the earnings. This thesis, define all about how the management manage earning through "manipulated" tax expense in order to make the earnings meet the company's forecast in financial report. This also provides specific accrual evidence to manage earnings defined by Healy and Wahlen (1998), that note, "the standard setters are more likely to be more interested in understanding which specific accruals are used for earnings management". Second, for the investors, scholars, and other parties who participate in this field. This research can contribute one important consideration and knowledge about the method in managing earnings in company that form the financial statement. Then, for a financial manager, this

study will help them to have some consideration in making earnings management through tax expense in order to make the earnings meet the company's forecast. Finally, for the government that needs some consideration in making economics policy especially about tax policy, they can make some rules of order, to controls the economic equilibrium in the country carefully.

### **1.6 Content Outline**

This thesis is designed and presented in five chapters. Chapter one is Introduction. The Introduction explains about background of study, who did the previous study and their findings, purpose of the study, research contribution and content outline. Chapter two reviews related literature and SAK about Financial Reporting, earnings management, and taxes (expense) including material derived from theories, related previous research and hypothesis. Chapter three is Research method. Research method provides description about population and sample, source of data, variables, operational hypothesis and statistical tools. Chapter four is Research findings, Discussion and implications. It reviews the entire data gathering from the research and result of data analysis. This chapter consists of data analysis result and the interpretations. The Last chapter is Conclusions and Recommendation. Conclusions will be gained from data analysis, it give the limitations and recommendations for future research.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

#### 2.1 Financial Reporting

Theoretically, Financial Reporting is broader than financial statement. Financial reporting does not only provide financial information, but also non-financial information. Based on PSAK No.1, the general purpose of financial reporting is to give the information about financial position, performance and company's cash flow that is useful for most financial report users in order to make the economic decisions. It also shows the management stewardship upon the usage resources that trusted to them. In order to reach its purpose, financial reporting provides information about the company including: assets, liability, equity, incomes and expenses including gain or loss and cash flow.

Financial report consist of balance sheet, net income, stakeholder equity that is made based on the accrual basis and from cash flow report that make based on the cash basis. The financial statements that are most frequently provided are: (SAK, 2004).

- (1) *The balance sheet.* Balance sheet shows the financial condition of the enterprise at the end of a period. It provides a report about assets, liability, and equity, where the total assets must be same with the accumulation of liabilities and equity.

- (2) *Income statement*. Income statement measures the results of operations during the period. It also provides report about revenues and expenses that company made, where the difference between revenues and expenses results net income.
- (3) *The statement of changing in stakeholder equity*, which reconciles the balance of stakeholder equity account from the beginning to the end of the period. It indicates profit and loss from company's operation during certain period.
- (4) *Statement of cash flows*, which reports the cash provided and used by operating, investing and financing activities during the period. It is presented based on cash basis approach which shows the cash outflow and inflow from the company
- (5) *Notes*, They have to be provided systematically. They consist of narrative description or explanation of amount that are existed in Balance sheet, Income statement, Cash flows, and Changes of stakeholder equity. They also have additional information such as contingency liabilities and commitment.

## **2.2 Financial Statement**

The objectives of financial statements is to provide information about the financial position, performance, and changes in financial position of an enterprise that is useful to a wide range of users in making economic decisions. Financial statements prepared for this purpose meet the common needs of most users. However, financial

statements does not provide all the information that users may need to make an economic decision since they largely portray the financial effects of past events and does not necessarily provide non-financial information.

Financial statements also show the results of the stewardship of management, or the accountability of management for the resources entrusted to it. Users who want to assess the stewardship or accountability of management do so in order that they make economic decisions; these decisions may include, for example, whether to hold or sell their investment in the enterprise or whether to reappoint or replace the management (PSAK, 2004).

### **2.2.1 Qualitative Characteristic**

Qualitative characteristic are the attributes that make the information provided in financial statement useful to users (PSAK, 2004). The four principal qualitative characteristics are understandability, relevance, reliability and comparability. The researcher will explain about those qualitative characteristics as follows:

#### **2.2.1.1 Understandability**

An essential quality of the information provided in financial statement is that is readily understandable by users. For this purpose, users are assumed to have reasonable knowledge of business or economic activities and accounting and a willingness to study the information that reasonable diligence. However information

about complex matters that should be included in the financial statement because of its relevance to the economic decision - making needs of users should not be excluded merely on the grounds that it might be too difficult for certain users to understand (PSAK, 2004).

#### **2.2.1.2 Relevance**

To be useful, information must be relevant to the decision-making needs of users. Information has the quality of relevance when it influences the economic decisions of users by helping them evaluate past, present or future events or confirming, or correcting, their past evaluations. The predictive and confirmatory roles of information are interrelated. For example, information about the current level and structure of asset holding has value to users when they endeavor to predict the ability of the enterprise to take advantage of opportunities and its ability to react to adverse situations. The same information plays a confirmatory role in respect of past predictions about, for example, the way in which the enterprise would be structured or the outcome of planned operations.

Information about financial position and past performance is frequently used as the basis for predicting future financial position and performance and other matters in which users are directly interested, such as dividend and wage payments, security price movements and the ability of the enterprise to meet its commitments as they fall due. To have predictive value, information need not be in the form of an explicit

the form of an explicit forecast. The ability to make predictions from financial statements is enhanced, however, by the manner in which information on past transactions and events is displayed. For example, the predictive value of the income statement is enhanced if unusual, abnormal and infrequent items of the income or expense are separately disclosed (PSAK, 2004).

#### **2.2.1.3 Reliability**

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

Information may be relevant but also unreliable in nature or representation that its recognition may be potentially misleading. For example, if the validity and amount of a claim for damages under a legal action are disputed, it may be inappropriate for the enterprise to recognize the full amount of the claim in the balance sheet, although it may be appropriate to disclose the amount and circumstances of the claim (PSAK, 2004).

#### **2.2.1.4 Comparability**

Users must be able to compare the financial statement of an enterprise through time in order to identify trends in its financial position and performance. Users must



also be able to compare the financial statement of different enterprise in order to evaluate their relative financial position, performance and change in financial position. Hence, the measurement and display of the financial effect of like transactions and other events must be carried out in a consistent way throughout an enterprise and over time for that enterprise and in consistent way for different enterprises.

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

The need comparability should not be confused with mere uniformity and should not be allowed to become an impediment to the introduction of improved accounting standards. It is not appropriate for an enterprise to continue accounting in the same manner for a transaction or other event if the policy adopted is not in keeping with the qualitative characteristics of relevance and reliability. It is also inappropriate for an enterprise to leave its accounting policies unchanged when more relevant and reliable alternatives exist. Because users wish to compare the financial

position, performance and changes in financial position of enterprise overtime, it is important that the financial statements show corresponding information for the preceding periods (PSAK, 2004).

### **2.3 Earnings Management**

In studying earnings management we should know what the Earnings Management is. There are several perspectives in defining earnings management. The following definition is formed by our goal of reviewing the earnings management. Based on Beneish (2001), earnings management can be defined as: “the process of taking deliberate steps within the constraints of generally accepted accounting principle to bring about a desired level of reported earnings (Davidson, Stickney and Weil, 1987), cited in Schipper (1989) p 92)

Managing earnings is “a purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain as opposed to say, merely facilitating the neutral operation of the process)....”A minor extension of this definition would encompass “real” earnings management, accomplish by timing investment or financing decision to alter reported earning or some subset of it” (Schipper 1989).

Earnings management occurs when manager use judgment in financial reporting and in structuring transaction to alter financial reports to either mislead some stakeholder about the underlying economic performance of the company or to

influence contractual outcome that depend on reported accounting numbers” (Heally and Wahlen, 1998).

Copeland (1968) also argue about the earnings management. Earnings management is “some ability to increase or decrease reported net income at will”. This means earnings management grab the management effort to maximize or minimize the earnings. It is consistent with Scott (1997) who also defines the earnings management as follow: “Given that managers can choose accounting policies from a set (for example: GAAP), it natural to expect that they will chose policies so as to maximiza their own utility and/or the market value of the company”

The purpose of managing earnings is to make the financial statement looks great, because the financial statement is the media of information to the external stakeholders like investor, creditor, and debtor. They see the financial statement to make valuation about the performance of the company, where financial statement gives information about company performance. There are various reasons for why companies, especially managers, have motivation to manage earnings. At the basic level, the reasons are related to the performance of the company with regarding to some benchmark. The benchmark here means the comparisons by the previous period performance that explicitly in order to enhance current period to improve the performance or may be meet the company’s forecast or just make neither improve or worse. If the company is very close to the target, the incentives to take earnings just over the target become very strong; so related to this case, the companies probably

will try and make rising earnings management, increase earnings to meet company's forecast. This also meet Dechow and Skinner (2000) who concluded that "the manager have strong motivation to meet the benchmark", indicate that companies just beating benchmark are potentially tend to be engaging in earnings management.

However, when companies have the earnings below their targets, some times they have a motivation to make things look even worse. It weird, but they do it for the following reasons. Firstly, it is highly unlikely that any amount of earnings management will get them over the target. Secondly, if one is way below the target, the costs of being even worse are typically minimal.

Healy and Wahlen (1998) have examined the literature of earnings management. They concluded that the motivation to do earnings management are (1) Capital market expectation and valuation; (2) contracts that are written in terms of accounting numbers and (3) other government regulation. In capital market expectation and valuation reason, Healy and Wahlen (1998) also examined the literature that concluded that earnings are managed to meet the expectations of financial analyst, specific types of investors, or management, their argument also meet Robb and Payne (1997). Then from contracts that are written in terms of accounting numbers reason, managing earnings for contracting reasons possible to be an interesting things for the standard setters. It supported by two reasons. First, whatever the reason is, earnings management can potentially lead to false in financial statement and affect resource allocation. So, in implementing earnings management it

does not only give the good effect to internal side, but also probably give mistake in financial statement. Second, Financial reporting is used for communicating management information not only to stock investors, but also to debt investor and to investors' representatives on boards of directors. The last, from other government regulation reason, the example that shows other regulation is when the manager of company susceptible to an anti trust investigation have motivation to make seen low profit. The manager has purpose to seek the government subsidy, but there is no direct evidence that show government regulation for earnings management that responded by investor.

Company has a variety of different options when it comes to managing earnings. The most common methods involve changing the assumptions for accounting standards. Most of this arises from the flexibility that GAAP usually allows. Fundamentally, most earnings management is based on accruals. Accruals are the differences between earnings and cash flows. Most accounting decisions involve some accruals.

Many of the studies use unexpected accruals as the proxy or methods in doing earnings management. But the standard setters are more likely to be interested in understanding earnings management use specific accruals (Healy and Wahlen, 1998). There are two broad groups, which discuss the potential cost the earnings management use specific accruals. The First is the cost of detected earnings management that commonly uses more egregious cases of earnings management. The

Second is the cost of undetected earnings management. Words “detected” in earnings management means to instances when the company use of earnings management become publicly known through a variety of mean such as earnings restatement, shareholders litigations, the rendering of qualified audit opinion, or negative coverage by business press. Then the word “undetected” in earnings management mean to instances where earnings management occurs but there is no obvious event that would reveal its occurrence to the public (Marquardt and Wiedman, 2004). By using specific accruals, the researcher can develop intuition for the key factors that influence the behavior of accrual, and specific accruals also can be applied in industries whose business practices cause the accrual in question to be material and a likely object of judgment and discretion, but specific accruals needs a costly investment in institutional knowledge, and imposes limits to the generalizability of the findings, since the studies of specific accruals tend to be to smaller or sector specific samples (Beneish, 2001).

In this study, the researcher uses specific accruals method to measure earnings management, many researchers use this method through several proxy or special items in this case including bad-debt expense (Teoh et al. 1998), loan-loss provisions (Beaver et al. 1989) and claim loss reserves (Petroni 1992, Beaver and McNichols 1998, Beatty et al. 2002, and Nelson 2000), as discussed by Healy and Wahlen (1999). Regarding to the proxy that already examined by specific accruals, the writer have incentive to consider using tax expense. Healy and Wahlen (1999) suggest that a

direction for future research on earnings management is to focus on the accounts where earnings management occurs. We focus on the income tax expense and measure earnings management use changes from the current year ETR to the prior year ETR ( $Etr_t - Etr_{(t-1)}$ ).

#### 2.4 Tax Expense

Tax is a fee charged ("levied") by a government on a product, income, or activity. If tax is levied directly on personal or corporate income, it is called a direct tax. If tax is levied on the price of a good or service, then it is called an indirect tax. Tax expense is the aggregate of current tax and deferred tax that is calculated in profit or loss calculation in one period. The complexity of tax expense computations and the discretion in estimating tax accruals allow information asymmetry between managers and both auditors and shareholders to persist.

The combination of judgment, discretion, information asymmetry, and time pressure makes a condition where the company can use tax expense that gives a "last chance" for conduct earnings management to achieve earnings targets. The components of tax expense such as the provision for tax contingencies (tax cushion), valuation allowances, and foreign tax rate effects are complex and need the decision from manager for estimation. Managers can use its discretion in making these estimates to manage earnings. This also meet Dhaliwal, Gleason, and Mills (2003), they consider tax expense because this account is material for a broad set of

companies and because it contains the necessary discretion to generate information asymmetry between managers and investors or analysts. Tax expense is also one of the last accounts finalized prior to earnings release because it depends on various information contained in pre-tax earnings, which can be affected by audit adjustments. Thus, while the researcher acknowledge that many other pretax accruals exist for earnings management, the researcher view tax expense as a final tool that managers have at their disposal to achieve earnings target (Dhaliwal, Gleason, and Mills, 2003).

## 2.5 Hypothesis

The researcher proposes the following hypothesis, stated in alternative form:

*H<sub>a</sub>: All else equal, changes in tax expense are negatively related to whether and by how much a company's earnings absent tax expense management miss its target earnings.*

In their research, Dhaliwal, Gleason, and Mills (2003) suggest that change in tax expense negatively related to how much earnings absent tax miss the target earnings. In this research, the researcher wants to prove whether the changes of tax expense ( $Etr_t - Etr_{(t-1)}$ ) are really negatively related to its earnings absent tax miss the earnings target (*Miss\_Amount*). The researcher also wants to find the amount of earnings absent tax expense management (unmanaged earnings) that will miss the target earnings which is also negatively influenced by the tax expense. The result



indicates that the tax expense is used to manage earnings in order to meet the company's target earnings. Because the amount tax expense always fluctuates depending on the pre-tax income amount of that period despite the legal tax rate is also influencing. Like in other studies, the researcher must develop the proxy for earnings management. The researcher define change in tax expense ( $Etr_t - Etr_{(t-1)}$ ) is the incentive of the management in manage earnings through tax expense.

And the difference between the annual ETR at current year and the estimated annual ETR at the year before provides a proxy for the company's unmanaged annual ETR (earnings absent tax expense) as the measurement of earnings management and last year income as a benchmark. Because the ETR at year before is an annual estimate which already incorporates tax planning anticipated for the current year, the researcher asserts that it is a reasonable alternative for the unmanaged ETR.

## **CHAPTER III**

### **RESEARCH DESIGN**

#### **3.1 Population and Sample**

The population from which a sample was taken for this study referred to all companies that were listed in Jakarta Stock Exchange from the period of January 1996 to December 2000. This research uses tax return data and annual financial statement data. The sample is firm-years that have data for pre-tax income and tax expense on an annual basis. Population is a group of comprehensive elements that usually in the form of people, object, transaction or event where we are interest to learn or to become the research object (Kuncoro, 2003). The method used in this research is purposive sampling. Purposive sampling method is a technique to collect the sample based on certain criteria that is in accordance with the purpose of research (Kuncoro, 2003). The purpose of the research is to analyze the relation of tax expense on a company's earnings absent tax expense management miss its target earnings. The companies to be analyzed are the ones that are not included in financial institutions companies and banks. Banking and insurance companies have fertile ground for research on specific accruals used to manage earnings (Heally and Wahlen, 1998).

Then, the researcher imposes screens related to the research design. Analysts' reports, news stories, and Brown (2001) describe earnings surprises in terms of how

many amount per share a company beat or miss an earnings target. Dhaliwal, Gleason, and Mills (2003) scope to the companies whose difference between the net income last year as the forecast and the actual earnings per share (called Miss) within Rp 1000, - per share to study companies that are sensitive to earnings management incentives, because Brown's (2001) frequency distribution of earnings surprises shows a concentration within Rp 1.000, -. Similar to the screen that limits our data to companies whose actual earnings are near the forecast. The researcher also limit the tests to the companies whose earnings absent tax expense management are within Rp 1.000,- per share of the consensus forecast (*Miss Amount*).

### 3.2 Variables

The dependent variable in this research is the change in ETR. Change in ETR, serve as the proxy for earnings management. To measure the change in ETR management the researcher uses the different of the annual ETR at the current year and estimated annual ETR at the year before;  $(Etr_t - Etr_{(t-1)})$  equals Current actual tax minus last year actual tax then divided by current year pretax income, where the ETR is defined as actual tax expense divided by accumulated pre-tax income, scaled by pretax income.

The researcher uses simple specification using only the dummy variable. In this formula the dummy variable is (*Miss*), as stated in the hypothesis, this intercept is expected to be negative because companies that are below the target will decrease

their ETR to reach the target. *Miss*, considered as alternative specification in robustness tests because the dummy alone may be amore powerful proxy for the incentive to manage tax expense.  $(Miss) = 1$  if  $Miss\_Amount < 0$ , and otherwise scaled by pretax income.

The researcher uses the *Miss\_Amount* as the proxy for target earnings to measure incentives in managing earnings, probably a company has such an incentive if it would have missed its earnings target based on unmanaged earnings (earnings absent tax expense management), following Burgstahler and Eames (2002). The researcher construct earnings absent tax expense management using actual pre-tax earnings less proxy for unmanaged tax expense: actual pre-tax earnings times one minus the annual ETR reported at the year before. *Miss\_Amount* is the last year net income as forecast less current pretax income then divided by outstanding shares that scaled by common shares.

$Miss * Miss\_Amount$  is predicted to be negative because company has a greater incentive to avoid missing the target (Dhaliwal, Gleason, and Mills, 2003). The researcher also includes *Induced\_Chg\_ETR* variable to measure the unexpected earnings that affect the company's ability to meet the company's target. The steps in estimating induced effect are not only one. First, comparing the actual and forecasted earnings per share to measure unexpected earnings, second converting the difference per share to total rupiah and gross it up using the applicable Indonesian legal tax rate to get an estimate of unexpected pre-tax earnings. Third then multiplying it by the

difference between  $Etr_{(t-1)}$  and the statutory tax rate to obtain the unexpected tax. Finally, the unexpected tax times ETR is then divided by actual pre-tax earnings, it will result the induce change in ETR scaled by pretax income.  $Induced\_Chg\_ETR =$  induced tax change/pretax income, where induced tax change are unexpected tax times ETR. Unexpected tax is equal current year pretax income – last year pretax income divided by current year pretax income

The researcher also includes a control for unexpected changes in ETR due to next year misestimating. We use tax return data to measure the extent of over- or underpayment of estimated taxes ( $Tax\_Owed$ ). We predict that Change in ETR ( $Etr_t - Etr_{(t-1)}$ ) be positively related to  $Tax\_Owed$ . If the company owes more tax than the prepayments, then it is more likely to show an increase in the ETR.  $Tax\_Owed$  equals the actual tax that paid during year minus the estimated tax and divided by pretax income. (From confidential tax return data), scaled by pre-tax income

### 3.3 Operational Hypothesis

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

H<sub>0</sub>: Changes in tax expense are not negatively related to earnings absent tax expense management miss its earnings target.

H<sub>a</sub>: Changes in tax expense are negatively related to earnings absent tax expense management miss its earnings target.

We estimate the following model to test our hypothesis that the changes in tax expense are related to whether a company misses its target earnings:

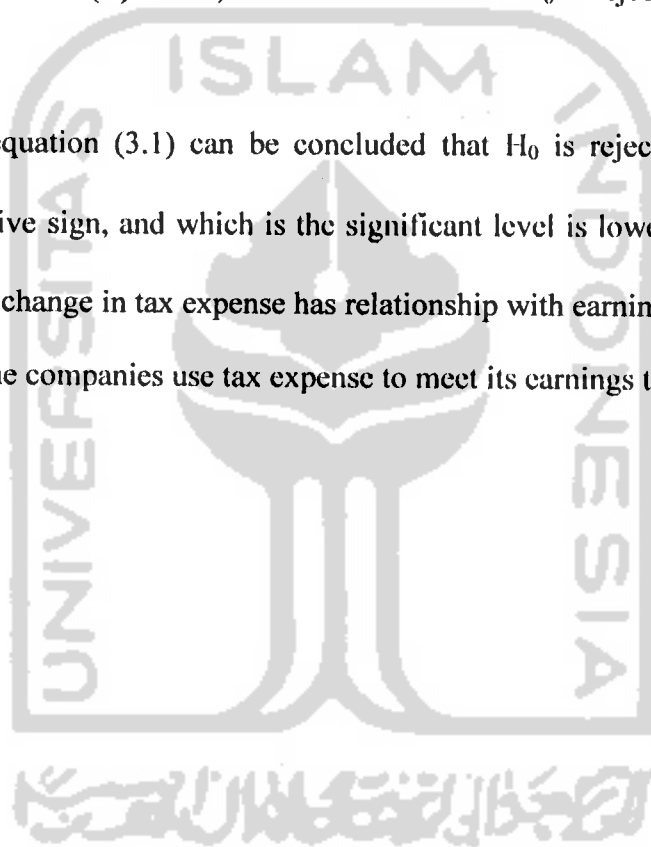
$$\begin{aligned}
 Etr_t - Etr_{(t-1)} &= \alpha_0 + \alpha_1 Miss_{i,t} + \alpha_2 Miss\_Amount_{i,t} \\
 &+ \alpha_3 Miss_{i,t} * Miss\_Amount_{i,t} + \alpha_4 Induced\_Chg\_ETR_{i,t} \\
 &+ \alpha_5 Tax\_Owed_{i,t} + \alpha_6 Etr_{(t-1)} + \alpha_7 - \alpha_{10} Year_{i1997-2000} + e_{i,t} \dots \dots \dots (3.1)
 \end{aligned}$$

Where:

- $Etr_t - Etr_{(t-1)}$  = Current actual tax minus last year actual tax then divided by current pretax income, where the ETR is defined as actual tax divided by accumulated pre-tax income scaled by pretax income.
- *Miss* is a dummy variable that equals one if *Miss\_Amount* > 0, zero otherwise scaled by pretax income.
- *Miss Amount* is the last year net income as forecast less current pretax income and divided by outstanding shares scaled by common shares.
- *Induced\_Chg\_ETR* equals induced tax change/pretax income, where induced tax change are unexpected tax times ETR. And unexpected tax is equal current year pretax income – last year pretax income and divided by current year pretax income scaled by pretax income.
- *Tax Owed* equals the actual tax that paid during year minus the estimated tax and divided by pretax income, scaled by pretax income

From the hypothesis formulation, the researcher will do hypothesis testing to answer the question on that hypothesis. Regarding to that hypothesis, the researcher will use analysis of statistical test to test the relationship of changes in tax expense ( $Etr_t - Etr_{(t-1)}$ ) as dependent variable and earnings absent tax expense management miss its target (*Miss Amount*) as independent variable. The analysis of this hypothesis by using significant level ( $\alpha$ ) = 5 %, with the standard that  $H_0$  is rejected if P-value of t-test  $\leq \alpha$  (0,05).

From the equation (3.1) can be concluded that  $H_0$  is rejected if  $\alpha_2$  (*Miss Amount*) has negative sign, and which is the significant level is lower than  $\alpha$  (0,05), this means that the change in tax expense has relationship with earnings management. So it implies that the companies use tax expense to meet its earnings targets.



## CHAPTER IV

### RESEARCH FINDINGS, DISCUSSION, AND IMPLICATIONS

This chapter explains about the early process of gathering the data, measurement of variables used in this research, the analysis of data and the interpretation of hypothesis testing which content of explanations about research findings, discussion and research implications.

#### 4.1. Research Sample

In this research, the range year is from 1996 – 2000. The data are obtained from Indonesian Capital Market Directory (ICMD), Capital Market database of Jakarta Stock Exchange (JSX) corner at Faculty of Economic Islamic University of Indonesia and other relevant sources with data criterion. There were 274 companies that have qualified for the requirement. The researcher took the sample for 1218 firm-years, but finally he obtained are 638 firm-years that have data for required variables. The companies become the samples in this research because it's already appropriate with the criteria of purposive sampling techniques. Those companies are already sorted and can fulfill the requirements as sample in this research with the completeness of data based on research variable, the companies that have pre-tax income, estimated tax expense, actual tax expense, and outstanding shares on annually data (appendix 1), Each year the companies which cannot fulfill data requirements are excluded as the sample. The samples are the company of the various



types of businesses except banks and financial institutions, so the result finding does not represent one business aspect only.

The data are obtained, and then processed by making several calculations using Microsoft Excel computer software to measure the notation as a basis in making research variables needed in this research. The variables used are seven variables plus four dummy variables to control the variance of the data. All sample used are 638 firm-year data based on the data requirement criteria.

#### **4.2 Research Process**

Data used in this research are quantitative data that are obtained from Indonesian Capital Market Directory (ICMD) 1996- 2000, Capital Market Data Base of JSX corner Islamic University of Indonesia, and also from other relevant sources. The companies that become the object of this research are 638 firm-year that are consistently listed in Jakarta Stock Exchange for period 1996- 2000. They are selected based on the requirement of fulfilment for this research. To test the hypothesis the researcher used statistical testing method, for the measurement of variables. Microsoft Excel is used to gather and sorting the data and then using Eviews 3.0 for the statistical calculations to process the data

In gathering the data, there are 1218 firm-year data samples that are consistently listed on JSX from 1996- 2000. The company variables, which has zero value in ETR, change in ETR, Miss Amount, tax owed and induce change in ETR are

eliminated or excluded from the samples and as many as 638 firm-year are selected. From 638 firm-year decreases become 628 firm-year samples based on Cook's distance criteria where the change or different in ETR is negative. Before entering the hypothesis testing, the researcher would make the analysis of descriptive statistic. Descriptive statistic can describe the condition of the data used in this research (Table 4.1). Table 4.1 show unvaried statistics for the 638 firm-year observations in the sample. It shows that the change in ETR from last year to current year (mean -0.598) is different from zero. Company beat the forecast on average by a 1000 rupiah per share.

**Table 4.1**  
**Description of Sample and Variable Definitions**

Variable	N	Mean	Std.Dev.	Median
etr	638	-10.6708092	261.5164556	-0.016336
chetr	638	-0.59879255	13.14671181	-0.0043782
miss	638	0.52507837	0.499762496	1
missmount	638	-112317.298	1960828.859	5.77785332
mma	638	346.8075065	1900.959426	0
tax owed	638	-7.99317116	194.5379418	0.04536535
icetr	638	0.10142131	2.56176238	-1.586E-13
pretax income	638	-4.643E+10	5.49779E+11	1599611945
Est tax	638	-1.567E+10	1.19859E+11	-2.77E+09
net income	638	-2.5827E+10	4.39687E+11	3471322650
actual tax	638	-3.2345E+10	1.63345E+11	-4.608E+09
Outstanding shares	638	607087116.9	1291535374	268800000

Table 4.2, shows correlation coefficients among the test variables. The change in ETR ( $Etr_t - Etr_{(t-1)}$ ) is negatively correlated with whether unmanaged earnings miss the forecast (*Miss*,  $\rho = -0.034014$ ) and the amount by which company miss the target *Miss Amount* ( $\rho = -0.002389$ ). Then ( $Etr_t - Etr_{(t-1)}$ ) is strongly positive correlated with  $Etr_{(t-1)}$ , ( $\rho = 0.992$ ). The continuous variable *Miss Amount* is strongly correlated with the dummy variable *Miss* by construction ( $Etr_t - Etr_{(t-1)}$ ).

**Table 4.2**  
**Correlation Coefficient for Regression Variables**

	CETR	MISS	MISSMOUNT	ICETR	TAXOWED	ETR
CETR	1					
MISS	-0.034014	1				
MISSMOUNT	-0.002389	0.060631	1			
ICETR	0.993974	-0.036882	-0.002358	1		
TAXOWED	-0.991373	0.037681	0.002273	-0.999412	1	
ETR	0.992485	-0.037531	-0.002326	0.99968	-0.999901	1

### 4.3 Hypothesis Testing

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

$H_0$ : Changes in tax expense are not negatively related to earnings absent tax expense management miss its earnings target

$H_a$ : Changes in tax expense are negatively related to earnings absent tax expense management miss its earnings target

The analysis of this hypothesis is by using significant level ( $\alpha$ ) = 5 %, with the standard that  $H_0$  is rejected if P-value of t-test  $\leq \alpha$  (0,05). If the coefficient is negative and probability  $< \alpha = 0,05$ ,  $H_0$  is rejected and if the coefficient is positive and probability  $> \alpha = 0,05$ ,  $H_0$  failed to reject. So that  $H_0$  is rejected if  $\alpha_2$  (*Miss Amount*) has negative sign, and the significant level is lower than  $\alpha$  (0,05). This means that the change in tax expense has negative relationship on how much earnings absent tax expense miss its target.

#### **4.4 Classical Assumption**

Before interpreting the regression result, the regression should be free from classical assumption that is heteroskedasticity and autocorrelation. This problem can make the result not accurate to use.

##### **4.4.1. Heteroskedasticity**

Regarding the analysis technique or model used in this research is regression, the researcher has to consider the Classical Assumption based in this regression model, that a classical assumption is heteroskedasticity. To get a valid regression model, the regression output or result must be free from heteroskedasticity.

The heteroskedasticity symptom will appear when the mistake or the residual has the different variance from one observation to another. The existence of heteroskedasticity causes the regression coefficient estimation to become inefficient.

One of the ways for detecting the heteroskedasticity symptom in the regression equation is using White test (Gujarati, 1995). Thus the probability value is more than  $\alpha = 0,05$ . The researcher finds a heteroskedasticity, but the heteroskedasticity automatically eliminated by Eviews 3.0.

#### **4.4.2 Autocorrelation**

Autocorrelation case can occur when the research is applied in cross sectional, time series and the combination of both. This is because of the linearity observation for a long time period and space that correlated each other, where there is a disturbance in individual or group that tends to influence the other similar individual or group in the next period. Autocorrelation also occurred in this research. This case is caused by the economic of Indonesia or macroeconomics condition where in 1997 – 1998 Indonesia was in crisis in economy. The observation samples taken from companies in year 1997-1998 mostly have extreme data while the other year that causes the outlier. By using First Difference method of Eviews 3.0 the problem of autocorrelation was automatically eliminated.

## 4.4 Implications

Table 4.3

## Estimation Result of Least Square Regression Model

White Heteroskedasticity-Consistent Standard Errors & Covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.014517	0.035781	-0.405705	0.6851
D(DM00)	0.077905	0.063049	1.235631	0.2171
D(DM97)	0.353711	0.128668	2.749022	0.0062
D(DM98)	0.219111	0.106650	2.054493	0.0403
D(DM99)	0.072871	0.083504	0.872660	0.3832
D(ICETR)	15818500	8878636	1.781636	0.0753
D(MISS)	-0.044010	0.058533	-0.751882	0.4524
D(MISSMOUN)	-4.46E-09	2.95E-09	-1.514409	0.1304
D(MMA)	-4.70E-06	6.40E-06	-0.734331	0.4630
D(TAXOWED)	0.567678	0.140942	4.027754	0.0001
D(ETR)	-0.061311	0.164502	-0.372705	0.7095
Adjusted R-squared	0.367515			
F-statistic	37.43281			
Prob(F-statistic)	0.000000			

Dependent Variable: Change in ETR (CHETR)

Estimation result of regression model with Ordinary Least Squares (OLS) method uses Eviews 3.0. The purpose of the research is to analyze the relationship of tax expense on a company's earnings absent tax expense management miss its target earnings. Table 4.3 shows that Coefficient determination ( $R^2_{\text{adjusted}}$ ) found 0.367515, it means that around 36.75% from variation on change in ETR (CHETR) variable may be explained by 10 independent variables in the model, where 63.25% of the residual explained by other factor outside the model

And Table 4.3 show that  $(Etr_t - Etr_{t-1})$  is slightly negatively correlated with *income*, inconsistent with income-increasing accruals as well as increasing effective tax rates negatively related (Coefficient = -4.46E-09, t = -1.51, prob.= 0.1304) to the amount by which company beat the forecast (*Miss\_Amount*). However, the relation

between the change in ETR (CHETR) and Miss amount is negative, but the probability value show that the relation is not significant, where to reject  $H_0$  the coefficient is should be negative and probability value  $< \alpha = 0,05$ . So, in this case  $H_0$  cannot be rejected. This means that the change in tax expense has not negative relationship with earnings absent tax expense. The result indicates that the tax expense is not used to meet the company's target earnings. The purpose of this research is to examine and to prove whether the company manage tax expense to reach earnings targets by the changes of tax expense that are expected to be negatively related with the earnings target and to find the amount of earnings absent tax expense management (unmanaged earnings) that will miss the target earnings. However, the result shows that change of tax expense is not negatively related to the earnings target. Regarding to financial reporting, the managers cannot use the tax expense to manage earnings in order to make the financial reporting look great; and also the company can not use tax expense as the last chance to beat the target, that is the company's forecast represented by prior year net income.

There are several probabilities why the tax expense are not negatively relates with the earnings targets. The research uses data that are provided in Indonesia which the financial reporting are reported in annually, so we just could find the Effective Tax Rate (ETR) can only be found annually not quarterly, where by the quarterly data the researcher can find the third quarter ETR and fourth quarter ETR, based on Dhaliwal, Gleason, and Mills (2003). They focus on the income tax expense and

measure earnings management using changes from the third to the fourth quarter effective tax rate (ETR). The other possibility is the simplicity of tax in Indonesia, because the amount of tax expense always follows the rate depending on the pre-tax income amount of the period. This research uses 1996 – 2000 data, so it contains year 1997 and 1998 when Indonesia was in economic crisis which is made in the observation, the data is extreme, despite the influencing legal tax rate.

Related to the tax expense that does not have negative relationship to the earnings target, the researcher initiates to suggest the other researchers to use other methods to do earnings management. Based on Healy and Wahlen (1998), standard setters are more likely to be interested in understanding earnings management using specific accruals. Many researchers use specific accrual method through several proxy or special items in this case including bad-debt expense (Teoh et al. 1998), loan-loss provisions (Beaver et al. 1989, Wahlen 1994) and claim loss reserves (Petroni 1992, Beaver and McNichols 1998, Beatty et al. 2002, and Nelson 2000). Then inspired by tax, this research uses tax expense to do earnings management, but it must be noted that tax has two types, Current tax and Deferred tax, from these things the other researchers can analyse earnings management using deferred tax valuation. The other method that can be used is Audit Differences Perspective (Libby and Kinney, 1999). They focus on the company's willingness to record immaterial income decreasing audit differences when the adjustment causes the company to report earnings below the consensus analyst forecast and the implementation of proposed auditing standards



aimed will affect the willingness to record such audit differences. Following Jian Zhou (2001), to measure earnings management can use the quality of disclosure where it uses ratings published by the Association for Investment Management and Research to measure corporate disclosure, and discretionary accruals from the modified Jones model.

Regarding to the Dummy variable (Miss) that predicted negatively related to  $(Etr_t - Etr_{(t-1)})$ , the value for this dummy is -0.044010, it shows that the company that are below the target will decrease their ETR to reach the target. Only by this dummy variable, we can know the management incentive to manage tax expense

The relation between  $(Etr_t - Etr_{(t-1)})$  and  $Miss * Miss\_Amount$  value is negative (-4.70E-06). It shows that companies have a greater incentive to avoid missing the target. As the same with prediction before, that  $(Etr_t - Etr_{(t-1)})$  is positively related to both control variables  $Induced\_Chg\_ETR$  (15818500) and  $Tax\_Owed$  (0.567678). Because the value of tax owed is positive, it shows that the company owes more tax than the prepayments, and it indicates that is more likely to increase the ETR. The dummy it self shows the consistency by the significant p-value for 1997 is 0.0062 and for 1998 is 0.0403, when year 1997 and 1998 Indonesia was in economic crisis that made almost company gets loss.

## CHAPTER V

### CONCLUSION AND RECOMMENDATION

#### 5.1 Research Conclusion

The objectives of this study are to examine and provide general evidence whether reported tax expense are used to manage earnings to meet earnings targets, regarding to its absent tax expense management in Indonesia. After the statistical test and analysis, the conclusion is that there is no sufficient evidence to prove that there is negatively significant relationship between Miss Amount and Change in tax expense. The result implies that Miss Amount is negatively correlated with Change in ETR but not significant. So tax expense is not used as the last chance earnings management to meet company's forecast of Indonesian companies listed in JSX for period 1996-2000.

#### 5.2 Research Recommendation

The result of the research is failed to prove the incentives of management in managing earning using tax expense to meet the company's forecast. The correlation between Miss Amount and Change in ETR is negative but not significant. It may be caused by the extremely data that are used. So, the researcher gives the following recommendations:

- a. The period of the next research can be extended for longer period or use the other period.

- b. It is suggested for the next research to add or change the variables in managing the earnings, such as bad-debt expense, loan-loss provisions, claim loss reserves, deferred tax expense; audit differences perspective, because this research is only focuses on the Tax expense.
- c. The Companies that becomes sources of data can be more specific.



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# APPENDICES

## APPENDIX 1

## The List of Company

No	Code	Company Name
1	AALI	PT. Astra Agro Lestari Tbk
2	ACAP	PT. Andhi Chandra Automotive Tbk
3	ADES	PT. Ades Alfindo Tbk
4	ADFO	PT. Adindo Foresta Indonesia Tbk
5	ADMG	PT. Petrocem Industries Tbk
6	AISA	PT. Asia Intiselera Tbk
7	AKPI	PT. Argha Karya Prima Industry Tbk
8	AKRA	PT. Aneka Kimia Raya Tbk
9	ALDI	PT. Alter Abadi Tbk
10	ALFA	PT. Alfa Retailindo Tbk.
11	ALKA	PT. Alakasa Industrindo Tbk.
12	ALMI	PT. Alumindo Light Metal Industry Tbk.
13	AMFG	PT. Asahimas Flat Glass Tbk.
14	ANSI	PT. Anwar Sierad Tbk.
15	ANTM	PT. Aneka Tambang Tbk.
16	APLI	PT. Asia Plast Industry Tbk.
17	AQUA	PT. Aqua Golden Missisipi Tbk.
18	ARGO	PT. Argo Pantes Tbk.
19	ARNA	PT. Arwana Citra Mulia Tbk.
20	ASGR	PT. Astra Graphia Tbk.
21	ASIA	PT. Asiana Multikreasi Tbk.
22	ASII	PT. Astra International Tbk.
23	ASTR	PT. Aster Dharma Industry Tbk.
24	AUTO	PT. Astra Autoparts Tbk.
25	BASS	PT. Bahtera Adimina Samudra Tbk.
26	BATA	PT. Sepatu Bata Tbk.
27	BATI	PT. Bat Indonesia Tbk.
28	BAYU	PT. Bayu Buana Travel Tbk.
29	BGMT	PT. Bali Graha Medikatama Tbk.
30	BIMA	PT. Primarindo Asia Infrastructure Tbk.
31	BIPP	PT. Bhuwanatala Indah Permai Tbk.
32	BKSL	PT. Bukit Sentul Tbk.
33	BLTA	PT. Berlian Laju Tanker Tbk.
34	BMRA	PT. Bintuni Mina Raya Tbk.
35	BMSR	PT. Bintang Mitra Semesta Raya Tbk.
36	BMTR	PT. Bimantara Citra Tbk.



No	Code	Company Name
37	BNBR	PT. Bakrie and Brother Tbk.
38	BRAM	PT. Branta Mulia Tbk.
39	BRNA	PT. Berlina Tbk.
40	BRPT	PT. Barito Pasific Timber Tbk.
41	BTON	PT. Beton Jaya Manunggal Tbk.
42	BUDI	PT. Budi Acid Jaya Tbk.
43	BUKK	PT. Bukaka Teknik Utama Tbk.
44	BUMI	PT. Bumi Modern Tbk.
45	BYSP	PT. Bayer Indonesia Tbk.
46	CEKA	PT. Cahaya Kalbar Tbk.
47	CENT	PT. Centrin Online Tbk.
48	CKRA	PT. Ciptojaya Kontrindoreksa Tbk.
49	CLPI	PT. Colorkpak Indonesia Tbk.
50	CMNP	PT. Citra Marga Nusaphala Persada Tbk.
51	CMPP	PT. Centris Multi Persada Pratama Tbk.
52	CNBE	PT. Concord Benefit Enterprise Tbk.
53	CNKO	PT. Central Korporindo International Tbk.
54	CNTX	PT. Centex Tbk.
55	CPDW	PT. Cipendawa Farm Enterprise Tbk.
56	CPIN	PT. Charoen Phokphand Indonesia Tbk.
57	CPPR	PT. CP Prima Tbk.
58	CTBN	PT. Citra Tubindo Tbk.
59	CTRS	PT. Ciptura Surya Tbk.
60	CTTH	PT. Citatah Industri Marmer Tbk.
61	DART	PT. Duta Anggada Realty Tbk.
62	DAVO	PT. Davomas Abadi Tbk.
63	DGSA	PT. Daya Guna Samudra Tbk.
64	DILD	PT. Dharmala Intiland Tbk.
65	DLTA	PT. Delta Djakarta Tbk.
66	DMAD	PT. Dharmindo Adhiduta Tbk.
67	DNET	PT. Dyniacom Tbk.
68	DNKS	PT. Dankos Laboratories Tbk.
69	DOID	PT. Daeyu Orchid Indonesia Tbk.
70	DPNS	PT. Duta Pertiwi Nusantara Tbk.
71	DSFI	PT. Dharma Samudra Fishing Indonesia Tbk.
72	DSST	PT. Dhamala Sakti Sejahtera Tbk.
73	DSUC	PT. Daya Sakti Unggul Corporation Tbk.
74	DUTI	PT. Duta Pertiwi Tbk.
75	DVLA	PT. Darya Varia Laboratoria Tbk.
76	DYNA	PT. Dynaplast Tbk.

No	Code	Company Name
77	EKAD	PT. Ekadharna Tape Industry Tbk.
78	ELTY	PT. Bakrie Land Development Tbk.
79	EPMT	PT. Enseval Putra Mega Trading Tbk.
80	ERTX	PT. Eratex Djaya Tbk.
81	ESTI	PT. Ever Shine Textile Industry Tbk.
82	ETWA	PT. Eterindo Wahanatama Tbk.
83	FAST	PT. Fast Food Indonesia Tbk.
84	FASW	PT. Fajar Surya Wisesa Tbk.
85	FISK	PT. Fiskaragung Perkasa Tbk.
86	FMII	PT. Fortune Mate Indonesia Tbk.
87	GDWU	PT. Ganda Wangsa Utama Tbk.
88	GDYR	PT. Good Year Tbk.
89	GGRM	PT. Gudang Garam Tbk.
90	GGST	PT. Great Golden Star Tbk.
91	GJTL	PT. Gajah Tunggal Tbk.
92	GMTD	PT. Gowa Makasat TD Tbk.
93	GRIV	PT. Great River International Tbk.
94	HDTX	PT. Pansia Indosyntec Tbk.
95	HERO	PT. Hero Supermarket Tbk.
96	HEXA	PT. Hexsindo Adiperkasa Tbk.
97	HITS	PT. Humpuss Intermoda Transport Tbk.
98	HMSP	PT. HM Sampoerna Tbk.
99	HPSB	PT. Hotel Prapatan Tbk.
100	IATG	PT. Infoasia Teknologi Global Tbk.
101	IDSR	PT. Indosiar Visual Mandiri Tbk.
102	IGAR	PT. Igar Jaya Tbk.
103	IKAI	PT. Inti Keramik Alamasri Industry Tbk.
104	IKBI	PT. Sumi Indo Kabel Tbk.
105	IMAS	PT. Indomobil Sukses International Tbk.
106	INAF	PT. Indo Farna Tbk.
107	INAI	PT. Indal Alumunium Industry Tbk.
108	INCI	PT. Intan Wijaya Chemical Tbk.
109	INDF	PT. Indofood Sukses Makmur Tbk.
110	INDR	PT. Indorama Syntetic Tbk.
111	INDS	PT. Indospring Tbk.
112	INRU	PT. Inti Indorayon Utama Tbk.
113	INSA	PT. Inti Nusa Selareksa Tbk.
114	INTA	PT. Intraco Penta Tbk.
115	INTD	PT. Inter Delta Tbk.
116	INTP	PT. Indocement Tunggul Prakarsa Tbk.

No	Code	Company Name
117	ISAT	PT. Indosat Tbk.
118	ITMA	PT. Itamaraya Gold Industry Tbk.
119	JAKA	PT. Jaka Artha Graha Tbk.
120	JECC	PT. Jembo Cable Company Tbk.
121	JIHD	PT. Jakarta International Hotel and Dev.Tbk.
122	JKSW	PT. Jakarta Kyoei Steel Works Tbk.
123	JPFA	PT. Japfa Tbk.
124	JPRS	PT. Jaya Pari Steel Corp. Tbk.
125	JRPT	PT. Jaya Real Property Tbk.
126	JSPT	PT. Jakarta Setia Budi Property Tbk.
127	JWJI	PT. Indosteel Tbk.
128	JWJI	PT. Jeewon Jaya Indonesia Tbk.
129	KARK	PT. Karka Yasa Profilia Tbk.
130	KARW	PT. Karwell Indonesia Tbk.
131	KBLI	PT. Kabel Indonesia Tbk.
132	KBLM	PT. Kabelindo Murni Tbk.
133	KDSI	PT. Kedawang Setia Industrial Tbk.
134	KIAS	PT. Keramika Indonesia Tbk.
135	KDSI	PT. Kedaung Indah Chan Tbk.
136	KIJA	PT. Kawasan Industri Jababeka Tbk.
137	KKGI	PT. Kurnia Kapuas Utama Tbk.
138	KLBF	PT. Kalbe Farma Tbk.
139	KOMI	PT. Komatsu Indonesia Tbk.
140	KONI	PT. Perdana Bangun PusakaTbk.
141	KOPI	PT. Kopitime Dot Com Tbk.
142	KPIG	PT. Krida Perdana Indah Graha Tbk.
143	LAMI	PT. Lami Citra Nusantara Tbk.
144	LAPD	PT. Lapindo Packaging Tbk.
145	LION	PT. Lion Metal Works Tbk.
146	LMAS	PT. Limas Stokhomindo Tbk.
147	LMPI	PT. Langgeng Makmur Industry Tbk.
148	LMSH	PT. Lion Mesh Prima Tbk.
149	LPCK	PT. Lippo Cikarang Tbk.
150	LPIN	PT. Lippo Enterprise Tbk.
151	LPKR	PT. Lippo Karawaci Tbk.
152	LPLD	PT. Lippo Land Development Tbk.
153	LPPF	PT. Pasific Utama Tbk.
154	LSIP	PT. PP London Sumatra Tbk.
155	LTLS	PT. Lautan Luas Tbk.
156	MAMI	PT. Mas Murni Indonesia Tbk.

No	Code	Company Name
157	MBAI	PT. Multi Breeder Adirama Indonesia Tbk.
158	MDLR	PT. Modern Land Realty Tbk.
159	MDRN	PT. Modern Photo Film Indonesia Tbk.
160	MEDC	PT. Medco Energy Corp. Tbk.
161	MERK	PT. Merck Indonesia Tbk.
162	META	PT. Metamedia Technologies Tbk.
163	MIRA	PT. Mitra Rajasa Tbk.
164	MLBI	PT. Multi Bintang Indonesia Tbk.
165	MLIA	PT. Mulia Industrindo Tbk.
166	MLND	PT. Mulia Land Tbk.
167	MLPL	PT. Multi Polar Tbk.
168	MPPA	PT. Matahari putra Prima Tbk.
169	MRAT	PT. Mustika Ratu Tbk.
170	MTDL	PT. Metro Data Electronic Tbk.
171	MTSM	PT. Metro Super Market Realty Tbk.
172	MWON	PT. Miwon Indonesia Tbk.
173	MYOR	PT. Mayora Indah Tbk.
174	MYRX	PT. Hanson Industry Utama Tbk.
175	MYTX	PT. Apax centerex Corp. Tbk.
176	NIPS	PT. Nipress Tbk.
177	NVPD	PT. Soedarmo Tbk.
178	MORE	PT. Indonesia Prima Property Tbk.
179	PAFI	PT. Panasia Filament Inti Tbk.
180	PANR	PT. Panorama Sentra Wisata Tbk.
181	PBRX	PT. Pan Brother Tex Tbk.
182	PFIN	PT. Pfizer Indonesia Tbk.
183	PICO	PT. Pelangi Indah Canindo Tbk.
184	PLAS	PT. Plast Pack Prima Industry Tbk.
185	PLIN	PT. Palza Indonesia realty Tbk.
186	PNSE	PT. Pudjiadi And Sons Tbk.
187	POLY	PT. Polysindo Eka Perkasa Tbk.
188	PRAS	PT. Prima Alloy Steel Universal Tbk.
189	PRDP	PT. Prodentia Tbk.
190	PSDN	PT. Prashida Aneka Niaga Tbk.
191	PSMD	PT. Putra Surya Multidana Tbk.
192	PTRA	PT. Putra Surya Perkasa Tbk.
193	PTRO	PT. Petrosea Tbk.
194	PTSP	PT. Putra Sejahtera Pioneerindo Tbk.
195	PUDP	PT. Pudjiada Prestige Limited Tbk.
196	PWON	PT. Pakuwon Jati Tbk.

No	Code	Company Name
197	PWSI	PT. Panca Wiratama Sakti Tbk.
198	PYFA	PT. Prydan Farna Tbk.
199	RALS	PT. Ramayana Lestari Sentosa Tbk.
200	RBMS	PT. Ristia Bintang Mahkota Sejati Tbk.
201	RDTX	PT. Roda Vivatex Tbk.
202	RICY	PT. Ricky Putra Globalindo Tbk.
203	RIGS	PT. Rig Tenders Indonesia Tbk.
204	RIMO	PT. Rimo Catur Lestari Tbk.
205	RMBA	PT. Rimab Niaga Idola Tbk.
206	RODA	PT. Roda Panggon Harapan Tbk.
207	RYAN	PT. Ryane Adhi Busana Tbk.
208	SAFE	PT. Steady Safe Tbk.
209	SAIP	PT. Surabaya Agung Industry Pulp Tbk.
210	SCCO	PT. Supreme Cable Manufacture Corp Tbk.
211	SCPI	PT. Schering Plough Indonesia Tbk.
212	SDPC	PT. Soedarpo Corp Tbk.
213	SHDA	PT. Sari Husada Tbk.
214	SHID	PT. Sahid Jaya Hotel Tbk.
215	SHSA	PT. Surya Hidup Satwa Tbk.
216	SIIP	PT. Suya Inti Pertama Tbk.
217	SIMA	PT. Van Der Horst Indonesia Tbk.
218	SIMM	PT. Surya Intrindo Makmur Tbk.
219	SIPD	PT. Sierad Produce Tbk.
220	SKBM	PT. Sekar Bumi Tbk.
221	SKLT	PT. Sekar Laut Tbk.
222	SMAR	PT. Smart Corporation Tbk.
223	SMCB	PT. Semen Cibinong Tbk.
224	SMDM	PT. Suryamas Duta Makmur Tbk.
225	SMDR	PT. Samudra Indonesia Tbk.
226	SMGR	PT. Semen Gresik Tbk.
227	SMPL	PT. Summit Plast Inter Benua Tbk.
228	SMRA	PT. Suma Recon Agung Tbk.
229	SMSM	PT. Selamat Sempurna Tbk.
230	SNGR	PT. Singer Industries Indonesia Tbk.
231	SOBI	PT. Sorini Corpoartion Tbk.
232	SONA	PT. Sona Topas Tourism Industry Tbk.
233	SPMA	PT. Suparma Tbk.
234	SQBI	PT. Sqiubb Indonesia Tbk.
235	SRSN	PT. Sarasa Nugraha Tbk.
236	SSIA	PT. Surya Semesta Internusa Tbk.

No	Code	Company Name
237	SSTM	PT. Sunson Textile Manufacture Tbk.
238	STTP	PT. Siantar Top Tbk.
239	SUBA	PT. Suba Indah Tbk.
240	SUDI	PT. Surya Dumai Industry Tbk.
241	SULI	PT. Sumalindo Lestari Jaya Tbk.
242	SUMI	PT. Super Mitory Utama Tbk.
243	TBLA	PT. Tunas Baru Lampung Tbk.
244	TMBS	PT. Tembaga mulia Semanan Tbk.
245	TCID	PT. Tancho Indonesia Tbk.
246	TEJA	PT. Texmaco Jaya Tbk.
247	TFCO	PT. Tifico Tbk.
248	TGKA	PT. Tiga Raksa Satria Tbk.
249	TINS	PT. Tambang Timah Tbk.
250	TIRA	PT. Tira Austenite Tbk.
251	TIRT	PT. Tirta Mahakam Tbk.
252	TKGA	PT. Toko Gunung Agung Tbk.
253	TLKM	PT. Telekomunikasi Indonesia Tbk.
254	TMPO	PT. Tempo Inti Media Tbk.
255	TOTO	PT. Surya Toto Indonesia Tbk.
256	TPEN	PT. Texmaco Perkasa Engineering Tbk.
257	TPFC	PT. Dharmala Agrifood Tbk.
258	TPIA	PT. Tri Polyta Indonesia Tbk.
259	TRPK	PT. Trafindo Perkasa Tbk.
260	TRST	PT. Trias Sentosa Tbk.
261	TSPC	PT. Tempo Scan Pasific Tbk.
262	TURI	PT. Tunas Ridean Tbk.
263	UGAR	PT. Wahana Jaya Perkasa Tbk.
264	ULTJ	PT. Ultra Jaya Tbk.
265	UNIC	PT. Unggul Indah Cahaya Tbk.
266	UNIC	PT. Unggul Indah Corp. Tbk.
267	UNSP	PT. Bakrie Sumatra Plantation Tbk.
268	UNTR	PT. United Tractor Tbk.
269	UNTX	PT. Unitex Tbk.
270	UNVR	PT. Unilever Indonesia Tbk.
271	VOKS	PT. Voksel Electric Tbk.
272	WAPO	PT. Wahana Phoenix Mandiri Tbk.
273	WICO	PT. Wicaksana Overseas Tbk.
274	ZBRA	PT. Zebra Nusantara Tbk.

APPENDIX 2

Data of each Variables in Year 1997

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
WICO	-329.286191	1	106.0789506	106.0789506	-4911.174603	-6605.222806	64.70668993	1	0	0	0
ADES	-1.036902923	1	30.02182288	30.02182288	-5.60289651	-5.615217265	1.1213E-06	1	0	0	0
HMSP	0.988057976	1	381.6114291	381.6114291	-1.967035244	-2.61553676	4.58793E-10	1	0	0	0
TPEN	-1.338445635	1	32.90858798	32.90858798	-1.806828858	-1.893490691	3.32156E-10	1	0	0	0
DUTI	-1.53121429	0	-6.383651757	0	-1.353785348	-1.693097196	-4.11379E-11	1	0	0	0
PLIN	1.928695923	1	118.4703826	118.4703826	-1.345484133	-1.719938756	1.10361E-09	1	0	0	0
ULTJ	4.279931063	1	87.46598519	87.46598519	-0.919242235	-1.172535316	6.49143E-09	1	0	0	0
LPIN	-0.069909615	0	-919.8200252	0	-0.684080666	-0.300723081	-3.13096E-12	1	0	0	0
BYSP	0.184061189	1	407.2544211	407.2544211	-0.671107821	-1.267209474	3.77074E-10	1	0	0	0
MDLR	5.19612368	1	32.27316337	32.27316337	-0.668277001	-1.657189384	4.08376E-09	1	0	0	0
UGAR	-0.368621853	0	-591.855	0	-0.641428482	-0.682658835	-5.10042E-09	1	0	0	0
LMSH	-0.145064608	1	-0.549287604	-0.5492876	-0.614436511	-0.905735236	5.53054E-10	1	0	0	0
SONA	0.142413939	1	52.29343201	52.29343201	-0.586438907	-0.592639975	3.00121E-10	1	0	0	0
GDYR	-0.163115877	1	346.503252	346.503252	-0.570812478	-0.949026063	9.76741E-11	1	0	0	0
BATI	-0.029953186	1	2903.939394	2903.939394	-0.564786162	-0.798976434	4.81705E-11	1	0	0	0
DAVO	-0.265833114	1	88.79626001	88.79626001	-0.518063124	-0.621491316	2.35269E-11	1	0	0	0
TCID	-0.353548946	1	73.95092224	73.95092224	-0.474733856	-0.792064851	9.94241E-11	1	0	0	0
BMTR	-0.531355735	1	99.95100492	99.95100492	-0.402513471	-1.560840688	9.25426E-11	1	0	0	0
LION	0.103673341	1	-28.60601911	-28.6060191	-0.202239384	-0.541021102	7.08042E-12	1	0	0	0
SQBI	-0.403141406	1	-340.7561728	-340.756173	-0.17916505	-0.545192242	4.10046E-11	1	0	0	0
FISK	-0.152109041	0	-23.15093944	0	-0.172395055	-0.234689805	-5.59858E-15	1	0	0	0
JSPT	-0.130107514	0	-63.42418475	0	-0.167313161	-0.258480621	-3.39584E-12	1	0	0	0
TURI	-0.037439738	1	0.621816287	0.621816287	-0.161242691	-0.693636609	1.41154E-11	1	0	0	0
INAI	0.757963588	1	38.75553659	38.75553659	-0.151128036	-0.282714211	1.27723E-10	1	0	0	0

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
PUDP	-0.146853603	1	49.16197289	49.16197289	-0.129980111	-0.514923934	1.1115E-10	1	0	0	0
SIMA	-0.019359053	0	-2.7047797	0	-0.129834782	-0.195019549	-4.66207E-12	1	0	0	0
DGSA	-0.016220486	0	-559.398396	0	-0.128345073	-0.128434539	-2.0446E-13	1	0	0	0
AQUA	-0.264718802	1	-136.8205109	-136.820511	-0.105056098	-0.455655755	7.42908E-12	1	0	0	0
UNSP	-0.065799063	0	-81.18991362	0	-0.102623511	-0.260829702	-5.86992E-14	1	0	0	0
SUDI	-0.055455406	1	-10.55724829	-10.5572483	-0.09177961	-0.219851186	6.95812E-13	1	0	0	0
MTDL	-0.113465721	1	-406.3261381	-406.326138	-0.062849693	-0.498071129	-6.25371E-13	1	0	0	0
JRPT	-0.061807874	1	201.9337149	201.9337149	-0.06068374	-0.420680535	5.14291E-11	1	0	0	0
CMNP	-0.055578427	1	-6.701413673	-6.70141367	-0.039144672	-0.191750844	8.22701E-14	1	0	0	0
IGAR	1.651481464	1	7.876510324	7.876510324	-0.033945809	-0.511168983	4.16837E-10	1	0	0	0
TLKM	-0.104066236	1	-12.71689331	-12.7168933	-0.03364865	-0.323338268	5.52367E-14	1	0	0	0
DILD	-0.059441526	1	945.0809725	945.0809725	-0.029755954	0.032275196	-3.12384E-13	1	0	0	0
ELTY	-0.021443253	1	19.48310755	19.48310755	-0.025121799	0.004166449	-1.0949E-13	1	0	0	0
MLND	-0.072034689	1	18.99850469	18.99850469	-0.021356891	-0.226263293	8.34362E-13	1	0	0	0
RALS	-0.070984846	0	-128.8114286	0	-0.018424685	-0.137051737	-2.13956E-13	1	0	0	0
HITS	-0.013536873	0	-68.18228222	0	-0.012258492	-0.12622498	-4.13799E-13	1	0	0	0
ASIA	0.018567646	0	-14.30117486	0	-0.010948924	-0.167709046	-1.11085E-11	1	0	0	0
FAST	0.05924964	1	52.31684034	52.31684034	-0.009241028	-0.10471483	6.29767E-12	1	0	0	0
BAYU	-8.29805E-06	1	401.852896	401.852896	-0.009164886	2.9152E-05	-3.08077E-16	1	0	0	0
MLIA	-0.169216616	1	70.38272714	70.38272714	-0.000551593	-0.348490017	8.59206E-11	1	0	0	0
ARGO	-0.003088337	1	1442.814654	1442.814654	-0.000241925	5.16622E-05	-1.47685E-16	1	0	0	0
MLBI	0.10743522	1	-440.7388384	-440.738838	0	-0.324242702	2.35391E-12	1	0	0	0
SMGR	0.091817817	1	-94.91481104	-94.914811	0	-0.138915155	2.15282E-14	1	0	0	0
MTSM	0.156200186	1	36.77100679	36.77100679	0	-0.77793153	4.48471E-10	1	0	0	0
INDS	0.625846077	1	168.1603641	168.1603641	0	-0.189912563	1.60567E-10	1	0	0	0
DYNA	0.103936173	0	-21.46926402	0	0.002772533	-0.162017093	-1.43229E-12	1	0	0	0
INDF	0.035973232	1	4764.812121	4764.812121	0.002814742	0.055219684	-6.81716E-14	1	0	0	0



Code	chetr	miss	missmount	mna	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
SMCB	-0.004277653	1	325.2345053	325.2345053	0.002977878	0.00435664	-2.26112E-14	1	0	0	0
MERK	0.05411022	1	-2271.435119	-2271.43512	0.005558555	-0.324601862	1.80026E-12	1	0	0	0
SAFE	0.003298898	1	2028.797751	2028.797751	0.005889954	0.006210371	-1.82982E-14	1	0	0	0
FASW	0.006146889	1	809.329008	809.329008	0.006139843	0.007658557	-4.36808E-14	1	0	0	0
BRNA	-0.12052517	1	180.9940167	180.9940167	0.007694382	-0.610681727	2.25734E-10	1	0	0	0
DART	0.018607874	1	418.8305288	418.8305288	0.010401006	0.046434912	-2.83742E-13	1	0	0	0
PTRA	-0.002464043	1	379.2409985	379.2409985	0.011552714	0.022094724	-3.62035E-14	1	0	0	0
BIPP	0.051943614	1	208.6813293	208.6813293	0.012121849	0.056306734	-5.55141E-13	1	0	0	0
ITMA	0.036773222	0	-68.33494457	0	0.013632637	-0.214942062	-3.52256E-11	1	0	0	0
SMRA	-0.092062789	1	451.2884845	451.2884845	0.013745949	0.101601606	-1.34246E-12	1	0	0	0
LPLD	0.040740161	1	481.0725543	481.0725543	0.013989224	0.089933745	-1.04106E-12	1	0	0	0
RIGS	0.000824903	0	-387.6562639	0	0.014245421	-0.027274119	-6.18801E-13	1	0	0	0
MORE	-0.042715643	1	137.2762295	137.2762295	0.016557215	0.108915124	-2.94297E-12	1	0	0	0
HDTX	-0.000362299	1	937.78971	937.78971	0.018005948	0.020267895	-1.09445E-13	1	0	0	0
SCCO	-0.001280254	1	1513.316672	1513.316672	0.02008132	0.008141012	-2.64586E-14	1	0	0	0
LPCK	0.068205851	0	-17.77016772	0	0.023669585	-0.065065337	-5.00554E-14	1	0	0	0
RDTX	-0.028132942	1	-1.532972314	-1.53297231	0.026145799	-0.282864417	3.88785E-12	1	0	0	0
BUKK	0.009879379	1	4475.360728	4475.360728	0.026612656	0.034926009	-6.95688E-14	1	0	0	0
GDWU	0.013180966	1	377.6670766	377.6670766	0.030080267	0.034116952	-4.44127E-13	1	0	0	0
KOMI	-0.073534778	0	-372.0029588	0	0.032974972	-0.276485396	-9.67502E-13	1	0	0	0
SKLT	-0.017868798	1	1124.855208	1124.855208	0.033656435	0.033797087	-4.98898E-13	1	0	0	0
SCPI	0.144458362	0	-4401.207683	0	0.035614165	-0.247625362	-5.63856E-12	1	0	0	0
SIIP	-0.045630294	0	-90.59395781	0	0.036862474	-0.050568903	-6.44745E-13	1	0	0	0
MLPL	0.069135812	1	125.4791846	125.4791846	0.03992949	0.085402607	-3.98634E-13	1	0	0	0
MPPA	-0.016035704	1	55.28488783	55.28488783	0.040436104	0.070830637	-6.36141E-13	1	0	0	0
ISAT	-0.035733599	0	-339.0970546	0	0.042657134	-0.224286795	-4.97399E-14	1	0	0	0
PTSP	0.002490158	1	464.8403871	464.8403871	0.042797698	0.06451918	-1.82982E-12	1	0	0	0

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
BLTA	0.487447715	0	-63.00593721	0	0.044608747	-0.027122443	-4.04991E-13	1	0	0	0
CPPR	0.008499912	1	1000.000843	1000.000843	0.053677127	0.061541134	-1.36193E-13	1	0	0	0
MIRAT	0.03196944	0	-71.83627751	0	0.053762503	-0.212843949	-5.92635E-13	1	0	0	0
TINS	0.012970507	0	-198.4891775	0	0.062466619	-0.244217462	-1.35663E-13	1	0	0	0
HERO	-0.020724168	1	277.0207253	277.0207253	0.062904071	0.19175757	-8.51208E-12	1	0	0	0
BATA	0.018735832	0	-1497.442418	0	0.068691195	-0.325169504	-2.57874E-11	1	0	0	0
STTP	0.008316613	0	-105.1997103	0	0.072796764	-0.029691856	-5.85602E-13	1	0	0	0
SHDA	0.096356675	0	-140.4544822	0	0.074121625	-0.206862073	-4.5054E-13	1	0	0	0
CMPP	0.05222983	0	-186.6938621	0	0.095852065	-0.032273183	-4.64381E-13	1	0	0	0
PNSE	0.022386069	1	179.4747493	179.4747493	0.100564544	0.074296428	-4.07987E-12	1	0	0	0
SMAR	-1.378580034	1	1109.637321	1109.637321	0.104329124	0.163399259	-1.31169E-11	1	0	0	0
BNBR	0.026826022	1	263.9623663	263.9623663	0.110252096	0.148679701	-8.55227E-13	1	0	0	0
GRIV	-0.0403473	1	101.7048234	101.7048234	0.131269288	0.14710248	-3.25724E-11	1	0	0	0
SULI	0.0702159	1	203.693266	203.693266	0.136856127	0.148046092	-1.00417E-11	1	0	0	0
AKPI	0.048617647	1	166.504112	166.504112	0.139709002	0.142287813	-9.30783E-12	1	0	0	0
DPNS	-0.033642228	0	-255.9881162	0	0.143786713	-0.195525135	-4.75076E-12	1	0	0	0
PSDN	-0.043507204	1	199.8845912	199.8845912	0.14470419	0.221995617	-9.78135E-12	1	0	0	0
TRPK	-0.019090214	1	469.7064578	469.7064578	0.173575584	0.266289789	-3.46588E-11	1	0	0	0
INCI	-0.033039631	0	-495.3246688	0	0.178500419	-0.121003033	-2.5202E-12	1	0	0	0
PWON	0.232089918	1	330.2868726	330.2868726	0.187844962	0.275416169	-4.75901E-12	1	0	0	0
JIHD	0.002252657	1	231.9403906	231.9403906	0.196617122	0.095096585	-5.53177E-13	1	0	0	0
TIRA	0.029036145	1	955.2035261	955.2035261	0.215033607	0.228570227	-3.84405E-11	1	0	0	0
EPMT	0.127252164	1	223.1178641	223.1178641	0.229285082	0.245263896	-1.16146E-11	1	0	0	0
TSPC	0.142664362	1	749.5369518	749.5369518	0.27531438	0.384755035	-1.2407E-11	1	0	0	0
INTP	0.069560911	1	388.0492167	388.0492167	0.343321992	0.343825709	-2.40242E-12	1	0	0	0
TEJA	0.207222681	1	310.2213834	310.2213834	0.468568241	0.468575748	-1.68232E-11	1	0	0	0
KDSI	-0.000679171	1	10.47185222	10.47185222	0.494138604	-0.363115601	5.12644E-11	1	0	0	0

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
KKGI	0.966119721	1	149.8221575	149.8221575	0.714533782	1.42435437	-1.43243E-09	1	0	0	0
TFCO	0.398783837	0	-97.40479658	0	1.038035217	1.03296784	8.0803E-10	1	0	0	0
MDRN	0.504060797	1	306.3452909	306.3452909	1.390904455	1.812779881	-5.97092E-10	1	0	0	0



Data of each Variables in Year 1998

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
UNTX	-0.475298035	0	-2374.04569	0	-10.75092164	-0.769317549	-3.39382E-09	0	1	0	0
SONA	3.40125011	0	24.53618462	0	-10.07101867	-0.139665395	8.431E-10	0	1	0	0
PLIN	0.599354605	0	-42.9987971	0	-2.327135528	-0.136255667	-3.74591E-12	0	1	0	0
TURI	0.5000705	1	14.17907628	14.17907628	-1.184245008	-1.723078156	7.05963E-10	0	1	0	0
DUTI	-0.433308441	1	-15.85912943	-15.8591294	-0.629340523	-1.257764992	-1.98885E-11	0	1	0	0
BATI	-0.105627899	1	213.6363636	213.6363636	-0.536969765	-1.231151847	2.81217E-11	0	1	0	0
KKGI	0.018055227	0	-429.6398046	0	-0.404524922	-0.108274234	-2.32757E-12	0	1	0	0
SHDA	-0.044742868	1	122.9597502	122.9597502	-0.389688641	-0.730639466	1.0816E-10	0	1	0	0
FASW	-0.001592578	1	1314.976965	1314.976965	-0.339957636	0.001288393	-1.69109E-15	0	1	0	0
UNIC	0.031259771	0	-195.7645761	0	-0.255465896	-0.222389609	-3.01661E-12	0	1	0	0
INDF	-0.08381677	0	-969.8581032	0	-0.252794835	-0.189197082	-9.52119E-13	0	1	0	0
JSPT	-0.035946406	1	312.5203224	312.5203224	-0.203454938	0.03687235	-3.26294E-13	0	1	0	0
KBLI	-0.064312358	1	93.29566963	93.29566963	-0.113247797	0.021603681	-4.75677E-14	0	1	0	0
POLY	-0.001595436	1	404.8708834	404.8708834	-0.093960743	0.028862589	-1.67077E-14	0	1	0	0
DSUC	0.304967946	0	-195.7753774	0	-0.091097151	-0.118401852	-3.05131E-11	0	1	0	0
MLBI	0.099767816	1	2178.60905	2178.60905	-0.088978669	-0.503048419	1.44465E-11	0	1	0	0
MRAT	-0.063499758	0	-100.2589135	0	-0.088161696	-0.25070249	-9.94915E-13	0	1	0	0
JRPT	1.121450207	1	28.05370213	28.05370213	-0.049714153	-0.842126934	4.76479E-10	0	1	0	0
PSDN	-0.010738684	1	375.2898744	375.2898744	-0.048672813	0.042345024	-1.81647E-13	0	1	0	0
ERTX	0.016141787	0	-954.8255505	0	-0.035631949	-0.048780919	-4.64491E-12	0	1	0	0
BMTR	-0.082202869	0	409.6381514	0	-0.035521708	0.13295839	-3.73347E-13	0	1	0	0
UGAR	0.091961797	0	-5.359617504	0	-0.031376322	-0.039347212	-5.3305E-12	0	1	0	0
PTRO	-0.183414767	0	-1560.628655	0	-0.030799799	-0.174927129	-4.57597E-13	0	1	0	0
JPRS	-0.014174007	1	325.0600436	325.0600436	-0.023127401	0.010547666	-3.3377E-13	0	1	0	0
DILD	0.02664919	1	18.01749868	18.01749868	-0.019608624	0.054270831	-4.19882E-14	0	1	0	0
UNSP	0.00182425	1	-69.02451591	-69.0245159	-0.018725207	-0.239637825	-2.74684E-13	0	1	0	0

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
SMAR	-0.010005008	0	-840.1641112	0	-0.017818864	-0.117617314	-1.5735E-12	0	1	0	0
ELTY	0.001267795	1	63.14052136	63.14052136	-0.00798115	0.00235542	-1.40777E-14	0	1	0	0
CTTH	-0.030432455	1	566.7817405	566.7817405	-0.006461333	0.004043547	-2.80343E-14	0	1	0	0
MLPL	-0.036929269	1	125.0701247	125.0701247	-0.005290017	0.011426603	-1.26848E-14	0	1	0	0
BKSL	0.026063007	0	-100.4850686	0	-0.004826152	-0.013445274	-8.61986E-14	0	1	0	0
BAYU	-2.31259E-05	0	51.6897924	0	-0.003770468	7.26676E-06	2.9007E-18	0	1	0	0
DVLA	0.001996761	1	76.6695647	76.6695647	-0.002540423	0.02201013	-4.6003E-14	0	1	0	0
RIGS	-0.013072201	0	-1410.325366	0	-0.001346894	-0.020515009	-1.28221E-13	0	1	0	0
PWSI	0.000696093	1	452.614995	452.614995	-0.001194147	0.000780027	-6.85193E-15	0	1	0	0
SMCB	-0.000173445	1	1791.285393	1791.285393	-0.000477764	0.000329037	-1.25063E-16	0	1	0	0
MTSM	-0.032329615	1	587.8066421	587.8066421	-0.000271804	0.034878236	-1.12862E-12	0	1	0	0
DSST	-0.010216235	0	2801.464748	0	-6.19618E-05	0.000518222	-2.03944E-16	0	1	0	0
BUKK	-0.016465149	0	-2288.461652	0	0	0.050660531	1.53748E-13	0	1	0	0
BLTA	-0.048552658	0	-157.3385424	0	0	-0.055273568	-4.4785E-13	0	1	0	0
PTRA	-0.00454795	1	161.6691825	161.6691825	0	0.010392546	-3.29281E-15	0	1	0	0
LPLD	-0.025716506	1	662.0870753	662.0870753	0.001016658	0.001482747	-2.1351E-15	0	1	0	0
ARGO	0.00148789	1	2734.546208	2734.546208	0.001133407	0.001513966	-1.03532E-15	0	1	0	0
LPKR	-0.00319585	1	302.0755541	302.0755541	0.001286485	0.010548635	-2.15719E-14	0	1	0	0
MDLR	-0.009795368	1	289.1244582	289.1244582	0.001337731	0.00870321	-3.69083E-14	0	1	0	0
SUMI	0.005434695	1	579.6093426	579.6093426	0.002309009	0.012593131	-5.49314E-14	0	1	0	0
SCCO	-0.002611153	1	798.6239017	798.6239017	0.006465675	0.002749613	-2.00094E-15	0	1	0	0
HERO	-0.010942843	1	66.43008925	66.43008925	0.006595017	0.11415079	-6.46217E-13	0	1	0	0
BNBR	-0.006073162	1	997.9070296	997.9070296	0.008169485	0.015677007	-6.03571E-15	0	1	0	0
MORE	-0.004250273	1	544.3198114	544.3198114	0.009534443	0.013365985	-3.43698E-14	0	1	0	0
PWON	-0.036970165	1	932.8254955	932.8254955	0.010248967	0.016494334	-2.62405E-14	0	1	0	0
SMRA	-0.027651059	0	-13.62998732	0	0.011073117	0.100867892	2.93348E-13	0	1	0	0
HITS	-0.063814908	0	-252.8644244	0	0.012788309	-0.11237233	-4.98323E-13	0	1	0	0

Code	chetr	miss	missmount	mima	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
PUDP	-0.054504989	1	240.0148741	240.0148741	0.012937867	0.022333941	-4.37668E-13	0	1	0	0
TLKM	0.202121939	0	-29.18057247	0	0.013514671	-0.166050523	1.61638E-14	0	1	0	0
MLND	0.049396591	1	500.2547552	500.2547552	0.013761367	0.11603529	-3.56504E-13	0	1	0	0
MIRA	-0.012566574	1	292.2907409	292.2907409	0.019138663	0.000752994	-1.11226E-14	0	1	0	0
JJHD	-0.01254397	1	1045.46734	1045.46734	0.020429929	0.003490085	-2.44709E-15	0	1	0	0
MYRX	0.004831205	1	592.8150478	592.8150478	0.021460626	0.012496419	-4.70834E-14	0	1	0	0
INCI	-0.119546029	1	-54.15628577	-54.1562858	0.022092815	-0.257606674	1.3302E-12	0	1	0	0
AQUA	0.043207311	0	-1350.307134	0	0.031405687	-0.174004965	-3.56441E-12	0	1	0	0
RICY	-0.031427123	1	108.1500137	108.1500137	0.045053601	0.053556578	-2.21158E-13	0	1	0	0
STTP	-0.035320706	0	-75.92497086	0	0.045197576	-0.059375854	4.26432E-13	0	1	0	0
DPNS	-0.17550908	0	-460.6420953	0	0.047237652	-0.240366059	-3.37251E-12	0	1	0	0
CPPR	0.007575663	1	326.7757774	326.7757774	0.053848967	0.062439373	-1.21111E-14	0	1	0	0
SIIP	0.321597112	1	75.77473702	75.77473702	0.054945055	-0.003451632	1.88783E-12	0	1	0	0
SKLT	-0.020163065	1	593.6041078	593.6041078	0.078630642	0.001346697	4.00496E-15	0	1	0	0
ETWA	-0.020986383	1	622.025552	622.025552	0.080456546	0.002566658	-6.51454E-15	0	1	0	0
MERK	0.117563918	1	-969.9315476	-969.931548	0.084306398	-0.294743374	7.29058E-12	0	1	0	0
SQBI	-0.034215128	1	41635.30864	41635.30864	0.084410102	0.065338993	-2.13038E-12	0	1	0	0
ISAT	-0.043156279	0	-862.4703042	0	0.084526849	-0.170784643	-4.79848E-14	0	1	0	0
ANTM	-0.003619414	0	-302.0593672	0	0.09190147	-0.060906678	-1.26449E-13	0	1	0	0
SSTM	0.201846673	1	11.01863221	11.01863221	0.100950382	0.071409961	-3.94658E-12	0	1	0	0
TPEN	-0.167230736	1	61.41527499	61.41527499	0.107569574	0.199736774	-2.23325E-12	0	1	0	0
RDTX	-0.019236049	0	-153.6717263	0	0.109155049	-0.111608297	-1.409E-12	0	1	0	0
PTSP	-0.02529109	1	516.4389597	516.4389597	0.115408498	0.001430096	-7.43084E-15	0	1	0	0
RALS	0.013369528	1	-99.44714286	-99.4471429	0.115841764	-0.082645991	-1.35981E-13	0	1	0	0
KIJA	0.019615042	0	-125.9144999	0	0.125314806	0.178233688	9.82289E-13	0	1	0	0
GDYR	-0.057788489	0	-10807.32732	0	0.128012303	-0.171429702	-2.10135E-12	0	1	0	0
TCID	0.065309709	0	-339.1810651	0	0.128714173	-0.168062762	-3.57954E-12	0	1	0	0

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
DNKS	-0.002230956	1	613.7906796	613.7906796	0.130480689	0.14387073	-1.89282E-12	0	1	0	0
LPCK	0.383096935	1	96.75360944	96.75360944	0.138068523	-0.21533458	1.95029E-10	0	1	0	0
KONI	0.194256486	0	-401.6805553	0	0.140092882	-0.042167262	-2.9264E-11	0	1	0	0
BRNA	0.278535079	0	-93.86162743	0	0.145272743	-0.059378565	-2.94381E-12	0	1	0	0
SMGR	0.000390608	0	-521.1500863	0	0.146061457	-0.12335233	4.35503E-14	0	1	0	0
MAMI	0.000310982	1	1554.842435	1554.842435	0.149174084	0.00074511	-2.86321E-15	0	1	0	0
LPIN	0.073737227	1	3276.220231	3276.220231	0.155218831	0.496391429	-8.27986E-11	0	1	0	0
PICO	-0.013791519	1	2009.160526	2009.160526	0.161351425	-0.001051742	2.98787E-15	0	1	0	0
SUDI	0.088696653	1	-8.348940462	-8.34894046	0.162309823	-0.15571041	3.82549E-13	0	1	0	0
JECC	-0.001118161	1	410.0138228	410.0138228	0.164806282	0.053202442	-9.19619E-13	0	1	0	0
PNSE	-0.072027549	0	-617.1730559	0	0.165782132	-0.098181859	-2.31531E-12	0	1	0	0
TINS	-0.040857429	0	-1117.605334	0	0.173584977	-0.125475141	-1.10765E-13	0	1	0	0
KLBF	-0.012910511	1	1173.513122	1173.513122	0.186705909	0.063845352	-9.37035E-14	0	1	0	0
LTLS	0.010528293	0	-249.9002534	0	0.188661116	-0.02382733	-1.67771E-13	0	1	0	0
TSPC	0.013517509	0	-627.6669022	0	0.197929784	-0.098109687	-5.74061E-13	0	1	0	0
BATA	-0.059938993	0	-7558.70022	0	0.221623236	-0.126394095	-2.56179E-12	0	1	0	0
AKPI	-0.006747116	1	311.2989683	311.2989683	0.228125183	0.023771439	-1.33681E-13	0	1	0	0
SOBI	-0.001671827	1	1955.322539	1955.322539	0.242012338	0.00163548	-2.9049E-15	0	1	0	0
INAI	0.018539149	0	-29.02217306	0	0.247066177	-0.122450649	-7.57E-12	0	1	0	0
TFCO	-0.075854966	0	-3893.991775	0	0.256504567	-0.098466917	-6.83313E-13	0	1	0	0
BIPP	-0.003119269	1	325.0857375	325.0857375	0.261582558	0.006493641	-8.84724E-15	0	1	0	0
NIPS	-0.004322639	0	123.3053556	0	0.262195724	0.016639369	-7.16629E-14	0	1	0	0
VOKS	0.001373342	1	2302.175839	2302.175839	0.265844569	0.02090257	-6.58025E-14	0	1	0	0
MWON	0.01069892	0	-1483.052481	0	0.267756576	0.041206863	2.75671E-13	0	1	0	0
LMSH	-0.056941233	1	923.6362619	923.6362619	0.27200359	0.055170408	-7.6056E-12	0	1	0	0
AISA	-0.023469665	1	374.3457265	374.3457265	0.27294366	0.000608054	-4.2662E-15	0	1	0	0
DGSA	0.076666793	0	-391.8430177	0	0.27403407	-0.009643458	-6.02618E-15	0	1	0	0

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
HEXA	-0.013725166	1	1207.525976	1207.525976	0.278290879	0.022440577	-1.32332E-13	0	1	0	0
MLIA	-0.004916114	1	491.5284958	491.5284958	0.289565271	0.006024357	-9.75051E-15	0	1	0	0
FAST	-0.042309345	1	582.1980504	582.1980504	0.296076224	0.0004738	-3.51808E-14	0	1	0	0
MBAI	-0.003663256	1	2747.170678	2747.170678	0.298497142	0.005117551	-1.72525E-14	0	1	0	0
IKAI	-0.002323519	1	1187.004122	1187.004122	0.308631359	0.001014936	-2.1801E-15	0	1	0	0
ITMA	-0.003403171	1	676.854087	676.854087	0.315731179	0.03785614	-3.64359E-12	0	1	0	0
CPIN	-0.052949581	0	-117.3865918	0	0.316437964	0.392016342	4.10726E-12	0	1	0	0
PRAS	-0.031822197	1	126.8003323	126.8003323	0.324818697	0.019477084	-5.05889E-13	0	1	0	0
WICO	-0.010427343	1	2301.625599	2301.625599	0.340934415	0.014419168	-2.8068E-14	0	1	0	0
TOTO	-0.163785334	1	1424.570384	1424.570384	0.347670338	0.079173528	-8.09184E-12	0	1	0	0
SHSA	-0.025876794	0	1503.915857	0	0.350307494	0.039018848	-2.81856E-15	0	1	0	0
AKRA	-0.003231956	1	1185.683049	1185.683049	0.352356055	0.000762182	-7.30096E-16	0	1	0	0
GRIV	0.012740485	0	200.3555662	0	0.361576401	0.035127712	-3.30002E-13	0	1	0	0
TRPK	-0.007532223	1	743.8018144	743.8018144	0.373015955	0.090984544	-2.17516E-12	0	1	0	0
EPMT	-0.017949906	1	346.6996106	346.6996106	0.384409687	0.056982123	-3.44974E-13	0	1	0	0
RBMS	0.020207196	1	27.55056637	27.55056637	0.423950589	0.914002541	-6.27446E-09	0	1	0	0
MTDL	-0.008555245	1	2286.572376	2286.572376	0.439784454	0.134439886	-2.26651E-12	0	1	0	0
INTP	-0.077881167	1	291.7383362	291.7383362	0.453306795	0.044577291	-2.65207E-14	0	1	0	0
MDRN	-0.470620496	1	98.40425312	98.40425312	0.498310701	0.161958722	-2.02371E-12	0	1	0	0
SPMA	0.063451271	0	3.002036085	0	0.523126216	0.195965262	-2.47119E-12	0	1	0	0
TKGA	0.165475973	0	-473.8052417	0	0.526595136	-0.048697513	-8.5624E-11	0	1	0	0
BYSP	0.230638446	1	3580.158906	3580.158906	0.549658741	0.572940442	-4.84998E-11	0	1	0	0
MPPA	0.030122468	0	4.842131399	0	0.62056661	0.092909651	-6.97421E-14	0	1	0	0
ASGR	-0.208226755	0	-245.5210522	0	0.677431795	0.743946302	7.70414E-11	0	1	0	0
TEJA	-0.218907354	0	-108.4492153	0	0.967903387	1.063170031	8.20816E-11	0	1	0	0
TIRA	0.977277827	0	-728.1248474	0	1.074265778	-3.700214935	-1.69508E-07	0	1	0	0
HMSP	-0.405739144	1	120.6822222	120.6822222	1.163519163	1.167268978	-2.11766E-11	0	1	0	0



Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
KOMI	0.131340358	1	292.257141	292.257141	1.826534055	1.494851068	-4.80944E-10	0	1	0	0
LION	-1.516429896	1	87.2959652	87.2959652	2.410281049	5.730715242	-1.79083E-07	0	1	0	0
BUDI	9.231635581	0	-68.99320818	0	2.757927475	-0.557062484	-1.48698E-09	0	1	0	0
CTRS	0.420132422	1	4.683159531	4.683159531	7.942796877	10.43197145	-6.01215E-08	0	1	0	0
SCPI	1.842547715	1	6533.022142	6533.022142	23.87195697	30.77548735	-4.35604E-05	0	1	0	0



Data of each Variables in Year 1999

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
TPIA	-17.62927166	0	-2309.568932	0	-25.83154988	-30.9865378	-2.17722E-06	0	0	1	0
TFCO	0.430705114	1	2287.644693	2287.644693	-1.488088287	-1.769527798	5.73132E-09	0	0	1	0
JPRS	-1.149477532	0	-401.1971464	0	-1.231882418	-1.358832619	-2.02582E-08	0	0	1	0
SOBI	0.006145297	0	-1762.662722	0	-1.202814478	0.033024769	1.893E-11	0	0	1	0
MIRA	-0.023348364	0	-395.6214164	0	-1.155537297	0.000215608	4.30371E-12	0	0	1	0
TSPC	-0.41388616	1	173.5807966	173.5807966	-1.044257478	-0.70566662	1.87893E-11	0	0	1	0
ETWA	-1.256007879	0	-381.5207441	0	-0.877148786	-1.311952486	-1.58725E-09	0	0	1	0
DPNS	-0.450248302	1	152.9038279	152.9038279	-0.818296735	-1.088623872	1.00511E-10	0	0	1	0
PICO	0.112500397	0	-1768.044913	0	-0.664792798	0.0959736	7.16809E-11	0	0	1	0
SPMA	-0.838707345	0	-38.74724859	0	-0.595052479	-0.894645096	-3.81265E-11	0	0	1	0
VOKS	-0.298463354	0	-1.39.908528	0	-0.577666651	-0.851514706	-2.88215E-09	0	0	1	0
HMSP	-0.743020367	0	-2292.363621	0	-0.491922879	-0.793729256	-4.07602E-13	0	0	1	0
RBMS	0.179642681	0	-11.32454123	0	-0.41447649	-0.784962221	-1.45376E-09	0	0	1	0
GJTL	0.002991906	1	73.93778378	73.93778378	-0.35802281	0.019349232	-3.89185E-15	0	0	1	0
TINS	-0.50442003	1	68.37048134	68.37048134	-0.352642627	-0.696143852	7.58622E-13	0	0	1	0
TKGA	-0.716077823	0	-275.7678827	0	-0.332750097	-0.760531485	-1.61572E-11	0	0	1	0
PNSE	-0.029441171	1	262.4207009	262.4207009	-0.307317892	-0.318473815	3.17866E-11	0	0	1	0
CTRS	0.602511717	0	-10.69334478	0	-0.273109997	-1.163226922	-2.61617E-10	0	0	1	0
BMSR	-0.162552325	0	-6.937468053	0	-0.239141857	-0.389756674	-5.06286E-11	0	0	1	0
TPEN	-0.040523551	1	214.710421	214.710421	-0.21556559	-0.002164579	3.14568E-15	0	0	1	0
AALI	-0.309476618	1	-23.47774245	-23.4777424	-0.209439331	-0.504550896	-4.78425E-13	0	0	1	0
DILD	0.371105688	0	-243.7261955	0	-0.195408422	-0.044963348	-1.60305E-11	0	0	1	0
PTRO	-0.012078148	1	1269.546784	1269.546784	-0.191130478	-0.448710399	8.78456E-12	0	0	1	0
BATA	-0.418045933	0	-10628.53297	0	-0.166612313	-0.485136677	-3.07793E-12	0	0	1	0
INCI	-0.201282517	0	-82.95888865	0	-0.160880271	-0.451915012	-4.36025E-13	0	0	1	0
LTLS	-0.297743907	1	3.467313082	3.467313082	-0.119590729	-0.331065831	1.59555E-12	0	0	1	0

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
JEC	0.044627777	0	-390.527877	0	-0.087668257	-0.500585226	-9.63489E-10	0	0	0	0
MTSM	-0.042273134	0	-731.338588	0	-0.069787521	-0.192028091	-1.30003E-10	0	0	0	0
STTP	-0.256818516	0	-150.6512351	0	-0.068824394	-0.298141764	-2.36665E-12	0	0	0	0
DUTI	0.137524895	0	-81.87642896	0	-0.065192496	-0.236777604	-1.52545E-12	0	0	0	0
JKSW	-0.064918432	0	-883.7813639	0	-0.052951371	-0.055992229	-3.61112E-12	0	0	0	0
SKBM	0.030948627	0	-599.3878314	0	-0.048409535	0.033847213	3.2255E-12	0	0	0	0
MLND	0.188463777	0	-443.2602778	0	-0.044771012	-0.475513903	-4.34114E-11	0	0	0	0
MRAT	-0.028123349	1	-26.12985771	-26.1298577	-0.044488735	-0.29782307	7.99764E-13	0	0	0	0
POLY	0.003552891	0	6.709118321	0	-0.038043425	0.028885938	-1.7744E-15	0	0	0	0
SCCO	-0.014096345	0	-2603.458295	0	-0.036835488	-0.026647518	-1.44234E-12	0	0	0	0
PRAS	0.002553938	0	214.3686127	0	-0.032511997	0.015197541	-1.79695E-13	0	0	0	0
DNKS	-0.171355366	0	-238.1466695	0	-0.031610926	-0.324023136	-9.15795E-12	0	0	0	0
RDTX	-0.146376193	1	25.56462244	25.56462244	-0.028700949	-0.317971239	4.92571E-12	0	0	0	0
HERO	0.034480139	0	-628.8525287	0	-0.028642701	-0.054284376	-1.22189E-12	0	0	0	0
AQUA	-0.19801248	0	-819.9682911	0	-0.02493724	-0.347110528	-1.66653E-12	0	0	0	0
ISAT	-0.128348913	0	-693.1463061	0	-0.009775524	-0.269174198	-2.53844E-14	0	0	0	0
JHJD	-0.036942958	0	-1218.950919	0	-0.006629104	-0.425499049	-4.48772E-09	0	0	0	0
LPLD	-0.008721559	0	-815.2607342	0	-0.0020821	0.00037766	2.45749E-14	0	0	0	0
PSDN	0.035759192	1	175.1371059	175.1371059	-0.000650107	0.064214322	-7.97987E-14	0	0	0	0
PTRA	0.004741723	0	-374.3793789	0	0	0.04117503	3.53927E-13	0	0	0	0
BLTA	-0.018177942	0	-143.0663509	0	0	-0.054789962	-1.31983E-13	0	0	0	0
RIGS	-0.008552649	1	1044.190633	1044.190633	0.000132413	-0.055811639	1.44072E-12	0	0	0	0
CTBN	-0.015273034	0	-450.9357865	0	0.005813627	0.02273917	1.75991E-13	0	0	0	0
PWSI	0.005665225	0	-265.9221025	0	0.006139398	0.006834627	7.80891E-14	0	0	0	0
KLBF	-0.154153693	0	-391.0546702	0	0.008021188	-0.265178887	-2.14496E-12	0	0	0	0
SMDM	-0.008795042	1	224.195163	224.195163	0.009129702	0.005894898	-1.84203E-14	0	0	0	0
SMRA	0.009286911	0	-502.8559694	0	0.010949462	-0.107087869	-2.92103E-12	0	0	0	0

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
MDLR	-0.009360292	0	-224.0972318	0	0.013063338	0.028124398	1.68002E-12	0	0	1	0
CKRA	0.01285549	0	-1.852450863	0	0.013337725	-0.120372674	-2.15056E-11	0	0	1	0
BAYU	-1.1757E-05	0	-424.6170102	0	0.014224383	-3.17671E-05	-3.07967E-15	0	0	1	0
KBLI	-0.033136549	0	-122.0237118	0	0.015078614	-0.001883185	-7.89977E-15	0	0	1	0
MORE	-0.024043746	0	-441.0956045	0	0.015593003	0.018151661	3.79153E-13	0	0	1	0
LPCK	0.079737281	1	34.30514822	34.30514822	0.0232226544	0.183551406	-1.44907E-11	0	0	1	0
BIPP	0.00326209	0	-152.4770106	0	0.025977334	0.022673797	2.21528E-13	0	0	1	0
HITS	0.010765476	1	-22.7505311	-22.7505311	0.028562916	-0.172244077	1.27084E-12	0	0	1	0
DSST	0.016767512	1	2589.684661	2589.684661	0.030140041	0.02252617	1.20822E-12	0	0	1	0
LAMI	0.036153525	0	-35.84737805	0	0.038535576	-0.237045999	-2.35637E-11	0	0	1	0
EKAD	-0.148298009	0	-120.5942053	0	0.038667966	-0.187630115	-1.89346E-12	0	0	1	0
KKGI	-0.059948933	1	56.83906725	56.83906725	0.040696798	-0.315662742	2.00453E-11	0	0	1	0
GDYR	-0.157421677	0	-1845.580195	0	0.045118936	-0.255143261	-8.70806E-13	0	0	1	0
LAPD	-0.116218377	0	-2367669.35	0	0.045533129	-0.282979381	-1.25641E-09	0	0	1	0
TEJA	-0.056120365	1	443.2465055	443.2465055	0.050200398	0.073670654	-3.51121E-13	0	0	1	0
CNBE	0.019340091	0	-10079.19799	0	0.051341926	0.037598764	3.14236E-12	0	0	1	0
LION	-0.045861264	0	-257.9327072	0	0.05351118	-0.276895383	-2.52099E-11	0	0	1	0
MYOR	0.136749172	0	-35.01169023	0	0.060038337	-0.124140384	-1.98844E-12	0	0	1	0
ADFO	-0.063108299	0	-172.9124934	0	0.064482508	-0.110390164	-8.68517E-12	0	0	1	0
CTTH	0.115426334	0	-532.6909981	0	0.069731285	0.126669832	6.13357E-12	0	0	1	0
PUDP	-0.042153781	0	-307.9306755	0	0.073080614	-0.079331509	-6.00033E-12	0	0	1	0
BNBR	-0.032007586	0	-711.5308348	0	0.074570138	0.011243047	2.46036E-14	0	0	1	0
MPPA	-0.001879222	0	-125.0161678	0	0.074596661	-0.054554313	-3.20362E-13	0	0	1	0
JRPT	-0.022404246	0	-49.52834255	0	0.081122616	-0.238086677	-6.99776E-12	0	0	1	0
ANTM	-0.110323362	1	-0.158507568	-0.15850757	0.085955685	-0.182452329	1.05123E-13	0	0	1	0
INAI	-0.155402708	0	-101.9937056	0	0.088121274	-0.202089061	-5.87913E-12	0	0	1	0
LPIN	-4.19112832	0	-1547.350813	0	0.093295168	0.628939008	3.68865E-09	0	0	1	0

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
ALMI	-0.129808481	0	-132.584765	0	0.101298029	-0.192852724	-5.07893E-13	0	0	1	0
UNTR	-0.000919388	0	-10065.06522	0	0.101319214	-0.231599985	-8.6741E-13	0	0	1	0
PRDP	0.054813659	0	-1438.772667	0	0.10592125	-0.211001192	-5.06763E-13	0	0	1	0
MLPL	0.263692225	0	-191.5724538	0	0.110496582	-0.141057523	-4.65708E-10	0	0	1	0
MWON	-0.063094713	0	-3880.874251	0	0.115529346	-0.113094163	-3.32949E-12	0	0	1	0
TURI	0.203390775	0	-106.3297491	0	0.117674505	-0.085075277	-2.20333E-12	0	0	1	0
RAIS	-0.026086245	0	-179.3685714	0	0.120412396	-0.094485324	-7.4074E-14	0	0	1	0
KOMI	-0.028379635	0	-654.0248615	0	0.129234975	-0.191033431	-1.25014E-12	0	0	1	0
INTD	-0.128451771	0	-1932.950099	0	0.136240789	-0.144108235	-5.75825E-11	0	0	1	0
ESTI	-0.16417782	0	-434.5920819	0	0.138386084	-0.175134985	-1.02378E-12	0	0	1	0
BRNA	-0.126516767	0	-435.3017018	0	0.138818628	-0.141345546	-2.93951E-12	0	0	1	0
INDF	-0.084381336	0	-897.2102468	0	0.14001401	-0.136433425	-4.70799E-14	0	0	1	0
SIIP	-0.046159432	1	8.216901042	8.216901042	0.145526623	-0.056311882	3.24011E-11	0	0	1	0
TCID	-0.065066621	0	-528.6004272	0	0.147779099	-0.151331632	-1.14158E-12	0	0	1	0
MERK	-0.065484759	0	-1441.526623	0	0.148250407	-0.161815604	-3.25919E-12	0	0	1	0
SMAR	-0.095675266	0	-556.8323603	0	0.149097492	-0.155894193	-3.1418E-13	0	0	1	0
SONA	-0.005879924	0	-82.23298691	0	0.15088712	-0.010969495	-4.6738E-13	0	0	1	0
EPMT	0.068667321	0	-285.5878085	0	0.152604413	-0.056877723	3.49927E-12	0	0	1	0
KIAS	0.029419948	0	-846.7945646	0	0.158114293	0.031084171	4.13453E-13	0	0	1	0
INTP	-0.078242213	0	-575.8747763	0	0.162464976	-0.142028798	-4.56519E-13	0	0	1	0
JSPT	-0.026840486	0	-648.5446501	0	0.180303652	-0.066773082	-1.04E-12	0	0	1	0
INTA	-0.128784797	0	-652.9222671	0	0.183182287	-0.266286612	-8.84297E-12	0	0	1	0
TLKM	0.003021892	0	-177.9804627	0	0.185461433	-0.076814055	-1.34614E-14	0	0	1	0
MLBI	0.058385003	0	-20364.85756	0	0.191161552	-0.110306662	-8.21808E-13	0	0	1	0
TOTO	0.157833261	0	-636.8449787	0	0.191835785	-0.149564732	-1.30976E-10	0	0	1	0
SUDI	0.000961211	0	-17.62317814	0	0.193835514	-0.097617107	-4.98764E-13	0	0	1	0
SHDA	-0.010565706	0	-648.6852288	0	0.200130175	-0.10234979	-7.18798E-13	0	0	1	0

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
BYSP	-0.000925961	0	-16697.02044	0	0.20138695	-0.139006856	-2.77088E-12	0	0	1	0
BATI	0.044206725	0	-8150.757576	0	0.203755884	-0.327484097	-3.85737E-12	0	0	1	0
KDSI	0.203399342	0	-121.5300976	0	0.207623428	-0.094614188	-1.40517E-11	0	0	1	0
MTDL	0.072162958	0	-208.9693568	0	0.213067901	-0.097528394	-3.64765E-12	0	0	1	0
BIMA	0.114342254	0	-526.7713931	0	0.215637956	-0.030265406	-2.89351E-12	0	0	1	0
AKRA	0.31538185	0	-1904.501353	0	0.2162303	0.309621804	3.94756E-11	0	0	1	0
DYNA	0.022536048	0	-66.07664123	0	0.222917852	-0.046203891	-5.13868E-13	0	0	1	0
AISA	0.000163575	0	-312.0389045	0	0.224818672	0.002767822	4.56542E-13	0	0	1	0
SHSA	-0.045951375	0	-3974.704658	0	0.225100507	-0.078362588	-2.29923E-13	0	0	1	0
PYFA	0.027150089	0	-70814.2737	0	0.229023542	-0.12794656	-5.5474E-11	0	0	1	0
FAST	-0.030723785	0	-674.223619	0	0.236707296	-0.03126119	-3.98923E-12	0	0	1	0
HEXA	0.056093722	0	-2309.876461	0	0.237638255	0.025574173	6.25876E-13	0	0	1	0
ERTX	-0.03259988	1	9.889022354	9.889022354	0.239108375	-0.084344907	2.4964E-13	0	0	1	0
CPPR	-0.000106162	0	-2054.541881	0	0.239671544	-0.063532529	-2.32559E-13	0	0	1	0
RICY	0.058226015	0	-382.6040414	0	0.239939687	-0.024092709	-1.42274E-12	0	0	1	0
LMSH	0.011800333	0	-852.606496	0	0.240936459	-0.237943924	-7.30268E-10	0	0	1	0
ARGO	0.007114837	0	-3052.378791	0	0.249804062	-0.006015787	-6.96877E-13	0	0	1	0
KBLM	-0.03139008	0	-581.3971725	0	0.251552344	0.09177908	6.57924E-12	0	0	1	0
PAFI	0.351218463	1	171.1622326	171.1622326	0.259096093	0.362427409	-2.35375E-11	0	0	1	0
WICO	0.039295869	0	-2189.256638	0	0.261110223	-0.014225818	-4.84314E-13	0	0	1	0
DSUC	0.00414441	0	-68.12537071	0	0.266584816	-0.027561191	-4.36204E-13	0	0	1	0
ITMA	-0.007511876	1	312.3546402	312.3546402	0.270866961	0.016453157	-3.0862E-13	0	0	1	0
IKAI	0.001936799	0	-38.59548287	0	0.279980856	0.003469682	6.16963E-15	0	0	1	0
AMFG	0.038957615	0	-114.1251429	0	0.280490157	-0.134155846	-1.99593E-12	0	0	1	0
SMGR	0.026125493	0	-267.8217101	0	0.284023234	-0.074170401	-3.64381E-14	0	0	1	0
CMNP	-0.050642207	0	-157.1656309	0	0.284605738	0.041197738	5.37493E-13	0	0	1	0
BUDI	-0.013360732	0	-499.8202628	0	0.285171962	-0.025233013	-2.05316E-13	0	0	1	0

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
CPIN	0.050321721	0	-1577.492951	0	0.289667003	-0.011751961	-3.48753E-14	0	0	0	0
ANSI	-0.012593285	0	-87862.5814	0	0.293328428	-0.018450529	-8.76647E-13	0	0	0	0
SSTM	-0.024237906	0	-58.76999456	0	0.293412075	-0.013000557	-1.88757E-13	0	0	0	0
MAMI	0.000114784	0	-14.03825871	0	0.298088476	0.001028197	1.08351E-15	0	0	0	0
MYRX	-0.014367152	0	-71.10232035	0	0.305946912	0.002976208	8.69862E-15	0	0	0	0
SUMI	-0.000800362	0	277.3691836	0	0.320047513	0.007877116	-7.98741E-15	0	0	0	0
BUKK	0.040632027	0	-4463.330683	0	0.329685787	-0.040895086	-5.65277E-13	0	0	0	0
IATG	-0.094727027	0	-128403.5225	0	0.349833696	-0.119327871	-4.00061E-10	0	0	0	0
MBAI	0.018888591	0	-3190.466862	0	0.351612432	-0.000748379	-5.61487E-14	0	0	0	0
NIPS	-0.01801958	0	-1389.173803	0	0.3544367	-0.058939813	-2.09539E-11	0	0	0	0
BMTR	0.165045457	1	526.7030482	526.7030482	0.354834104	0.514662271	5.44216E-12	0	0	0	0
DVLA	-0.378647545	0	-291.9177661	0	0.354900591	-0.548021685	-2.55742E-10	0	0	0	0
LSIP	0.077194499	0	-750.81476	0	0.362649189	-0.000520452	-1.57118E-14	0	0	0	0
SKLT	0.095838596	0	-1417.739037	0	0.372332839	0.125112283	4.61331E-10	0	0	0	0
LMPI	0.058832077	0	-217.1629747	0	0.384053415	0.087171333	2.30469E-12	0	0	0	0
PWON	-0.072809616	0	-1720.553426	0	0.388313907	0.316726577	3.33955E-10	0	0	0	0
AKPI	-0.018171579	0	-219.9079631	0	0.406129093	0.203596954	1.13261E-10	0	0	0	0
TRPK	-0.012499993	0	74.98790814	0	0.406718833	0.147426897	7.45083E-12	0	0	0	0
LPKR	-0.010540393	0	-357.3648331	0	0.419524962	0.103560847	2.84627E-11	0	0	0	0
KONI	-0.489388365	1	56.45331888	56.45331888	0.451651793	-0.738255044	3.22725E-09	0	0	0	0
PLIN	0.018345846	1	114.7602812	114.7602812	0.49232892	-0.090644541	-6.96957E-13	0	0	0	0
ALDI	1.313891155	0	-251.801008	0	0.503494249	-0.007781194	-1.42537E-12	0	0	0	0
SQBI	0.022476408	0	-32191.36317	0	0.589815284	0.575039457	9.99789E-10	0	0	0	0
NVPD	-0.000418277	0	-742.826546	0	0.637610376	-0.000728208	-8.52647E-14	0	0	0	0
HPSB	-1.172114697	0	-37.18703025	0	0.733111648	-0.489043281	-3.3322E-09	0	0	0	0
FASW	0.000529686	0	-1117.870192	0	0.780000314	-0.00466031	-1.98613E-13	0	0	0	0
SCPI	0.449443806	1	1952.73388	1952.73388	0.939346708	0.782725362	-1.00711E-10	0	0	0	0

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
GRIV	0.015101298	1	333.6411538	333.6411538	1.088574431	0.060223209	2.43875E-13	0	0	1	0
ASGR	0.526183645	0	122.4965656	0	1.376209103	0.896856504	-1.28256E-11	0	0	1	0
UNSP	-0.285827745	1	257.9766672	257.9766672	1.37810033	0.849457046	-3.56428E-10	0	0	1	0
UNTX	1.131423879	1	3448.510328	3448.510328	1.583621794	1.455854359	-4.18887E-10	0	0	1	0
TIRA	0.534266814	0	-176.1553896	0	1.67405574	-1.170047801	-6.20422E-10	0	0	1	0
MLIA	0.016273619	0	-291.3386395	0	1.95007499	0.07025245	7.86294E-12	0	0	1	0
SUBA	4.671976642	1	5.870607022	5.870607022	5.951041956	6.117602427	-5.49845E-09	0	0	1	0
PTSP	0.428252218	0	-797.6152861	0	22.56035939	0.543670267	3.10192E-08	0	0	1	0
BKSL	12.59404871	1	35.59051723	35.59051723	31.61731948	-1.396801478	7.73805E-06	0	0	1	0





Data of each Variables in Year 2000

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
SRSN	-20.98659103	0	2.139054545	0	-139.0306429	-34.17141568	0.000136667	0	0	0	1
UNTR	-5.175526222	1	293.6613613	293.6613613	-65.68319658	-60.57402783	5.14758E-06	0	0	0	1
SHSA	-25.33188932	1	1170.698715	1170.698715	-33.82981874	-34.92443069	8.31923E-07	0	0	0	1
ESTI	-4.496402509	1	49.25668732	49.25668732	-13.53775918	-13.1733026	2.12662E-07	0	0	0	1
BMTR	0.323079547	1	232.0521141	232.0521141	-8.336043669	4.832717348	2.133E-09	0	0	0	1
KLBF	-4.675178984	1	45.79104792	45.79104792	-7.558316583	-8.506504354	4.88106E-09	0	0	0	1
ALMI	-2.506570485	1	259.1161077	259.1161077	-5.330618485	-5.37112587	8.77964E-09	0	0	0	1
SONA	-0.777053377	1	36.57995456	36.57995456	-3.798789319	-1.104173905	4.19635E-08	0	0	0	1
TMBS	-1.041843193	0	77.31109316	0	-2.955289418	-1.826596141	-5.41273E-11	0	0	0	1
CTRS	-1.349334156	1	17.78272521	17.78272521	-2.852677411	-3.192844937	5.69212E-10	0	0	0	1
HMSP	-0.942865433	1	-123.0334052	-123.033405	-1.668087035	-1.999161009	4.33134E-13	0	0	0	1
RBMS	-4.135575984	1	1.775161662	1.775161662	-1.313369262	0.836066003	-3.49918E-08	0	0	0	1
ASGR	-0.292123533	1	-204.6644103	-204.66441	-0.924193023	-0.7010297	-1.32632E-11	0	0	0	1
AALI	-0.099268771	1	40.24377318	40.24377318	-0.908418049	-1.245621544	1.41293E-11	0	0	0	1
SMRA	-0.038139731	1	166.4739392	166.4739392	-0.76764118	-0.895207753	6.35496E-10	0	0	0	1
PRAS	0.084671239	0	-7.608311697	0	-0.600778395	-0.08764829	4.13254E-10	0	0	0	1
ERTX	-0.829683914	1	48.13970439	48.13970439	-0.537835605	-1.014897122	1.27389E-10	0	0	0	1
ULTJ	-0.268102944	0	-11.72290164	0	-0.529527168	-0.668058526	-1.51417E-11	0	0	0	1
INTA	0.56226172	1	207.5614744	207.5614744	-0.484796684	-0.794051649	4.00296E-10	0	0	0	1
AQUA	0.413809513	1	853.4518251	853.4518251	-0.466059764	-0.759325012	2.04843E-10	0	0	0	1
DNKS	-0.37157291	1	-16.36318249	-16.3631825	-0.464386225	-0.734359932	1.34881E-12	0	0	0	1
G DYR	-0.158755084	1	850.2261951	850.2261951	-0.46037828	-0.761892472	1.94994E-11	0	0	0	1
AISA	0.000177908	1	428.3253577	428.3253577	-0.43966897	0.000962508	-9.82268E-15	0	0	0	1
TINS	-0.07919964	0	-349.2694247	0	-0.433610488	-0.762192504	-2.91574E-14	0	0	0	1
IDSR	-0.229561071	0	-67.23275333	0	-0.375343928	-0.492430521	-3.29136E-12	0	0	0	1
IGAR	-0.523633853	1	-9.774891528	-9.77489153	-0.369289572	-0.684318635	4.3766E-12	0	0	0	1

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
CPIN	-0.611232183	1	197.1113546	197.1113546	-0.335316326	-0.634162657	3.01541E-12	0	0	0	1
APLI	0.015754439	1	4.681117702	4.681117702	-0.323442662	-0.129606386	7.72448E-11	0	0	0	1
BAYU	0.000210813	1	115.4381758	115.4381758	-0.320639281	-0.000164578	5.43323E-13	0	0	0	1
JRPT	0.278421328	1	7.886374468	7.886374468	-0.314970853	-0.178293874	1.2409E-11	0	0	0	1
IKAI	0.010559096	0	-384.4032372	0	-0.299991574	0.023663991	8.62901E-13	0	0	0	1
EKAD	-0.171209844	1	93.80276061	93.80276061	-0.293709647	-0.541930117	6.4479E-11	0	0	0	1
HERO	-0.10777604	1	125.3888653	125.3888653	-0.281856994	-0.177633294	8.30379E-13	0	0	0	1
IMAS	-0.186828722	1	285.3009349	285.3009349	-0.27063324	0.198853947	-2.37807E-12	0	0	0	1
IKBI	0.009933901	0	-2.99681383	0	-0.268581857	-0.003221173	-3.83669E-13	0	0	0	1
GMTD	-0.056518019	1	125.6761696	125.6761696	-0.266417394	-0.254435602	1.64916E-10	0	0	0	1
DUTI	-0.25160398	0	-44.57937507	0	-0.263799101	-0.454872886	-5.06879E-13	0	0	0	1
PTRO	-0.116761496	1	-51.71539961	-51.7153996	-0.242081849	-0.669460518	2.50072E-12	0	0	0	1
SOBI	0.002100002	1	1312.803944	1312.803944	-0.235659253	0.004991076	-1.48055E-14	0	0	0	1
RDTX	-0.145948395	1	-28.88511575	-28.8851158	-0.229412824	-0.486202146	1.05083E-12	0	0	0	1
BATI	-0.182218519	0	-726.6212121	0	-0.211867545	-0.438890211	-1.25502E-12	0	0	0	1
ARNA	-0.078699466	0	-40643298.84	0	-0.210623493	-0.111488001	-4.60894E-11	0	0	0	1
LTLS	0.18883871	1	18.85029544	18.85029544	-0.20783362	-0.478770983	1.18702E-11	0	0	0	1
BATA	-0.126823702	0	-3244.518692	0	-0.198368757	-0.514369255	-1.11769E-12	0	0	0	1
HPSB	0.022832143	1	105.1182458	105.1182458	-0.192258206	-0.01510731	3.44241E-13	0	0	0	1
AKRA	0.054669404	1	2284.551741	2284.551741	-0.166797795	0.002966906	-8.61409E-15	0	0	0	1
KOMI	-0.301829779	0	-239.8246369	0	-0.165291308	-0.45771666	-4.05567E-13	0	0	0	1
SAFE	0.017010237	1	5543.018434	5543.018434	-0.158346032	0.017057692	-1.83636E-14	0	0	0	1
SMGR	-0.283312946	0	-346.6141377	0	-0.13055516	-0.34655983	-1.14393E-13	0	0	0	1
SIIP	-0.011556269	0	-9.388817925	0	-0.127488636	-0.035505758	-2.57213E-12	0	0	0	1
SUDI	-0.000725182	1	118.6299428	118.6299428	-0.123821334	0.028082985	-1.49468E-13	0	0	0	1
TSPC	-0.154747475	0	-759.799043	0	-0.101414566	-0.276052847	-5.30045E-13	0	0	0	1
KDSI	0.398116215	0	-127.0251651	0	-0.101063349	-0.398124966	-7.53452E-12	0	0	0	1

Code	chetr	miss	missmount	mama	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
TCID	-0.270949167	0	-197.3426808	0	-0.097052919	-0.399409984	-7.94181E-13	0	0	0	1
UNVR	-0.277719369	0	-797.3538663	0	-0.096206717	-0.383735213	-1.05594E-13	0	0	0	1
ADFO	0.00543541	0	276.1011529	0	-0.094421354	0.068794931	4.99469E-12	0	0	0	1
GGRM	-0.201272626	1	-470.7492589	-470.749259	-0.088238575	-0.3833355617	-9.76138E-16	0	0	0	1
SMP1	-0.375353446	0	-55.91167835	0	-0.083319945	-0.414243697	-2.69576E-12	0	0	0	1
LAPD	-0.033583058	1	-14515.55279	-14515.5528	-0.079318815	-0.423976673	2.67641E-10	0	0	0	1
INCI	0.072119102	0	-86.20449471	0	-0.072487981	-0.37099085	-2.52588E-13	0	0	0	1
SKLT	-0.00152059	1	1612.814442	1612.814442	-0.061726839	0.004056425	-3.07185E-14	0	0	0	1
KKGI	-0.037095729	1	-14.80518804	-14.805188	-0.061634556	-0.423820783	5.45102E-12	0	0	0	1
TPEN	0.00363729	0	150.9749236	0	-0.058624665	0.002413722	-1.06689E-15	0	0	0	1
FMIJ	0.022727854	0	53.98398671	0	-0.046797843	-0.337162676	4.49634E-12	0	0	0	1
RALS	-0.219011156	0	-90.83071429	0	-0.046581142	-0.280865291	-2.88784E-13	0	0	0	1
DPNS	0.450892551	0	-89.21972208	0	-0.041103018	-0.342693534	3.77518E-12	0	0	0	1
AMFG	-0.35884761	1	114.5005369	114.5005369	-0.037272122	-0.109833246	1.24099E-11	0	0	0	1
LSIP	0.017074292	1	1671.778783	1671.778783	-0.036752518	0.017154059	-2.67467E-14	0	0	0	1
JSPT	0.029955678	1	489.3041756	489.3041756	-0.035732864	0.077724126	-7.1318E-13	0	0	0	1
TOTO	0.00757422	1	1125.097099	1125.097099	-0.03508034	0.023592093	-5.01697E-13	0	0	0	1
MORE	0.00494671	1	38.66607499	38.66607499	-0.027185073	0.020526175	-2.41766E-14	0	0	0	1
PICO	-0.045474777	0	1034.009877	0	-0.022469713	-0.029085431	2.09069E-13	0	0	0	1
TRPK	0.099069378	0	-928.6751044	0	-0.016724546	-0.047640988	-6.30881E-12	0	0	0	1
MEDC	-0.336745956	0	-296.5881495	0	-0.014942755	-0.58891776	-3.15705E-13	0	0	0	1
RIGS	-0.010167074	0	-1447.413376	0	-0.012561051	-0.030915776	-1.42978E-13	0	0	0	1
SSIA	-0.047060965	1	206.9587418	206.9587418	-0.011359491	0.02974871	-3.5872E-13	0	0	0	1
MLPL	0.000356769	0	-63.29835206	0	-0.011102312	-0.011921516	-8.58775E-14	0	0	0	1
DART	-0.001016776	1	705.8037509	705.8037509	-0.010317331	0.000569346	-5.71234E-16	0	0	0	1
KIAS	-0.005777881	1	1342.597015	1342.597015	-0.0092229	0.001568072	-1.66569E-15	0	0	0	1
SMDR	-0.044848034	1	-162.5851572	-162.585157	-0.007515964	-0.120825606	1.28455E-13	0	0	0	1

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
LPLD	3.39379E-05	1	288.6841838	288.6841838	-0.007117862	0.000187097	-5.71389E-16	0	0	0	1
BLTA	-0.031843757	1	218.2314841	218.2314841	0	-0.267758136	2.71931E-11	0	0	0	1
MDLR	-0.009493305	1	121.1381187	121.1381187	0.000666521	0.000480449	-1.98623E-15	0	0	0	1
TPFC	-0.000755331	1	508.2788316	508.2788316	0.001109283	0.003317546	-5.00989E-15	0	0	0	1
MLND	-0.007083857	0	914.28168	0	0.002383771	0.04395729	-7.09574E-14	0	0	0	1
JWJ16	-0.012172053	0	-681.1504127	0	0.003042804	0.003352905	3.83944E-13	0	0	0	1
BIPP	0.006051043	1	98.75646744	98.75646744	0.005381908	0.018709008	-2.26594E-14	0	0	0	1
BYSP	-0.304002914	0	-10300.35837	0	0.005390007	-0.401303014	1.35372E-12	0	0	0	1
AKPI	0.00159008	1	1306.272719	1306.272719	0.006152744	0.00803363	-1.64438E-14	0	0	0	1
ASIA	0.000128654	0	-16.662949	0	0.006557182	0.000989655	2.04216E-14	0	0	0	1
PTRA	-0.003177	1	165.0423639	165.0423639	0.00700542	0.015520536	-1.31983E-14	0	0	0	1
LPIN	0.005607173	1	2618.328059	2618.328059	0.007714079	0.025341071	-5.18578E-13	0	0	0	1
BNBR	0.021266606	1	177.2813757	177.2813757	0.008531346	0.029465491	-7.23856E-15	0	0	0	1
MTSM	-0.04426464	1	393.9510479	393.9510479	0.008930265	0.049176272	-4.54941E-12	0	0	0	1
CTTH	-0.024765026	1	1762.187773	1762.187773	0.012879561	0.000442435	-1.91783E-15	0	0	0	1
PWON	-0.029892046	1	1363.904984	1363.904984	0.014489558	-0.01843088	2.99685E-14	0	0	0	1
LPPF	-0.008538774	0	1082.51329	0	0.01526634	0.003808291	-4.382E-14	0	0	0	1
DYNA	-0.293917416	0	-66.11844963	0	0.016584716	-0.333563418	-9.70292E-13	0	0	0	1
MYRX	-0.000710038	1	170.1725079	170.1725079	0.017340506	0.001155286	-2.03653E-15	0	0	0	1
BRPT	0.005538478	1	645.6126429	645.6126429	0.018786036	0.035776024	-3.05708E-14	0	0	0	1
SCCO	0.01267445	0	1102.941734	0	0.020788941	0.061886555	-3.16472E-12	0	0	0	1
TEJA	-0.032113927	1	575.8096687	575.8096687	0.021794544	0.002169882	-2.93085E-15	0	0	0	1
BUKK	0.066942552	1	42.9504521	42.9504521	0.029052191	0.076369486	-1.14756E-13	0	0	0	1
INAF	-0.236464023	1	-30.6659065	-30.6659065	0.033782846	-0.302101637	-1.01763E-13	0	0	0	1
BRNA	-0.129664612	0	-273.8187939	0	0.035423928	-0.257432639	-6.19612E-13	0	0	0	1
DILD	0.004040838	1	324.2966321	324.2966321	0.039162692	0.007917995	-3.05095E-14	0	0	0	1
MRAT	-0.037894279	0	-207.917178	0	0.042120512	-0.231907698	-1.86612E-12	0	0	0	1

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
LION	-0.084086196	0	-193.0571418	0	0.043319763	-0.262908228	-5.26303E-12	0	0	0	1
CTBN	0.002527249	1	462.2243467	462.2243467	0.043984976	0.008596086	-6.72017E-15	0	0	0	1
TLKM	-0.21404222	0	-259.6110212	0	0.044599933	-0.261561221	-2.08288E-14	0	0	0	1
ALFA	0.132531189	0	-18.55920654	0	0.046429923	-0.026096193	-5.06794E-13	0	0	0	1
ISAT	-0.032990299	0	-940.3911154	0	0.046496645	-0.245774539	-2.18807E-14	0	0	0	1
SHDA	-0.185044307	0	-552.3057056	0	0.048771165	-0.252761729	-4.54507E-13	0	0	0	1
POLY	-0.005008661	1	1759.498001	1759.498001	0.049067013	0.005223597	-6.00225E-16	0	0	0	1
FASW	-0.000672277	1	309.1688296	309.1688296	0.049105189	0.000316285	-6.8927E-16	0	0	0	1
KONI	-0.133239444	0	49.26865942	0	0.050464234	0.075944516	-2.46278E-11	0	0	0	1
AUTO	-0.171553334	1	-99.26930948	-99.2693095	0.053097516	-0.204464227	1.92287E-13	0	0	0	1
SMSM	0.030132186	0	-207.0041838	0	0.053912934	-0.261724547	-8.85581E-13	0	0	0	1
PSDN	-0.025041629	1	839.1267887	839.1267887	0.056539183	0.004130092	-3.87902E-15	0	0	0	1
SHID	0.009214029	0	153.894694	0	0.062775065	0.061674794	-9.95028E-13	0	0	0	1
SIMM	0.076961001	0	-74.52825853	0	0.066162731	-0.281225205	-4.06482E-12	0	0	0	1
MERK	-0.153810162	0	-2109.25308	0	0.067071232	-0.230734103	-1.72172E-12	0	0	0	1
WICO	-0.00281874	1	1445.139945	1445.139945	0.067367636	0.003697061	-1.7839E-14	0	0	0	1
ACAP	-0.020387825	0	-65.73546269	0	0.075978249	-0.238602529	-4.23398E-12	0	0	0	1
SMDM	-0.001987934	1	317.1245276	317.1245276	0.078410756	0.000681883	-6.11799E-16	0	0	0	1
FAST	-0.112907198	0	-46.97398319	0	0.084492717	-0.128652826	-1.92298E-12	0	0	0	1
SMAR	0.070823414	1	2284.559589	2284.559589	0.096380747	0.140795796	-3.78119E-13	0	0	0	1
MLBI	-0.126933158	0	-3392.456051	0	0.099034068	-0.200483523	-4.99298E-13	0	0	0	1
TIRT	-0.162705225	0	-17.64353829	0	0.101063609	-0.195554299	-4.49313E-12	0	0	0	1
JIHD	-0.005573516	0	503.0332327	0	0.106642711	0.003837568	-8.14561E-15	0	0	0	1
TURI	-0.104864354	0	-355.5949821	0	0.107243266	-0.126771168	-7.53944E-13	0	0	0	1
SUMI	-0.003390895	0	532.7690654	0	0.108590332	0.002804054	-1.53577E-15	0	0	0	1
TPIA	0.049506517	1	2156.823301	2156.823301	0.108775428	0.207350632	-3.66453E-13	0	0	0	1
INTD	0.036208305	1	1351.220226	1351.220226	0.110732621	0.090481551	-3.88256E-12	0	0	0	1

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
LPCK	0.072587526	0	77.26123988	0	0.11251935	0.118193847	-1.17561E-12	0	0	0	1
INDF	0.06991643	1	30.19353663	30.19353663	0.119277372	-0.186214585	1.46005E-13	0	0	0	1
MTDL	-0.013703265	1	-18.98087072	-18.9808707	0.125704838	-0.122338802	2.56582E-13	0	0	0	1
KBLM	-0.016780087	1	1857.993484	1857.993484	0.152496745	-0.000741664	5.01876E-15	0	0	0	1
IATG	-0.001888134	0	-5.386531843	0	0.155089189	-0.01144452	-3.11902E-12	0	0	0	1
JPRS	-0.050323675	1	172.6835245	172.6835245	0.155637827	0.026665913	-1.14161E-12	0	0	0	1
JKSW	0.00950505	1	1355.779921	1355.779921	0.157474043	-0.000707758	2.328E-15	0	0	0	1
LAMI	0.087594747	0	-3.711360773	0	0.161812149	-0.096376389	-1.74129E-12	0	0	0	1
TGKA	-0.326574812	1	-94.92005503	-94.920055	0.16688344	-0.340046384	1.41187E-12	0	0	0	1
DLTA	-0.115723142	1	402.5452532	402.5452532	0.167781676	-0.144776926	2.12993E-13	0	0	0	1
RIMO	-0.106326497	0	-32.4118863	0	0.173656451	-0.119005985	-3.86232E-12	0	0	0	1
STTP	0.122254682	0	-81.9181073	0	0.179274643	-0.106483467	-5.00718E-13	0	0	0	1
GJTL	-0.000257644	0	1339.933657	0	0.188744918	0.002337064	4.27778E-16	0	0	0	1
PBRX	-0.068289632	0	-85.35487065	0	0.192185557	-0.090882224	-1.23664E-12	0	0	0	1
DSFI	0.109631016	0	-132.9787492	0	0.197864049	-0.115267405	-3.02443E-12	0	0	0	1
BGMT	0.138555941	1	77.85177605	77.85177605	0.199856948	0.165332276	-4.59585E-12	0	0	0	1
HITS	-0.000833642	0	-582.5217089	0	0.208089653	-0.054536418	-1.37352E-13	0	0	0	1
SAIP	-0.004814992	1	3588.540789	3588.540789	0.208722636	0.011432922	-9.34344E-15	0	0	0	1
MLIA	0.003806309	1	579.3826939	579.3826939	0.209596087	0.007960892	-6.22814E-15	0	0	0	1
MBAI	0.009609676	1	2717.873275	2717.873275	0.220603487	0.009907357	-8.54375E-14	0	0	0	1
HEXA	-0.146688174	1	371.0726918	371.0726918	0.220880763	-0.091630702	2.35832E-12	0	0	0	1
TIRA	0.12915781	1	304.3836244	304.3836244	0.22508016	0.216415358	-1.70489E-11	0	0	0	1
KBLI	0.004393621	1	583.6260758	583.6260758	0.22787231	0.003928921	-6.85837E-15	0	0	0	1
ANTM	0.030179085	0	-254.7608065	0	0.22919065	-0.076313922	-5.79879E-14	0	0	0	1
ETWA	0.034320931	1	524.0663825	524.0663825	0.235153966	0.083534209	-1.72535E-13	0	0	0	1
MYTX	0.015447428	1	582.6317304	582.6317304	0.243905093	0.016595775	-5.50613E-14	0	0	0	1
MPPA	-0.010392615	0	-61.69747605	0	0.244286566	-0.046846906	-3.89231E-14	0	0	0	1

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
ADMG	-0.000140169	1	655.9585455	655.9585455	0.251983416	0.001816062	-5.82376E-16	0	0	0	1
ALDI	0.003568248	1	540.950382	540.950382	0.25331779	0.004460686	-2.43735E-14	0	0	0	1
JECC	-0.078293631	1	235.8668254	235.8668254	0.26111952	0.01246548	-4.56858E-13	0	0	0	1
SSTM	-0.028460592	1	116.6792887	116.6792887	0.262375797	-0.015309765	5.36775E-13	0	0	0	1
SIPD	0.03812543	1	989.6185226	989.6185226	0.27019729	0.047792446	-1.00805E-13	0	0	0	1
RICY	-0.010199207	1	276.8200058	276.8200058	0.277800669	0.011060591	-4.27642E-13	0	0	0	1
CKRA	0.186966082	1	1.31652531	1.31652531	0.279666243	-0.00308212	2.96611E-12	0	0	0	1
TKGA	0.395596273	0	-101.3182669	0	0.282758562	-0.014045107	-8.50866E-13	0	0	0	1
PYFA	-0.024067797	0	-39554.76758	0	0.285796875	-0.086616733	-1.91856E-11	0	0	0	1
VOKS	0.034781856	0	952.268499	0	0.286062807	0.095326848	-8.94911E-13	0	0	0	1
LMSH	-0.103537203	1	174.7805202	174.7805202	0.289573274	0.475922261	-2.21096E-09	0	0	0	1
MAMI	-0.000104287	0	2.462090672	0	0.291436104	0.001342428	3.58689E-15	0	0	0	1
ARGO	0.000459544	1	2489.405017	2489.405017	0.292152278	0.001301227	-2.48533E-15	0	0	0	1
PANR	-0.006527565	0	-28278938	0	0.292438746	-0.007254521	-4.84566E-13	0	0	0	1
TRST	1.65299E-05	1	200.7087125	200.7087125	0.293997636	0.007457621	-3.80816E-14	0	0	0	1
LPKR	-0.023716229	1	131.488378	131.488378	0.295153923	2.44054E-05	-1.2073E-16	0	0	0	1
DVLA	-0.208430918	1	24.54786071	24.54786071	0.29646619	0.646925837	-1.38772E-10	0	0	0	1
BIMA	0.002602383	1	736.39859	736.39859	0.29793872	0.016645244	-5.19417E-13	0	0	0	1
CNBE	-0.007536722	0	6878.550951	0	0.299272728	0.002209007	-8.42459E-15	0	0	0	1
UNSP	-0.025998407	1	1059.509374	1059.509374	0.299502799	0.017040438	-5.99413E-14	0	0	0	1
PWSI	-0.00398384	0	154.2645419	0	0.303885382	0.001306147	-5.22952E-15	0	0	0	1
PAFI	-0.062838749	1	421.7669725	421.7669725	0.304038594	0.009510387	-5.69118E-14	0	0	0	1
SQBI	0.003844657	1	4260.052469	4260.052469	0.308946922	0.181437187	-9.03003E-12	0	0	0	1
SIMA	-0.004616589	0	-145.9982958	0	0.317055108	-0.118092526	-5.65487E-12	0	0	0	1
TFCO	0.019877161	1	1484.639867	1484.639867	0.317982545	0.061215751	-2.22072E-13	0	0	0	1
PNSE	-0.216643841	1	286.0187899	286.0187899	0.327860988	0.040518533	-3.03647E-12	0	0	0	1
KARW	0.052698275	1	91.49068036	91.49068036	0.343172405	0.118316128	-6.97092E-12	0	0	0	1

Code	chetr	miss	missmount	mma	tax owed	tax rate	icetr	DM97	DM98	DM99	DM00
MWON	-0.038412859	1	1657.754593	1657.754593	0.374998082	0.063507826	-1.4473E-12	0	0	0	1
UNTX	-0.012064313	1	6489.054302	6489.054302	0.381576114	0.114882604	-1.85056E-12	0	0	0	1
MDRN	-0.053254378	1	333.9241822	333.9241822	0.381641256	0.116899455	-1.96201E-12	0	0	0	1
NIPS	0.113444059	1	991.6866129	991.6866129	0.404041416	0.154043877	-1.84171E-11	0	0	0	1
SKBM	0.010306278	1	898.9661012	898.9661012	0.414753084	0.016484255	-7.60062E-14	0	0	0	1
SPMA	0.019566739	1	257.4220775	257.4220775	0.415138956	0.134766656	-6.49397E-13	0	0	0	1
LMPI	0.051973788	1	74.05003405	74.05003405	0.424778544	0.127252101	-3.56577E-13	0	0	0	1
INTP	0.055640256	1	714.2619644	714.2619644	0.443951071	0.141342883	-1.80822E-13	0	0	0	1
BMSR	0.37282489	1	-2.901633471	-2.90163347	0.448641744	-0.026779852	2.13608E-13	0	0	0	1
CMPP	-0.004433729	0	-115.4913493	0	0.465180138	-0.047146609	-2.87467E-12	0	0	0	1
ITMA	-0.079119828	0	-315.4426013	0	0.477689528	0.004252484	4.48013E-12	0	0	0	1
BUDI	0.27852596	1	195.1729186	195.1729186	0.529501004	0.303038862	-4.82528E-12	0	0	0	1
DSUC	0.270101964	1	102.8509264	102.8509264	0.582336094	0.337718369	-6.18437E-11	0	0	0	1
INDS	0.236141817	0	688.6303105	0	0.588309241	0.293874051	-2.17582E-11	0	0	0	1
INAL	0.503927679	1	134.399306	134.399306	0.591425405	1.197974294	-8.5781E-10	0	0	0	1
MYOR	0.10776933	1	98.74535392	98.74535392	0.608109514	0.338613529	-3.19225E-11	0	0	0	1
KOPI	0.30044043	1	5.68509962	5.68509962	0.638366173	0.343165585	-1.57186E-10	0	0	0	1
CEKA	0.062330746	1	92.11387727	92.11387727	0.641851809	0.492561795	-2.06341E-10	0	0	0	1
PUDP	-0.079984259	1	148.0380987	148.0380987	0.679540565	0.076848332	-1.28377E-11	0	0	0	1
SUBA	-0.152318728	1	5.504833604	5.504833604	0.680225073	0.688264076	-1.00694E-10	0	0	0	1
CMNP	0.086811474	0	-89.4109132	0	0.748166383	-0.017362295	-9.98054E-13	0	0	0	1
EPMT	0.317737599	1	149.7866256	149.7866256	0.756085874	0.42411817	-4.37307E-11	0	0	0	1
KDSI	0.545053271	1	104.6052725	104.6052725	0.765003974	0.605530663	-5.71718E-11	0	0	0	1
PLIN	0.043892528	1	71.40928116	71.40928116	0.833055546	0.206560631	-3.98045E-11	0	0	0	1
GRIV	-0.032548961	0	401.8272279	0	1.030584221	-0.004493304	1.59141E-14	0	0	0	1
PTSP	-0.056462152	1	163.4758438	163.4758438	1.090190912	0.036585417	-3.71497E-12	0	0	0	1
TBLA	0.019036227	1	318.6469351	318.6469351	1.092618382	0.044195179	-3.58497E-12	0	0	0	1



SCPI	-0.121120896	0	-400.9093469	0	1.196264022	1.072705269	1.11775E-10	0	0	0	1
CPPR	2.469885691	1	610.874551	610.874551	3.496622917	3.222221365	-8.8978E-10	0	0	0	1
TMPO	3.158987258	1	3.975572414	3.975572414	4.226237785	5.386844058	-1.23806E-08	0	0	0	1



### APPENDIX 3

#### Descriptive Statistics of Variable

Variable	N	Mean	Std.Dev.	Q1	Median	Q3
etr	638	-10.6708092	261.5164556	-0.23625565	-0.016336	0.0293206
chetr	638	-0.59879255	13.14671181	-0.06340189	-0.0043782	0.03016736
miss	638	0.52507837	0.499762496	0	1	1
missmount	638	-112317.298	1960828.859	-245.072338	5.77785332	311.029572
mma	638	346.8075065	1900.959426	0	0	283.230882
tax owed	638	-7.99317116	194.5379418	-0.03541137	0.04536535	0.23874085
icetr	638	0.10142131	2.56176238	-2.7521E-12	-1.586E-13	8.0664E-15



## APPENDIX 4

## Coefficient Correlation Among Variables

	CHETR	MISS	MISSMOUNT	ICETR	TAXOWED	ETR
CHETR	1	-0.034014	-0.002389	0.993974	-0.991373	0.992485
MISS	-0.034014	1	0.060631	-0.036882	0.037681	-0.037531
MISSMOUNT	-0.002389	0.060631	1	-0.002358	0.002273	-0.002326
ICETR	0.993974	-0.036882	-0.002358	1	-0.999412	0.99968
TAXOWED	-0.991373	0.037681	0.002273	-0.999412	1	-0.999901
ETR	0.992485	-0.037531	-0.002326	0.99968	-0.999901	1



## APPENDIX 5

## The Result of Least Square Regression Model

Dependent Variable: D(CHETR)

Method: Least Squares

Date: 07/22/06 Time: 07:56

Sample(adjusted): 2 629

Included observations: 628 after adjusting endpoints

White Heteroskedasticity-Consistent Standard Errors &amp; Covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.014517	0.035781	-0.405705	0.6851
D(DM00)	0.077905	0.063049	1.235631	0.2171
D(DM97)	0.353711	0.128668	2.749022	0.0062
D(DM98)	0.219111	0.106650	2.054493	0.0403
D(DM99)	0.072871	0.083504	0.872660	0.3832
D(ICETR)	15818500	8878636.	1.781636	0.0753
D(MISS)	-0.044010	0.058533	-0.751882	0.4524
D(MISSMOUN)	-4.46E-09	2.95E-09	-1.514409	0.1304
D(MMA)	-4.70E-06	6.40E-06	-0.734331	0.4630
D(TAXOWED)	0.567678	0.140942	4.027754	0.0001
D(ETR)	-0.061311	0.164502	-0.372705	0.7095
R-squared	0.377603	Mean dependent var	-0.005712	
Adjusted R-squared	0.367515	S.D. dependent var	1.139363	
S.E. of regression	0.906123	Akaike info criterion	2.658078	
Sum squared resid	506.5938	Schwarz criterion	2.735893	
Log likelihood	-823.6365	F-statistic	37.43281	
Durbin-Watson stat	2.778529	Prob(F-statistic)	0.000000	