An Analysis Of Personal Income Tax Compliance Rate In Indonesia For The Year 1996-2004

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CHAPTER I
INTRODUCTION

1.1 Background

The economic crisis in 1998 has caused great budget cost for the Indonesian government. The main part of this huge fiscal expense is for the banking restructuring program that cost Rp 648 trillion, does not include the interest that must be paid. Furthermore huge depreciation of the Rupiah also contributes to the expansion of energy subsidy (fuel and electricity's subsidies). Thus, efforts to increase the revenue and increase the efficiency of expenditure have become an important issue for the government to guarantee fiscal sustainability in the future.

The need for expansion as mentioned above requires funding. However, the traditional sources of funding, the income from oil and gas, become less reliable since Indonesia is becoming a net oil importer country. In addition, the revenue from foreign loans shows a decreasing trend in the near future. Thus, it is obvious that the domestic revenue have to be increased, and one of the important sources is the tax revenue.

The results of the Indonesia-Japan Economic Cooperation Working team as indicated in report dated October 2004, shows that there are several indicators of the opportunity to increase national tax revenue without having to increase the current rates, which are:

- Low tax ratio compare to other countries. In year 2003 the ratio of tax revenue to GDP was 11.9%, compare to India (11.49%), Pakistan (13.76%), Srilanka (19.8%), Malaysia (18.5%), and Thailand (16.5%).
- Realization of tax revenue is still below potential. For example the corporate tax revenue that is paid by State Owned Enterprises is still larger than the private sector. While, compare to the role of state owned enterprises in terms of GDP, it is far below the private sector contribution.
- The elasticity of tax collection for all types of tax is still greater than one, indicates that the actual potential tax has not been achieved.
- There is a tendency that the tax revenue concentrates on few tax payers only. For example in year 2002, 1% of registered individual tax payers contributed to 50% of personal income tax, while 2% of registered tax payers contributed to more than 80% of corporate income tax revenues. These figures reveal a significant potential for tax revenue expansion through the tax base rather than the increasing of the tax rate.

1.2 Research Aims

This research aims to analyze the existing income tax potential, review the current tax system in Indonesia, observes the source of problem, in order to recommend some alternative suggestion in order to increase the income tax revenue level in the future. However, the scope of income tax potential in this research only covers the Personal income tax (PIT).

1.3 A Brief Overview of Indonesia Tax System

1.3.1 Tax Subject

Indonesia income tax law adopts residence principle with regard to domestic tax subjects. Both individual and corporation are subject to tax on all income received or earned both from a source in Indonesia and abroad (worldwide income concept). While with regard to foreign tax subjects (non residents), both individual and corporation are subject only to tax on income from sources in Indonesia (source of income concept). Thus, the income tax law does not give different tax treatment based on nationality or citizenship status. A resident taxpayer is defined as an individual present in Indonesia for more than 183 days during a tax year or having the intention to reside in Indonesia.

1.3.2 Income Tax Object

A tax object shall be income, meaning any increase in economic capability received or accrued by taxpayer, originating from within or without Indonesia, which can be used for consumption or to increase the wealth of the taxpayer concerned including:

- salary, wage, honorarium, commission, bonus, gratuity, pension or compensation in other forms, except where stipulated otherwise in the law
- lottery prizes of gifts from work or other activities
- profit from business
- gain from the sale of transfer of property, interest
- interest, including premiums, discounts and compensation from loan repayment guarantees
- dividends, including dividends paid by an insurance company
- royalties
- rent and other income related to the use of property annuities received or accrued
- gains from the cancellation of indebtness
- gain from fluctuation in foreign currencies

- gains from revaluation of property
- insurance premiums

While those mentioned below are excluded:

- aid or donation and gifts received by blood relatives with one degree of direct lineage an by religious, educational or social bodies
- inheritances
- property including cash deposits
- payment by an insurance firms to an individual in connection with health, accident, life, dual purpose or education insurance
- dividends or a share of profit received by an enterprise owned by the state or a regional government
- contribution received by a pension fund approved by the Minister of Finance
- interest on bonds received or accrued by an investment fund firm

1.3.3 Deduction of Taxable income

a. Business deductions: A specific tax exemption or concessional deduction covering approved business and occupational expenses is granted, amount to 5% of the gross income with a maximum of Rp 648,000/annum
b. Non business expenses: Contribution to a pension fund approved by the minister of Finance are recognized in full as allowable deductions, as are an employee's contributions to Jamsostek for old age savings (2% of gross income).
c. Personal allowances:

Table I.1 Deduction of Taxable Income

	Per Annum Before 2002	Per Annum After 2002
Taxpayer concerned	Rp 1,728,000	Rp 2,880,000
Addition for married Taxpayer	Rp 864,000	Rp 1,440,000
Addition For Wife (income combined with husband)		Rp 2,880,000
Addition For Each Full dependant (maximum 3 persons)	Rp 864,000	Rp 1,440,000

1.3.4 The Structure Of Income Tax Rate

The present rate of Personal income tax is progressive rate with the following five layers:

- Taxable income < Rp 25 million : 5%

- Taxable income Rp 25 million - 50 million : 10%
- Taxable income Rp 50 million – 100 million : 15%
- Taxable income Rp 100 million – 200 million : 25%
- Taxable income > Rp 200 million : 35%

While for the corporate income tax rate (effective as from year 2001) is progressive rate with three layers:

- Taxable income up to Rp 50 million : 10%
- Taxable income Rp 50million- 100 million : 15%
- Taxable income >Rp 100 million : 30%

1.3.5 Comparison with Other Countries Tax Rate

For comparison use, below are several tax rates of neighboring countries:

Table I.2 Cross-Countries Comparison of Individual Income Tax Rate

Country	Lowest Rate	Higher Rate	Rate Layer	Allowance& Deduction US$	Allowance Ratio& Deduction with Income Per Capita
Indonesia	5%	35%	5	2277	2.9
Malaysia	19%	28%	5	7500	2
Philippines	5%	32%	7	1556	1.5
Thailand1)	0%	37%	6	3852	2
Vietnam2)	10%	50%	5	–	–
Cambodia3)	0%	20%	5	692	2.3
China	5%	45%	9	5783	6.1

1) Up to baht 50,000 0% rate is valid

2) No allowance for an individual

3) Up to CR 500,000 0% rate is Applicable

The table above shows that the maximum nominal rate in Indonesia is higher than the rate in Philippines, Malaysia and Cambodia. While comparing the corporate income tax rates for these countries:

Table I.3 Comparison of Corporate Income Tax in Several Countries

Country	Corporate Income Tax Rate	
Indonesia	10%	Rp 0–50,000,000
	15%	Rp 50,000,0001–100,000,000
	30%	> Rp 100,000,0001

Malaysia	28%	Non oil
	38%	Oil
Philippines	32%	
Thailand	30%	
Vietnam	32%	Domestic and branch
	25%	Foreign
	50%	Oil and Gas
Cambodia	20%	
	9%	For investment incentives
	30%	Oil and Gas
China	30% + 3% Local surtax	

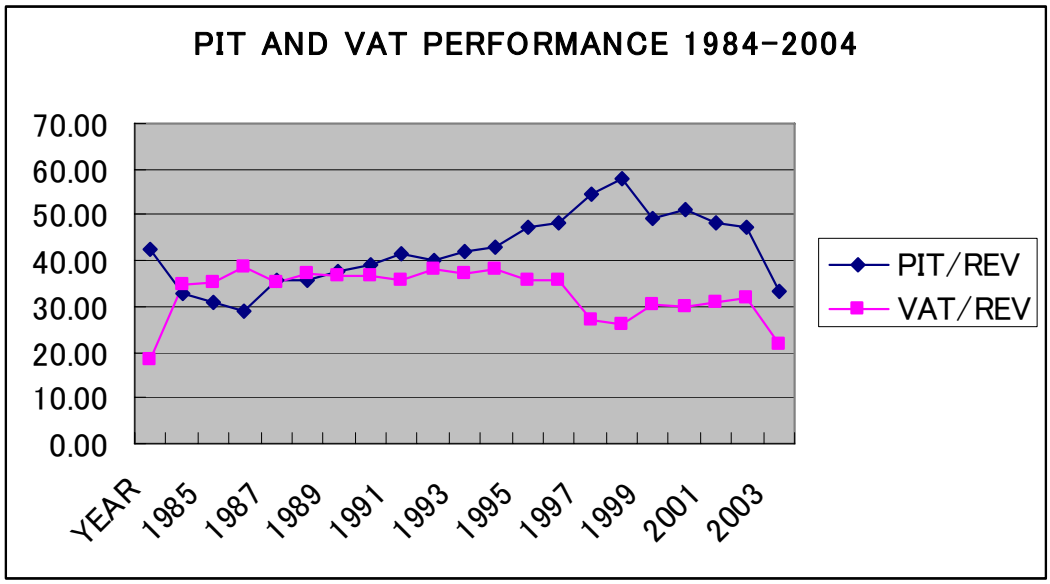
Source : Price Waterhouse Coopers, Corporate Taxes 2003

It can be concluded from the table above that many of the sample countries use a single rate and also almost each country applies a special rate for certain sector, e.g.: the oil sector and foreign businesses. Though the Indonesia highest tax rate (30%) is slightly lower compared to Philippines and Vietnam and slightly higher than Malaysian tax rate, but still far higher compared to Cambodia.

1.3.6 Indonesia Value Added Tax Performance At A Glance

The graph below describe Value added tax performance compare to the personal income tax during 1984-2004

Graph 1.1



While the table below describes the Indonesia VAT Productivity compare to some neighbor countries.

Table I.4

Comparative Analysis Of the VAT Productivity

Country	Standard VAT Tariff	VAT/GDP Ratio	VAT Productivity
Indonesia	10%	4.20%	0.42
Malaysia (*)	5–25%	4.20%	0.42
Philippines	10%	1.60%	0.16
Thailand	10%	2.80%	0.28
Vietnam	0,5,10%	4.00%	0.40
Cambodia	10%	2.90%	0.29
China	17%	3.00%	0.18

(*) Sales VAT

(**) Equipment import exemption

Compare to some neighbor countries, Indonesia's VAT productivity is considered competitive. Its value is relatively the same with Malaysia and Vietnam, which is around 0.4. Furthermore, a VAT/GDP ratio which already achieved 4.2% indicates that the collection of value added tax in Indonesia is relatively effective.

CHAPTER 2
METHODOLOGY AND PREVIOUS RESEARCH

2.1 Methodology

This research uses macro data. The potential income tax is calculated using the household survey data and the estimation based on the Pareto distribution.

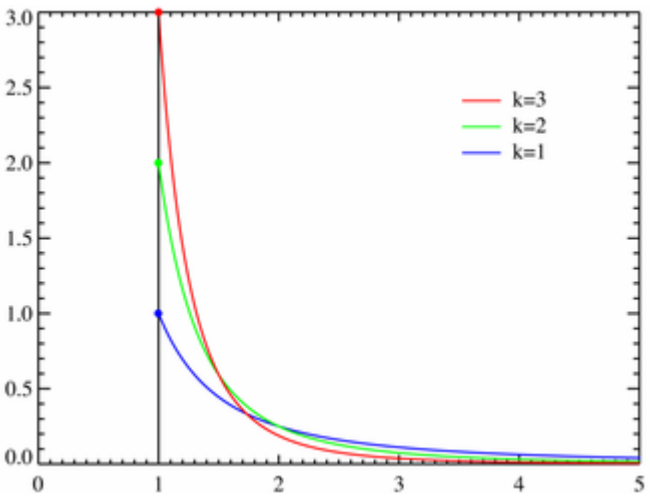
The Pareto distribution, named after the Italian economics Vilfredo Pareto, is a power law probability distribution found in a large number of real-world situations. This distribution is also known, mostly outside economics, as the Bradford distribution.

This distribution is originally used to describe the allocation of wealth among individuals since it seemed to show rather well the way that a larger portion of the wealth of any society is owned by a smaller percentage of the people in that society. It can be seen from the graph below that the probability or the fraction of the population p(x) that owns a small amount of wealth per person (x) is rather high, and then decreases steadily as wealth increases.

Graph 2.1

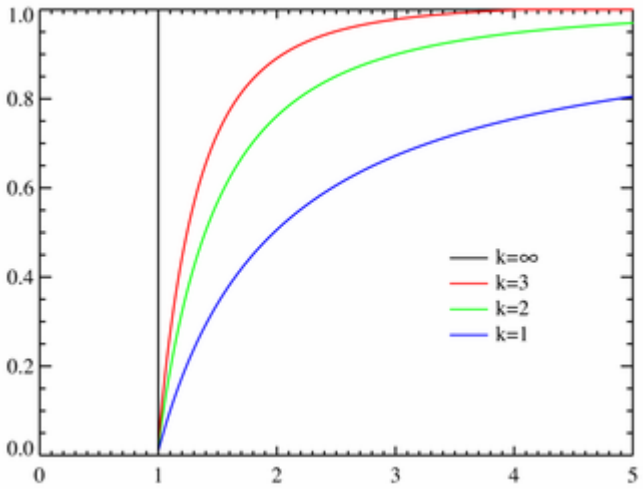
Pareto Distribution Function

Probability density function



Pareto probability density functions for various k with $x_m = 1$. The horizontal axis is the x parameter. Note that as $k \to \infty$ the distribution approaches $\delta(x - x_m)$.

Cumulative distribution function



Pareto cumulative density functions for various k with $x_m = 1$. The horizontal axis is the x parameter.

Under this distribution, if x is the income, and N(x) is the number of individual / household whose income greater than x, the number of household whose income greater than x0 can be written as:

$$N(x0) = \beta x^{-\alpha} \qquad x>x0$$

The accumulative distribution function and density function are defined as:

$$F(x) = 1- N(x)/N(x0) = 1-(x/xo)^{-\alpha} \qquad x>x0$$

$$f(x) = \alpha \; x_0^{-\alpha} \; x^{-(\alpha+1)} \qquad x> x0$$

There are three scenarios considered for the year 1996 and 2002 data, which are:

1) First, calculate the potential tax revenue of the total family income
2) Second, input from farming activity is removed from family income, due to the regulation that agriculture income is not an object of taxation
3) Third, in addition to input from farming, the transfer incomes are also removed from family income (such as bequest, transfer from children to parents, etc), since this income also not an object of Personal income tax.

Two methods of calculation are also conducted.

1) Method 1: simply calculating the potential tax revenue by multiplying the mean of income for each class with the tax rate applied. Only the highest income class potential revenue is calculated using the Pareto distribution.

2) Method 2: calculating all the mean of income for every class, then multiply the result with the tax rate applied.

The first method is applied only for the year 2002. For year 1996 the first method is considered unsuitable since from the data plot the distribution is very left-skewed. While for the year 2000 calculation, since the national census data do not provide detail about the mean of income for each class, only method 2 is available to apply.

The calculation result from the above equation will be compared with the data of collected tax at the same year. Thus, the compliance rate for each group will be known and analyzed.

2.2 The Equations

All the calculation is based on the assumption that household structure is with a housewife and two children. Since there is an increasing in deducted allowances in year 2002 from Rp 1,728,000 and Rp 864,000 for each tax payers and dependants to Rp 2,880,000 and Rp 1,440,000 for each tax payers and dependants, there is a slightly change in the amount of deductible allowances. For year 1996 and 2000 calculation, the allowance is equal to Rp 4,320,000/year to Rp 7,200,000 for year 2002.

Furthermore, there are five layers progressive rate in the recent tax system:

- Taxable income < Rp 25 million : 5%
- Taxable income Rp 25 million - 50 million : 10%
- Taxable income Rp 50 million – 100 million : 15%
- Taxable income Rp 100 million – 200 million : 25%
- Taxable income > Rp 200 million : 35%

Thus for each scenario, given the amount of deduction and five layers of tax rate, equations below will be applied:

1) For method 1 the tax revenue of the last class is equal to:

Potential tax revenue = Tax 5% + Tax 10% +Tax 15% + Tax 25% + Tax 35%

= (A) + (B) + (C) + (D)

Since the last class yearly income is more than Rp 36 million then the partial integration is conducted start from the 10% bracket. Define D as the deductible allowance, N as the number of household in the last class, For each scenario, given the amount of deduction and five layers of tax rate, equations below will be applied:

$$A = N/(1-F(x>36{,}000{,}000)\int_{0}^{25\text{million}} 5\%\,(25{,}000{,}000 - D) + 10\%\,(x - 25{,}000{,}000)\,f(x)\,dx$$

$$B = N/(1-F(x>36{,}000{,}000)\int_{25\text{million}}^{100\text{million}} 5\%\,(25{,}000{,}000 - D) + 10\%\,.\,25{,}000{,}000) + 15\%(x-50{,}000{,}000)\,f(x)\,dx$$

$$C = N/(1-F(x>36{,}000{,}000)\int_{100\text{million}}^{200\text{million}} 5\%\,(25{,}000{,}000 - D) + 10\%\,.\,25{,}000{,}000) + 15\%.\,50{,}000{,}000 + 25\%\,(x-100{,}000{,}000)\,f(x)\,dx$$

$$D = N/(1-F(x>36{,}000{,}000)\int_{200\text{million}}^{\text{infinite}} 5\%\,(25{,}000{,}000 - D) + 10\%\,.\,25{,}000{,}000) + 15\%.\,50{,}000{,}000 + 25\%\,.\,100{,}000{,}000 + 35\%\,(x-200{,}000{,}000)\,f(x)\,dx$$

2) For method 2, the mean of income for each class is calculated using the definition of

$$E(X) = 1/F(x)\int_{a}^{b} x\,f(x)\,dx$$

where x : the value of income

f(x) : the Pareto distribution function

F(x) : the density function at the interval a-b

2.3 Previous Research

There are two previous research correlated has been conducted before.

2.3.1 The IMF Fiscal Affairs Department Report by Sunley, Escolano, et.al (September 1998).

This research was conducted for describing the revenue impact on wage withholding as a result of personal allowances/deduction change in the personal income tax. The main step in the estimation is the computation of the number of potential taxpayers and the distribution of wage income (the potential tax base) across these taxpayers. Thus, the result of this estimation is taken for comparison.

Since there were no statistical data on the distribution of income or the number of potential taxpayers, this research use the 1996 expenditure survey provided by BPS to estimate the distribution of wage income. The basic data taken from the survey are :

Table 2.1

Distribution of Urban Population by monthly

Per Capita Expenditure, 1996

Expenditure (Rp)	Percent of Population
< 15,000	0.028
15,000–20,000	0.127
20,000–30,000	2.842
30,000–40,000	8.389
40,000–60,000	22.909
60,000–80,000	19.145
80,000–100,000	13.540
100,000–150,000	18.229
>150,000	14.791
Source:BPS, Expenditure Survey 1996	

Next, the lognormal distribution is used for estimating the potential tax revenue. A continuous lognormal distribution was estimated by non-linear least squares, and the fitted continuous distribution of expenditure was used as a base to compute a distribution of wage income in 1997/1998. At the end, the nominal amounts in Rupiah defining the brackets were multiplied by the tax rate and the number of taxpayers.

The idea of lognormal distribution is similar with the Pareto distribution. The log-normal distribution is often used in simulations of variables such as personal incomes, age at first marriage, or tolerance to poison in animals. In general, if x is a sample from a normal distribution, then $y = e^x$ is a sample from a log-normal distribution. Thus, the log-normal distribution is defined as:

Probability Density Function

$$f(X) = \frac{\exp\left[-\frac{1}{2}\left[\frac{\ln(X)-\mu}{\sigma}\right]^2\right]}{\sqrt{2\pi\sigma^2 X^2}}$$

where

μ is the mean

σ is the standard deviation

2.3.2 The Indonesia-Japan Economic Cooperation Working Team Report (October 2004).

This research used the Susenas data for year 2002 only. The estimation is conducted using a model developed by BAPENAS. But unfortunately, this model is not mentioned in detail in the report. It is assumed that amount of non-taxable income is for a family with two children.

There are three scenarios considered, which are:

1. Calculating the total household income and tax based on all types of income
2. The input from farming enterprise is removed from family income
3. Only public officers' income (salary and pension) is included in family income, since this type of income is the easiest to determine.

Below is the conclusion from the calculation:

Table 2.2

Alternative Scenario For Income Tax(2002)

	(Trillion Rp)
Total Household income	
a) Based on all types of income	878.7
b) With removal of income from farming	785.2
c) Only including public officers salaries	568.1
Total Personal income tax payment	
a) Based on all types of income	114.3

b) With removal of income from farming	112.3
c) Only including public officers salaries	101.3
Percentage of tax free household	
a) Based on all types of income	33.70%
b) With removal of income from farming	48.10%
c) Only including public officers salaries	68.10%

Sources: Ikhsan, et.al 2004

CHAPTER 3
PERSONAL INCOME TAX IN INDONESIA: REVENUE POTENTIAL AND THE DISTRIBUTION

3.1 Profile Of Indonesia Tax Revenue

Below are the graph of Indonesia tax ratio development and the table of Indonesia Tax Revenue. It can be concluded that the ratio of Indonesia tax revenue to its GDP (Tax ratio) is considered low. Before year 2002, it was less than 10% of the GDP.

Graph 3.1

Table 3.1 Indonesia Tax Revenue Developments 1983-2003

(in billion Rp)

Year	Administration Cost	Tax Revenue					
		Non-oil income Tax	VAT	Land Tax	Other Tax	Total	Tax Ratio%
1983/1984	-	1,932.3	830.6	144.9	51.5	2,959.3	3.671
1984/1985	-	2,121.0	878.0	180.6	115	3,294.6	3.504
1985/1986	-	2,313.0	2,326.7	224.5	151.2	5,015.4	5.024
1986/1987	-	2,270.5	2,900.1	190	190.4	5,551.0	4.930

1987/1988	-	2,663.4	3,390.4	275.1	222.9	6,551.8	4.885
1988/1989	-	3,949.4	4,505.3	424.2	292.1	9,171.0	5.894
1989/1990	-	5,748.8	5,986.1	604.4	191.1	12,530.4	6.646
1990/1991	-	8,250.0	8,119.2	785.8	216.5	17,371.5	8.238
1991/1992	-	9,727.0	9,145.9	944.4	298.8	20,116.1	8.047
1992/1993	-	12,516.3	10,742.3	1,106.80	252.4	24,617.8	8.718
1993/1994	-	14,758.9	13,943.5	1,484.50	283.4	30,470.3	9.240
1994/1995	158.2	18,764.1	16,544.8	1,647.30	301.9	37,258.1	9.748
1995/1996	213.7	21,012.0	18,519.4	1,893.90	452.8	41,878.1	9.214
1996/1997	251.1	27,062.1	20,351.2	2,413.20	590.7	50,417.2	9.467
1997/1998	168.6	34,388.3	25,198.8	2,640.90	477.8	62,705.8	9.990
1998/1999	294.0	55,944.3	27,803.2	3,565.30	413	87,725.8	9.179
1999/2000	-	72,729.0	33,087.0	4,107.30	610.9	110,534.2	10.051
2000	334.1	38,421.4	35,231.8	4,456.10	836.7	78,946.0	6.158
2001	516.8	71,474.4	55,957.0	6,662.90	1,383.90	135,478.2	9.087
2002	-	87,200.0	67,800.0	7,530.70	1,455.20	163,985.9	13.100
2003	-	106,149.0	80,789.9	9,925.30	2,156.80	199,021.0	13.500

As a comparison, neighboring countries which are Philippines, Malaysia, Thailand, Vietnam, Cambodia and China is chosen since they are considered have comparable economical and social characteristics. Compare to other sample countries, Indonesia tax ratio is lower than the average ratio for the neighboring sample countries. Indonesia tax ratio is only slightly over the Philippines and Cambodia's tax ratio.

Furthermore, the ratio is lower than Vietnam tax ratio, which share of the agriculture sector in GDP is higher than Indonesian share. By looking at the economic characteristics and the tax ratio value below, it can be stated that a country dominated by the industrial and service sectors but with a low tax ratio may indicates that the taxation level in the country is relatively low, or its taxation administration system is still not effective.

Table 3.2 Economic Profile of Neighboring Countries (2002)

Country	GDP Composition (%)			Export	GNP/CAP	Tax Ratio
	Agriculture	Manufacturing	Service	% of GDP	(US$)	%
Philippines	14.7	22.7	52.8	44.1	1033.7	12.3

Cambodia	35.6	20.2	36.4	44.1	303.1	8.2
China	14.5	44.8	33.7	26.3	951.5	17.2
Malaysia	9.1	30.7	46.4	98.1	3609.5	18.5
Thailand	9	33.8	48.5	52.9	1960	14.5
Vietnam	25	20.6	38.5	46	409.8	15.3
Indonesia	17.5	25	38.1	33.5	779.7	13.1
Average	17.6	28.3	42.1	49.3	1292.5	14.2
The highest	35.6	44.8	52.8	98.1	3609.5	18.5
The Lowest	9	20.2	33.7	26.3	303.1	8.2

3.2 The Estimation Of the Potential Income Tax Revenue

3.2.1 Data

The estimation of potential income tax revenue is conducted for the year 1996, 2000, and 2002. However, since the Susenas data is not available for the year 2000, the calculation of year 2000 is based on the household structure data by income classification from the national census.

This estimation focuses on the income potential and the allocation of tax in the individual income tax system in Indonesia. This assessment refers to the calculation of tax payer incomes from ten thousands of families from the year 1996 and 2002 national economic and social census (Susenas). Meanwhile, the national census data for year 2000 covers the entire population.

Table below describes the characteristics of household in Indonesia in the 1996 and 2002 Susenas.

Table 3.3

Characteristics of household in Indonesia in 1996 and 2002 SUSENAS

	1996	2002
Total Amount of household	45,477,139	105,543,588
Number of potential tax payers	6,628,455	40,449,855
Percentage of household with income from farming	29.756%	22.907%
Percentage of total household income from farming	3.921%	8.826%
Percentage of tax free household(zero income tax)	85.425%	61.675%

Source: BPS (Central Bureau of Statistic Indonesia)

3.2.2 Method of Calculation

The potential tax revenue calculation is based on the Pareto distribution estimation. As mentioned before in Chapter 2, this distribution is originally used to describe the allocation of wealth among individuals since it seemed to show rather well the way that a larger portion of the wealth of any society is owned by a smaller percentage of the people in that society. This idea is sometimes expressed more simply as the Pareto Principle or the "80-20 rule" which says that 20% of the population owns 80% of the wealth.

For the year 1996 and 2002, there are three scenarios considered, which are :

- First, calculating the potential income tax revenue of the total income
- Second, calculating the potential revenue of the total income without the agriculture income. This scenario is considered since agriculture incomes is not an object of tax
- Third, calculating the potential revenue of the total income minus agriculture income and transfer income (such as bequest, income from children, etc)

Since the average income and the distribution for every class of income are available in the Susenas data, two methods of calculation is applied for year 2002 data, which are:

- Method 1 : using the average income data for each class and calculating the potential tax revenue from this average income. While for the last class, potential tax revenue is estimated using Pareto distribution This method is considered since the last class mean is suspected biased. Under this method not the average income is estimated, but the potential revenue for this class is directly calculated using the Pareto distribution.
- Method 2: calculating the mean of income for each class using Pareto distribution, then calculating the tax revenue by multiplying the mean by the tax rate.

Table 3.4 below describe the result of potential tax revenue and compliance rate calculation.

Table 3.4

CONCLUSION			
Potential Tax Revenue (Rp.)	1996	2000	2002
Method 1			
Calculation For :			
a) Total household income	–	–	265,706,803,406,046
Compliance Rate			**8.666%**
b) Household income without	–	–	
income from farming			200,259,536,274,428
Compliance Rate			**11.498%**
c)Total income–agriculture income– other Y	–	–	169,013,698,410,672
Compliance Rate			**13.624%**
Method 2			
Calculation For :			
a) Total household income	67,322,474,701,279	97,037,306,015,848	215,366,983,742,668
Compliance Rate	**12.013%**	**15.428%**	**10.692%**
b) Household income without	65,408,235,860,905	–	155,178,516,628,287
income from farming	**12.364%**		**14.839%**
Compliance Rate			
c)Total income–agriculture income– other Y	28,434,501,603,481	–	121,686,156,280,628
Compliance Rate	**28.442%**		**18.923%**

There are several point can be concluded from this result :

- For the year 2002, the compliance rate is vary between 8% to 18% using three scenarios mentioned before. (Compare to the result from Ikshan, et.al (October 2004) that mentioned the potential tax revenue equals to Rp 114.2 trillion and compliance rate equals to 20.14%)
- There are a slightly increasing trend in the compliance rate in the year 2000. This result mainly caused by the economic recovery after a severe crisis that

happened in year 1998. Furthermore, since the data used is the national census data, the calculation can not remove the agriculture income part for the total household income.

- For year 1996, there is a significant difference in the compliance rate between scenario 2 and 3. This result indicates that there is still space to expand tax revenue by widing the definiton of object of income tax, which cover also other income.

For comparison use, the calculation results above are being compared to previous research related and publication by Minister of Finance Indonesia. Table below summarize the comparison.

Table 3.5

Several Comparison of Compliance Rate Calculation

This Research				IMF Report	Minister Of Finance Publication	Ikhsan et.al
Year	**1996**	**2000**	**2002**	**1996**	**2000**	**2002**
Compliance						
Rate	**12.013%–28.442%***	**15.43%**	**10.692%–18.923%**	**20%**	**11.49%**	**20.14%**
Data	*SUSENAS 1996*	*National*	*SUSENAS 2002*	*Expenditure*	*Publication of*	*SUSENAS*
		Cencus 2000		*Survey 96*	*Minister Of Finance*	*2002*
Method	Pareto	Pareto	Pareto	Lognormal		
	Distribution	Distribution	Distribution	Distribution	–	

*variation in value depends on the method and scenario taken

From the result above, it can be strongly stated that Indonesia tax compliance rate is low. The tax revenue only covers 11%-20% of the potential value. There is still wide space for increasing the revenue.

In general an effort to increase the tax revenue can be done by increasing the tax rate, widening the tax base or increasing the compliance rate. In relation with the calculation result above, it is also can be stated the there is possibility to increase the tax revenue without increasing the rate. A low compliance rate indicates that by improving the tax administration or by giving tax education, the compliance rate could be improved.

According to the directorate general of tax, in year 2001, there are only 7,300,027 taxpayers. This number is equal to 26.1% of total household number of 31.2%

of total non-free tax household number. Thus, an effort to broadening the tax base is considered urgent and effective for increasing the tax revenue.

Conclusions and several recommendations related to this result will be discussed in detail in the next two chapters.

CHAPTER 4
SEVERAL ISSUES ABOUT THE TAX ADMINISTRATION

4.1 Complicated tax system.

It is a fact that Indonesia current tax system is complicated and there are many exemptions in several sectors, especially in the area of value added tax. Tax simplification is perhaps the most important method of limiting opportunity for corruption and can also increase economic efficiency. Tax reform in several countries under IMF advice, generally focus on lowering tax rates, broadening the tax base, and eliminating special exemptions. These acts will tend to make tax obligations transparent and reduce the compliance cost of honest taxpayers. Presumptive taxation of small businesses which may not keep extensive books and record can also reduce the discretionary power of tax inspectors and make calculations simpler and clearer.

4.2 Efficiency of tax office

As explained in the previous part, Indonesia's tax compliance rate is considered low (less than 20%),while using the year 1984-2004 data, Indonesia tax elasticity is considered elastic (1.43 for Personal Income Tax and 1.15 for VAT). Since Indonesia is a developing country, it means that in the future there is significant additional potential tax revenue when the economy grows. Thus, the next issue is how to improve the performance of the tax revenue collection. Below is the tax collection cost development since 1995-2001. It shows that the cost used for collecting the tax is considered low (0.38% of the total tax revenue, with tax ratio 11.9%), compare to Japan (1.15%,with tax ratio 22%) or Singapore (1.65%,with tax ratio 15.4%). Regardless from the issue whether this collection cost is efficient or not, it can be stated that by spending more for collecting the cost, there is a possibility to increase the tax revenue.

Table 4.1 Cost of Tax Collection Ratio

Year	Cost Incurred (billion Rp)	Tax Revenue (billion Rp)	Ratio (%)
1995/1996	213,7	41.878,1	0,51%
1996/1997	251,1	50.417,2	0,50%
1997/1998	168,6	62.705,8	0,27%
1998/1999	294,0	87.725,8	0,34%

1999/2000	N/A	N/A	N/A
2000	334,1	97.484,8	0,34%
2001	516,8	135.478,4	0.38%

Source: Directorate General of Taxes, annual report 2001

Furthermore, table 4.2 and 4.3 below show that the number of submitted tax returns and registered taxpayer are also low. And taxpayers who fail to submit the tax return by the dateline will be fined only Rp 100,000 (US$ 11).

Table 4.2 Submission of Annual Tax Return

	1998	1999	2000
Income Tax Art. 25 Corporate	53,1%	54,7%	36,72%
Income Tax Art. 25 Individual	54,9%	50,7%	32,49%
Income Tax Art. 21	53,6%	52,6%	N/A

Source: Directorate General of Taxes, annual report 2001

Table 4.3 Registered Taxpayers

Types of Tax	Per 1 Jan 1997	Per 1Jan 1998	Per 1 Jan 1999	Per 1 Jan 2000	Per 31 Des 2000	Per 31 Des 2001
Income Tax Art. 21	637.586	694.187	737.306	808.617	873.437	845.283
Income Tax Art. 22	112.475	118.612	125.201	135.338	142.571	22.509
Income Tax Art. 23	477.307	524.654	551.556	598.783	635.008	666.325
Income Tax Art. 25 Individual	1.193.899	1.263.993	1.291.906	1.311.582	1.320.157	1.552.816
Income Tax Art. 25 Corporate	479.926	523.546	548.657	607.066	660.736	738.326
Value Added Tax	338.922	362.838	375.529	392.515	419.002	464.471

Source: Directorate General of Taxes, annual report 2001

In order to increase the efficiency of tax office, since 2001, the directorate of general taxes established the Large Taxpayer Offices (LTO), Medium and Small Taxpayer Offices (MTO), and also the Foreigner Taxpayer Offices (FTO). Furthermore

the On-line Payment System has been applied in six Land and Building Tax offices located in Surabaya, East Jakarta, Central Jakarta, West Jakarta, North Jakarta, and South Jakarta since August 1999. The system enabled taxpayers to pay taxes (currently only for land and building taxes) on-line through 162 banks in those cities. The system is a coordinated work between the Directorate General of Taxes and local governments. Telephone Information Service Taxpayers (especially land and building taxpayers) may ask any information related to land and building taxes by using a telephone. PIT has been applied in 37 of 107 lands and building tax service offices, particularly those located in Java. Currently, PIT is developed by Directorate General of Taxes and third parties. In Fiscal Year 2002, Directorate General of Taxes has already applied on-line payment system in District Tax Officers. This development enable taxpayers pay their tax obligation in more than 80 banks in Indonesia by on-line system program.

4.3 Corruption

Perhaps this is the most important issues in the administration area. Due to the complicated tax filling requirement under the current system, there is an excessive contact between taxpayers and tax officials, thus a chance of corruption increases. An important instrument to limit this contact could be a relying on withholding taxes and increasing the use of third-party data for tax assessment. Unfortunately, under the current system, the tax office has no access to the bank records, though tax evasion is happened and well-proof. Another important act is perhaps the internal and external checks. Internal audit divisions and anticorruption are considered as the most important bodies in the revenue administrations. In addition, important institution outside the revenue administration that should be considered include an independent and effective judiciary, external review by government agencies, and taxpayer associations that could strengthen citizen's voice.

CHAPTER 5
CONCLUSION AND RECOMMENDATION

There are several points that can be concluded from this research:

- It can be strongly stated that the compliance rate of Personal income tax revenue in Indonesia is low. It vary between 8%-18% in year 2002, depends on the scenario taken.
- In year 1996 there is a significance difference between the compliance rate under scenario 1(total income), which is equal to 12.364%, and scenario 3 (total income minus agriculture income and other income), 28.442%. This difference is belief due to a huge number of other incomes, which were not an object of income tax in year 1996.
- While in year 2002, the difference between scenario 1 and scenario 3 is around 8%, compare to 16% in year 1996. This result can be presumed as an impact of money outflow after the monetary crisis in 1998. Since one of other income is the saving deposit, which is belief belong to Indonesian- Chinese in majority, there is a significance decrease in this number of income after year 1998. As a result, the compliance rate under scenario 1 and 3 does not differ much.
- Comparing the compliance rate under scenario 1 (total income), which is equal to 10.692% and scenario 2 (total income minus agriculture income), which is equal to 14,893%, in year 2002; there is a potential revenue from the agriculture sector that should be considered in the future. Taxing the agriculture income politically is not a popular policy, especially in agriculture country like Indonesia, where more than 50% of population is working in this sector. However, by taxing even a small number of agriculture incomes, it is expected that an improvement of income in the future or the possibility of transferring job to other sector, will increase the tax revenue. In other word, this action is considered in order to broaden the tax base and compliance rate in the future. Once a person is registered as a taxpayer, it is become difficult to evade.
- From the calculation result in year 2002, by taxing the agriculture income, there will be additional revenue around Rp 60 – 65 trillion. This is equal to three times of the actual tax revenue in this year. Thus, it can be stated that there is a considerable potential tax in the agriculture sector.
- An effort to increase tax revenue by broadening the tax base is also supported by the fact from publication of the directorate general of tax in year 2001 about the

number of taxpayer. There are only 7,300,027 taxpayers from 27,960,516 total number of household in salary-man/employee category. This number is equal to only 26.1% of total household number of 31.2% of total non-free tax household number. Thus, an effort to broadening the tax base is considered urgent and effective for increasing the tax revenue.

- There is a need for improvement of tax administration, consist of the tax system, tax authorities, and taxpayers. Two current two main problems in Indonesia tax administration:
  - A large compliance gap as a result of weak awareness to pay taxes
  - Leakage in tax imposition and collection due to improper or inadequate executive actions of the tax authorities.
- There is a need for introducing the taxpayers' id number. There is regulation that every citizen should have a resident registration number in Indonesia. Thus, the next issue to consider is how to use this resident registration number as a tool for registering unrecorded potential taxpayers in the future.

APPENDIX

Personal Income Tax Buoyancy

Dependent Variable: LNPIT

Method: Least Squares

Date: 08/10/05 Time: 13:58

Sample: 1984 2004

Included observations: 21

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-8.865582	0.729784	-12.14823	0.0000
LNGDP	1.443397	0.058749	24.56892	0.0000
DUMMYCRISIS	-0.268622	0.125526	-2.139964	0.0472
DUMMYREG	-0.050564	0.089763	-0.563307	0.5806

R-squared	0.991092	Mean dependent var	9.771962
Adjusted R-squared	0.989521	S.D. dependent var	1.392993
S.E. of regression	0.142600	Akaike info criterion	-0.887909
Sum squared resid	0.345689	Schwarz criterion	-0.688952
Log likelihood	13.32304	F-statistic	630.4984
Durbin-Watson stat	1.569869	Prob(F-statistic)	0.000000

Value Added Tax Buoyancy

Dependent Variable: LNVAT

Method: Least Squares

Date: 08/10/05 Time: 14:00

Sample: 1984 2004

Included observations: 21

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-8.494115	1.059286	-8.018716	0.0000
LNGDP	1.408171	0.085274	16.51340	0.0000
DUMMYCRISIS	-0.618426	0.182202	-3.394173	0.0035
DUMMYREG	-0.340376	0.130291	-2.612433	0.0182

R-squared	0.976520	Mean dependent var	9.528215
Adjusted R-squared	0.972377	S.D. dependent var	1.245379
S.E. of regression	0.206984	Akaike info criterion	-0.142705
Sum squared resid	0.728322	Schwarz criterion	0.056252
Log likelihood	5.498403	F-statistic	235.6776
Durbin-Watson stat	1.028741	Prob(F-statistic)	0.000000