

# On Assessment of the Supreme Court Decisions in Tackling Substance Misuse in Indonesia

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# On Assessment of the Supreme Court Decisions in Tackling Substance Misuse in Indonesia<sup>1</sup>

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#### Abstract

This study aims to analyse the Indonesian Supreme Court (Mahkamah Agung) decisions to the defendants of substance misuse. The data were based on the Supreme Court decisions for substance misuse cases from 2001-2009, uploaded in putusan.mahkamahagung.or.id. The database consists of 191 cases involving 218 defendants. Logistic regression and Tobin's logistic regression (Tobit) were used in this study to estimate the probability and the intensity of various disposals. This is inline with Becker (1968) argument that the optimal deterrence effect of a disposal arose from the probability of conviction and the intensity of punishment.

The types of punishment sentenced to defendants of substance misuse cases are vary, ranging from imprisonment, fines, community service, probation and even a capital punishment. The results from logistic regression analyses showed the social costs of substance misuse was used by the Supreme Court judges to consider the value of fines sentenced to offenders. the social cost that is inflicted by the defendant was only weighed in giving fines to the defendant. On the other hand, the results from Tobit regressions showed that the Supreme Court judges did not taken into consideration the social cost of substance misuse in determining the intensity of punishment sentenced to defendants.

The explicit social cost caused by the defendants of the narcotics/psychotropic's case was Rp 23.7 billion (about US\$ 2.37 million), however the fines charged by the Supreme Court was only Rp 5.5 billion (about US\$ 550,000). Further investigation showed that the defendants who were sentenced to pay fines by the District Courts has 51.7% more probability to be sentenced with imprisonment by the Supreme Court. On the other hand, results from Tobit regressions showed that the longer the imprisonment sentenced by the District Court, the more fines were sentenced to the defendants by the Supreme Court.

Keywords: Narcotics, Psychotropic, Social Cost of Crime, Financial Punishment, Deterrence Effect.

#### Jel Classification: K40

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# 1. Introduction

The emergence of the economic model of crime was initiated from Becker's work (1968), "Crime and Punishment: An Economic Approach". This work implemented the use of mathematical approach to the deterrence theory, proposed earlier by Beccaria (1770) and Bentham (1789). Assuming that individuals are rational, Becker (1968) argued that individuals' decision whether or not to commit an offence depend on their estimation of the net expected benefits of committing an offence. An offence will be committed (not committed) if the expected benefits of conducting the activities exceed (less then) their expected costs. This work, then, was referred by many authors and extensive and excellent literature reviews in this field were conducted by Garoupa (1997), Kaplow and Shavell (2002) and Polinsky and Shavell (2007), among others.

Levitt and Miles (2007) argued that the economic analysis of criminal actions provide impetus on the cognitive side of human decision, whereby an action was committed as a result of cost-benefit analysis. This approach, however, has undermined pscychological factor or other social factors which may attributable to offending behaviour. Hundreds of studies in the area of behavioural economics show how psychological factors and other social factors may influence individuals in making their decision (see Allais, 1954, Ellsberg, 1962, Kahneman and Tversky, 1979, 1984, Tversky and Kahneman, 1991, 1992, Knetsch, 1994, Camerer, 2000, Starmer, 2008).

The court plays a crucial role to form an expected costs of individuals in conducting an offence, since the court is an institution which has ultimate authority to decide the probability and the intensity of punishment to offenders. This study aims to assess the verdicts of the Supreme Court of Indonesia in the case of substance misuse during the period of 2001-2009. The database comprise of 191 cases with 218 defendants and the Supreme Court decisions have been publised in the Supreme Court in its official website: *http://putusan.mahkamahagung.go.id*. For each case, the document contains of the of the Supreme Court, and the decisions of the previous courts (i.e. High Courts (province) and District Courts (district or kabupaten) and also the official investigation by the Prosecutor.

### 2. Narcotic and Psychotropic

Narcotic is a substance or medication that can either come from a plant or non-plant, synthetic or even semi-synthetic that can cause a downgrade or shifting consciousness, losing senses, reducing to eliminating pain, and can also cause addiction.<sup>3</sup> On the other hand, psychotropic is a substance or medication, whether natural or synthetic that is not narcotic, that has psychoactive effect by certain influence to some central nerve system that can cause such alteration to mental and physical activity.<sup>4</sup>

Narcotic and psychotropic are useful in medical industry, for example as anaesthesia, analgesic, and psychiatric drugs. Beside its benefit in the medical industry, narcotic and psychotropic can lead to a fatal impact to the users. Narcotic and psychotropic can cause user to lose control in continuously using those substances or addiction (UNICEF, 2004). Furthermore, intravenous drug users are also subject to possibly catching HIV and HCV (Hepatitis C Virus) (Volkow, 2009).

Individuals with substance misuse problem have higher probability to involve in a criminal action, particularly theft and burglary to finance their dependency to the substance (ONDCP, 2000). A study conducted by ILO (International Labour Organization) in Egypt, Mexico, Namibia, Poland and Sri Lanka showed that substance misusers tend to absence from work about twice to three times more often compared to other workers (UNODC, 1994). This result shows how the substance misuse may have direct impact on the productivity of an economy. The United Nations acknowledges the impact of substance misuse, thus in 1961 and 1971 the UN formed Single Convention on Narcotic Drugs and Convention on Psychotropic Substances. The ultimate purpose of the conventions is to limit the use of narcotic and psychotropic to medical purposes and science.

### 3. Substance Misuse in Indonesia

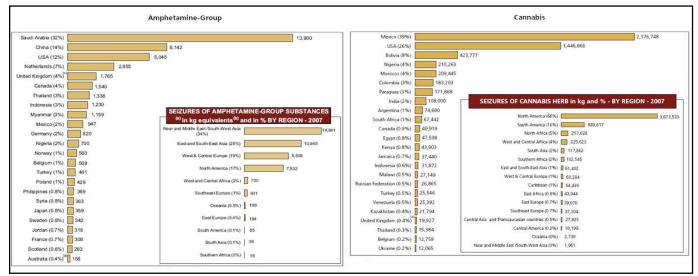
The rising of illegal distribution of narcotic and psychotropic in Indonesia is in alarming situation. In 2007, there were 72 ecstasy factories were found throughout the world, of which 16 of the factories were located in Indonesia (UNODC, 2009). Indonesia was ranked in 8<sup>th</sup> place in the number of psychotropic seizure for amphetamine in 2007 with as much as 1,230 kg or 3% of

<sup>&</sup>lt;sup>3</sup> Law of The Republic of Indonesia number 22 of 1997 Concerning Narcotic.

<sup>&</sup>lt;sup>4</sup> Law of The Republic of Indonesia number 5 of 1997 Concerning Psychotropic.

number amphetamine seizures worldwide (see Figure 1). Furthermore, Indonesia was in the  $2^{nd}$  place in Asia and in the  $15^{th}$  place worldwide for illegal cannabis seized with the amount of 31,870 kg of cannabis seized (UNODC, 2009).

Figure 1. Top 15 Nations by Amount and Percentage of Amphetamine and Cannabis seized (kg) in 2007



<sup>(a)</sup>Amphetamine-group substances are amphetamine, methamphetamine, and related non-specified amphetamines (exclude ecstasy-group substances).

<sup>(b)</sup> 1 dosage unit is assumed to be equal to 30 mg; 1 litter is assumed to be equal to 1 kg.

<sup>(c)</sup> Data refer to England and Wales only.

<sup>(d)</sup>Total seizures reported by national as well as state and territory law enforcement agencies, which may result in double counting.

Source: UNODC (2009)

It was estimated that in 2008 about 3.6 million people or 1.99% of Indonesia population had involved in substance misuse related activities. This number has increased dramatically from 2.9 million people back in 2004 (National Narcotic Agency/BNN and Indonesia University, 2009). During the period of 2001-2008, the trend of narcotic, psychotropic and other addictive substances' misuse in Indonesia tends to increase every year. In 2008, there were 10,006 narcotic's cases and this is considered a huge increase from 1,907 cases in 2001. In 2009, the number of cases for psychotropic misuse was 9,780, whereas the number was only 1,648 cases in 2001 (see Figure 2).

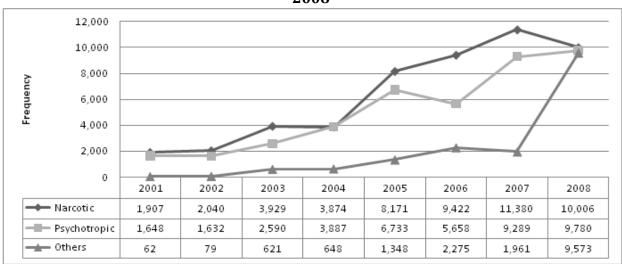


Figure 2. Number of Narcotic, Psychotropic and Other Addictive Substance in 2001-2008

Source: National Narcotics Agency (BNN) (2009), estimated

# 4. Legislation Concerning Substance Misuse

Nowadays, the fundamental commandment that regulates narcotic is Anti Narcotic Act 2009 (Law No. 35/2009), which amended Anti Narcotic Act 1997 (Law No 22/1997). The legislation, which regulates psychotropic, is the Anti Psychotropic Act 1997 (Law No. 5/1997). The data used in this research is in the period of 2001-2009 and the Anti Narcotic Act 2009 has not been implemented yet, therefore all cases in this study were sentenced based on the Anti Narcotic Act 1997.

The Anti Narcotic Act 1997 classified narcotic into three groups and the Anti Psychotropic Act 1997 classified psychotropic into four groups. All classification for both narcotic and psychotropic are based on the level of danger and its usage in medical industry as in Table 1 below:

Narcotic Groups	Example	Psychotropic Groups	Example
Group I Narcotic is narcotic that can only be used for science purposes and not be	Papaver Somniferum, Opium, Coke (plant and leaf), and Red Cocaine,	Group I: Psychotropic that is only used for science but not in physical practices, and also has a high risk to catch addiction.	MDMA/Ecstasy, N-ethyl-MDA, LCD, DOM
used in therapy, and also has high risk of addiction.	Heroine and Morphine, Cannabis	Group II: psychotropic that is useful for medicine as well as in therapy and/or science purposes, and also has a high risk to catch addiction.	Amphetamine, Methamphetamine, Phenethylamine, Phencyclidine (PCP)
Group II Narcotic is narcotic aiming for medical needs that are used as the last method in therapy and/or for research development and has a high risk of addiction.	Alphacetylmetadol, Benzethydine, Betametadol	Group III: Psychotropic that is useful for medicine and often used in therapy and/or science purposes, and has a medium risk to catch addiction.	Amobarbital, Buprenorphine, Butalbital, Flunitrazepam
Group III Narcotic is narcotic aiming for medical needs and often used in therapy and/or research development and has a lower risk of addiction.	Acetyl-dihidrocodeina, Dextropropoxyphene, Dihidrocodeina	Group IV: Psychotropic that is useful for medicine and commonly used in therapy and/or science purposes, and has a low risk to catch addiction.	Diazepam/Valium, Nitrazepam, Nordazepam, Alprazolam, Bromazepam/Lexotan, Estazolam/Esilgan

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Source: Anti Narcotic Act 1997 & Anti Psychotropic Act 1997.

The type of punishments which may be sentenced to the offenders of narcotic and psychotropic misuse can be seen in Appendix 1 and 2. According to Indonesian Penal Code article 10 (KUHP), the types of main punishments are capital punishment, imprisonment, light imprisonment and fines. Furthermore, additional punishments include revocation of certain privileges and the seizure of certain goods.

Both Anti Narcotic Act 1997 and Anti Psychotropic Act 1997, in general, classified defendants into three categories: seller, user, and distributor. As previously mentioned, this research uses information of narcotic and psychotropic case that was published by the Supreme Court (MA) in 2001-2009. The drug's mistreatments that happened during those years are

cannabis, heroine, and cocaine misuse. On the other hand, the mistreatments of psychotropic that happened during those years are methamphetamine and ecstasy/MDMA (including lexotan capsule). Based on the reasoning, the operational definition of narcotic in this research is cannabis (including cannabis latex commonly called hash), heroine and cocaine. Then, the operational definition of psychotropic in this research is methamphetamine and ecstasy/MDMA (including lexotan capsule).

# 5. Court Decisions in Substance Misuse Cases

Under Indonesia criminal justice system, the prosecution of the attorney toward a defendant of substance misuse is in the District Court in each district (Kabupaten). Once the District Court has given verdict to the defendant, the defendant (prosecutor) may have right to appeal the decision to either High Court (the Supreme Court). The High Court is entitled to sustain, to reject or to modify the decision made by judges in the District court. After this stage, the defendant still has the right to request a further appeal to the Supreme Court.

The data set of this study was based on information from the Supreme Court decision during of substance misuse cases in the period of 2001-2009 published in official website of the Supreme Court: <a href="http://www.putusan.mahkamahagung.go.id">www.putusan.mahkamahagung.go.id</a>.

The trend of the case's number and defendants increased from 2001 to 2007 and started to decrease since 2008. In 2001, it started with two cases and six defendants and ended with 63 cases and 72 defendants in 2007. From 2007, the trend tends to decrease and finally reaches the number of 15 cases with 17 defendants in 2009 (see Table 2).

Table 2. The Number of A	ppeal of S	Substance Misuse	e Cases in the Si	apreme Court 2001-2009

	Number of	Number of
Year	Case	Defendants
2001	2	6
2002	5	5
2003	9	10
2004	17	17
2005	15	19
2006	19	20
2007	63	72
2008	46	52
2009	15	17
Total	191	218
	· ·	2000 + 1

Source: Indonesia Supreme Court Decisions, 2001-2009, estimated

Subsequently, the total of fines sentenced to 147 defendants by the Supreme Court is only Rp 5.5 billion (about US\$ 550,000). This figure is 20.87% lower than to the total Rp 6.6 billion (about US\$ 660,000) fines prosecuted to those 147 defendants. It should be noted that the total of fines sentenced by the District Court is the lowest (Rp 4.9 billion or about US\$ 490,000). The average fines prosecuted was the highest on average, which was Rp 45.3 million (about US\$ 4,500), followed by the Supreme Court which was Rp 37.5 million (about US\$ 3,700) and the lowest was by the District Court which was only Rp 33.7 million (about US\$ 3,300) (See Table 3).

In the Supreme Court, 2001-2009					
		<b>Total Fines</b>			
	Number of	Sentenced (in			
Level	Defendants	U.S Dollar)	%	Average	
Supreme Court	147	550,590	100.00	3,745	
District Court	147	494,710	89.85	3,365	
Attorney Lawsuit	147	665,490	120.87	4,527	

Table 3. Fines Sentenced to the Defendants of Substance Misuse Cases In the Supreme Court, 2001-2009

Source: Indonesia Supreme Court Decisions, 2001-2009, estimated

In term of imprisonment, the average length of imprisonment to 145 defendants sentenced by the Supreme Court was 62.48 months. The average length of imprisonment given by Supreme Court however was 23 month less than the average length of imprisonment prosecuted, which was 85.11 months. The average value of imprisonment sentenced by the District Court to those defendants however was the lowest, which was only 61.51 months (see Table 4).

Supren	Supreme Court, 2001-2009					
Number of Average (by						
Level	Defendants	Month)				
Supreme Court	145	62,48				
District Court	145	61,51				
Prosecutor Lawsuit	145	85,11				

Table 4. Imprisonment Sentenced to the Defendants of Substance Misuse Cases in the Supreme Court, 2001-2009\*

\*Imprisonment does not include life sentence

Source: Indonesia Supreme Court Decisions, 2001-2009, estimated

During 2001-2009, whether the lawsuit from the Prosecutor, District Court, or Supreme Court, all have given life sentence and capital punishment to the convicts. The life sentence was prosecuted to twelve defendants, in which nine of them were Indonesian passport holders,

whereas the rest were foreign citizens. The capital punishment was prosecuted to nine defendants, of whom only two were Indonesian citizen and the rest were foreign citizens.

	Life Sentence Imprisonment			Capital Punishment				
Level	Number of		Citizen	ship	Number of		Citizens	ship
	Defendants	%	Indonesia	Other	Defendants	%	Indonesia	Other
Attorney Lawsuit	12	5.50	9	3	9	4.13	2	7
District Court	6	2.75	2	4	4	1.83	1	3
Supreme Court	5	2.29	5	0	7	3.21	1	6

Table 5. Life Sentence and Capital Punishment Sentenced to the Defendants of Substance Misuse in the Supreme Court, 2001-2009

Source: Indonesia Supreme Court Decisions, 2001-2009, estimated

In the District Courts level, six defendants were sentenced with life sentence, of whom two were Indonesian and four were foreign citizens. In addition, the District Courts sentenced capital punishment to four defendants, of whom one was Indonesian and the rest were foreign citizens. The Supreme Court sentenced life sentence to 5 defendants who were all Indonesian citizens. Furthermore, the Supreme Court sentenced 7 defendants with capital punishment, of whom one was Indonesian citizen and the others were foreign passport holders. (See Table 5).

The majority of defendants were male. Of 218 defendants, 195 were male and 23 were female. In term of their role in substance misuse trade and usage, of 218 defendants observed in this research there were 56 sellers, 140 users, and 22 distributors (see Table 6). The background of occupation of defendants varies. Of 218 defendants, 113 defendants worked in private sector; 11 worked in the national army/police department & civil servant; 16 were secondary school students & college students; 34 worked as farmers and blue-collar workers; 14 worked as fishermen, public drivers, public bike drivers & housewives, and 30 defendants were unemployed (see Table 6).

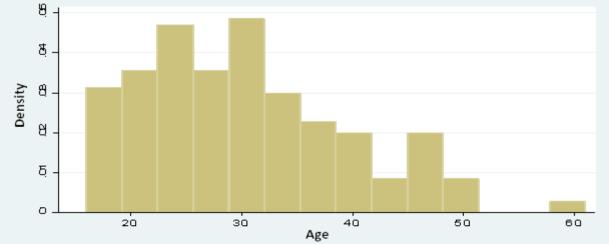
Supreme	Court, According to Gender	/	,
	Classification	Defendants	Proportion (%)
Gender	Male	195	89.45%
	Female	23	10.55%
Status	Seller	56	25.69%
	Distributor	22	10.09%
	User	140	64.22%
Occupation	Private Sector	113	51,8%
	Farmer and Blue-Collar		
	workers	34	15,6%
	Army/Police and Civil		
	Servant	11	5,0%
	Students (High Schools		
	and University)	16	7,3%
	Unemployed	30	13,8%
	Fishermen, Public		
	Drivers, and		
	Housewives	14	6,4%

Table 6: The Distribution of Offenders of Substance Misuse Cases Appealed to the Supreme Court, According to Gender, Status and Occupation, 2001-2009

Source: Indonesia Supreme Court Decisions, 2001-2009, estimated

The defendants of narcotic/psychotropic misuse cases vary by age with the youngest of 16 years old, the oldest of 61 years old, and the average of all defendants is 30 years old. The histogram (Figure 4) shows that the defendants of substance misuse cases in Indonesia mostly vary between 20 to 30 years old (see Figure 3).





Source: Indonesia Supreme Court Decisions, 2001-2009, estimated

In term of the type of substances, which were brought into lawsuit, a defendant may be prosecuted with more than one type of narcotic/psychotropic. The data show that there were 143 defendants who were charged for cannabis; 41 were charged for psychotropic in the form of ecstasy; 41 were charged for psychotropic in the form of methamphetamine; 14 were charged for narcotic in the form of heroin, and; 2 defendants were charged for narcotic in the form of cocaine (see Table 7).

Substance Misuse Cases in Supreme Court in 2001-2009				
Number of Narcotic				
Types of Narcotic/Psychotropic Brought	Psychotropic Brought into			
into Lawsuit	Lawsuit			
Cannabis	143			
Ecstasy	41			
Methamphetamine	41			
Heroine	14			
Cocaine	2			

 Table 7. Types of Narcotic/Psychotropic Brought into Lawsuit to the Defendants of

 Substance Misuse Cases in Supreme Court in 2001-2009

Source: Indonesia Supreme Court Decisions, 2001-2009, estimated

### 6. Social Cost of Substance Misuse

According to Collins *et al* (2000), the social cost of drugs derives from tangible cost and intangible cost. Tangible cost according Collins *et al* (2000) is an expense that if reduced will release resources to every aspect of society to be used for other consumption or investment. For example, cost reduction for enforcement, justice, and cost reduction for punishing offenders will indeed release more resources to government to invest in other areas. In reverse, intangible cost when reduced does not release resources for other uses. Even if the reduction were very important, it would not give the benefits that can be redistributed to other areas/parties. Example of intangible costs are life loss, pain and suffering, therefore, it is very difficult to weigh the value of intangible cost.

Furthermore, Collins *et al* (2000), mentions that the production and consumption of illegal drugs utilizes certain resources that can be used for alternative consumption and production purposes. Of course, if the resources used for other goods and services that are legal in law, the government should get tax disbursement from the products along with the customs fee (if imported). Based on that reasoning, not only the lost value of the substance's evidence that

was seized from defendants but also the loss of the tax and customs fee (if drugs were smuggled) will be involved in social cost calculation from drug's misuse in this research. Figure 5 shows what Collins *et al* (2000) says about the social cost caused by drug's misuse.

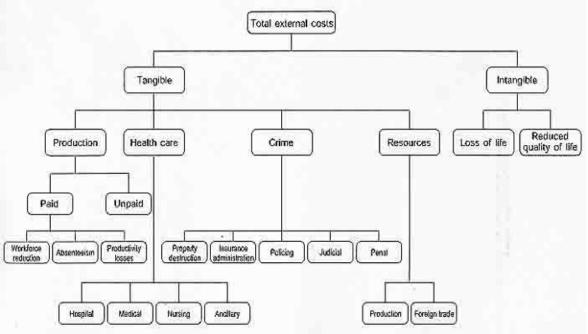


Figure 4. Social Cost (External) Caused by Drug's Misuse

Source: Collins et al (2000)

As one can see in Figure 5, there is so much of the social cost caused by the drug's misuse. However, because of the limited data to evaluate all tangible cost and the uncertainty to value all intangible cost, the social cost in this research can only be estimated by the value of the substance's evidence from the defendants, tax and customs fee that should have been collected if all transactions were legally conducted. It is obvious that the estimation of social costs in this research is much lower than the real value of the social costs.

Fees given to narcotic and psychotropic transaction in Indonesia (if legally conducted) are similar to other medical substances: 10% from the cost of goods sold plus the customs fee (if narcotic/psychotropic is to be imported). The rate of the customs fee and value added tax for imported narcotic and psychotropic is based on Indonesian Customs Tariff Book (BTBMI) issued by Indonesian Directorate General of Customs & Excise. Indonesian Customs Tariff Book to this issue nowadays is Indonesian Customs Tariff Book 2007 and was Indonesian Customs Tariff Book 2004 previously. Since the data used comes from the year of 2001-2009, this

research must apply to the Indonesian Customs Tariff Book according to its year appropriately. According to the data used in this research, there is no case of smuggled narcotic and psychotropic from out of the country during the year of 2001-2003. As a result, the Indonesian Customs Tariff Book needed is just the one that applies to year 2004-2009.

The customs fee to narcotic and psychotropic for Indonesian Customs Tariff Book 2004 and Indonesian Customs Tariff Book 2009 has the same rate so it would not need a different table to compare them. Table 8 shows the customs fee and Value Added Tax to Narcotic and Psychotropic in Indonesian Customs Tariff Book 2004 and Indonesian Customs Tariff Book 2007.

Table 8. Import Customs Fee and Indonesian Value Added Tax to Narcotic and PsychotropicAccording to Indonesian Customs Tariff Book 2004 and 2007

Form of Narcotic/Psychotropic	Customs Fee (%)	Value Added Tax (%)
Cannabis	5	10
Heroine	5	10
Methamphetamine	0	10
Ecstasy <sup>5</sup>	5	10
Cocaine	5	10

Source: Directorate General of Customs & Excise (2010)

As previously explained, calculation of social cost to narcotic and psychotropic case in this research can be shown in the equation below:

Social Cost = Price of Narcotic and Psychotropic \* Total of the Evidence of Narcotic and Psychotropic (in grams and number of pills) + (Total of the Evidence of Narcotic and Psychotropic \* Price of Narcotic and Psychotropic \* Value Added Tax + (Total of the Evidence of Narcotic and Psychotropic \* Price of Narcotic and Psychotropic \* Customs Fee)

Where:

- Social Cost: the monetary value of narcotic and psychotropic evidence from defendants along with the country's financial loss (value added tax rate and customs fee) caused by illegal transaction of narcotic and psychotropic.
- Total of Narcotic and Psychotropic Evidence (in grams and number of pills): total of evidence seized divided by the number of defendants involved in the case whether it is in the same or separate lawsuit. If there is an offender still on the Police Wanted List (DPO),

<sup>&</sup>lt;sup>5</sup> There is no customs fee for ecstasy in Indonesian Customs Tariff Book (BTBMI), however according to WHO (2010) ecstasy is a descent of amphetamine or amphetamine-type stimulant, thus the customs fee for ecstasy in this research uses customs fee of amphetamine.

the person cannot be included in the equation because of the pending charges of being guilty and whether the person is exist or not (e.g. the defendant suffers schizophrenia, etc.).

- The Price of Narcotic and Psychotropic: the price of narcotic and psychotropic known from the investigation. If there is no information from the investigation report, the price will follow the average price of narcotic and psychotropic according to National Narcotic Agency and Centre of Health Research-UI (2009) and World Drug Report (2009) assuming that the exchange rate is Rp 10,000/US\$.
- Value Added Tax: the amount of 10% of narcotic/psychotropic price.
- Customs Fee: entry fee charges to narcotic and psychotropic if found to be smuggled. This fee will follow Indonesian Customs Tariff Book rate.

As discussed previously, when the price of the evidence from defendant is unknown, the estimated social cost of narcotic and psychotropic will follow the national average price of narcotic and psychotropic. There are two versions of cost estimation: National Narcotic Agency & Centre of Health Research-UI (2009) and World Drug Report 2009, UNODC (2009). Both versions use different measurement of estimation. National Narcotic Agency and CHR-UI (2009) use the standard of narcotic and psychotropic per package, while UNODC (2009) uses the standard of narcotic and psychotropic per gram. For psychotropic in the form of ecstasy, National Narcotic Agency & CHR-UI (2009) and UNODC (2009) use the same standard of measurement which was per pill.

In calculating the estimated social cost in the data, if the evidence only has information per package and no information whatsoever in grams, the calculation will use the average value from National Narcotic Agency and CHR-UI (2009). When there is more detail information of the narcotic and psychotropic in grams, the calculation will use the average price of narcotic and psychotropic from UNODC (2009). Table 9 shows the average price of narcotic and psychotropic nationally by National Narcotic Agency (BNN) & CHR-UI (2009) and UNODC (2009).

Type of Narcotic	BNN & CH	IR UI 2009	World Drug Report 2009		
	Unit	Price (US\$)	Unit	Price (US\$)	
Cannabis	1 Package	1,5	Gram	0,2	
Cocaine	1 Package	20	Gram	111,7	
Methamphetamine	1 Package	20	Gram	93,6	
Ecstasy	1 Package	14	Pill	9,9	
Heroine	1 Package	10	Gram	93,6	

Table 9. The Average Market Price of Narcotic and Psychotropic in Indonesia

Source: National Narcotic Agency (BNN) and CHR-UI (2009), World Drug Report (2009)

The social cost of substance misuse during the period of 2001-2009 was Rp 23.7 billion (about US\$ 2.37 million). The social cost of cannabis' misuse was Rp 5.96 billion (about US\$ 596,000); heroine was Rp 1.01 billion (about US\$ 101,000); ecstasy Rp 9.79 billion (about US\$ 979,000); methamphetamine was Rp 6.35 billion (about US\$ 635,000); and cocaine was Rp 624 million (about US\$ 62,400).

The social cost of substance misuse of ecstasy was the highest, followed by that of methamphetamine. Even though the number of the defendants prosecuted for ecstasy and methamphetamine were not on top of the list, the defendants tend to generate large number of ecstasy and methamphetamine in their operation in a short period of time, causing the most expensive social costs of substance misuse. On average, within 52 hours, a maker may produce up to 25 kilograms of ecstasy or methamphetamine. In the third position, cannabis misuse created substantial social cost of substance misuse. This finding may not be surprising since cannabis misuse was the highest cases among all other types of substance misuse (see Table 10).

Type of	Social Cost (US\$)	%	Average
Cannabis	Rp5.96 billion (\$596,250)	25,1	Rp41.69 million (\$4,169)
Heroine	Rp1.01 billion (\$101,331)	4,3	Rp72.37 million (\$7,237)
Ecstasy	Rp9.79 billion (\$979,061)	41,2	Rp238.79 million (\$23,879)
Methamphetamine	Rp6.45 billion (\$634,551)	26,7	Rp154.76 million (\$15,476)
Cocaine	Rp623.9 million (\$62,391)	2,6	Rp511.95 million (\$31,195)
	Rp23.74 billion		
Total	\$2,373,584	100	

Table 10. The Explicit Cost of Substance Misuse Cases Appealed to the Supreme Court in 2001-2009 (current price)

Source: Indonesia Supreme Court Decisions, 2001-2009, estimated

The social cost inflicted by the defendants of substance misuse cases has not yet been able to be covered by financial punishment prosecuted by the attorney or the court of justice. Table 11 shows the comparison of the total social cost and the total financial punishment (i.e. fines plus total cash evidence) that were brought into lawsuit by Prosecutor or sentenced by District Court and the Supreme Court to 200 defendants of substance misuse cases in which the estimation of social costs inflicted were known. It is estimated that only 32.7% of the total social costs inflicted by the defendants were covered by financial punishment prosecuted by Prosecutors. The total of the financial punishment sentenced by the District Courts covered only

29.1% of all social cost caused by the defendants. Furthermore, the financial punishment sentenced by the Supreme Court covered only 23.2% of all social cost inflicted by defendants.

Defendants of Narcotic and Psychotropic Case in 2001-2009					
	Number of	Total		Average	
	Defendants	(in Dollar)	%	(in Dollar)	
Total of Social Cost	200	2,373,584	100	11,867	
Total Financial Punishment brought into					
lawsuit by Prosecutor	200	777,312	32,7	3,886	
Total Financial Punishment by District					
Court	200	689,829	29,1	3,449	
Total Financial Punishment by the					
Supreme Court	200	550,919	23,2	2,754	

Table 11. Social Cost and Financial Punishment Sentenced by the Supreme Court to Defendants of Narcotic and Psychotropic Case in 2001-2009

Source: Verdict of Supreme Court (2001-2009), estimated

# 7. Assessment of the Supreme Court Decisions

Any attempt to increase either the probability of conviction or the severity of punishment or both, ceteris paribus, are going to increase the expected losses from committing illegal activities. It should be noted, however, that increasing either the probability of conviction or the intensity of punishment are costly. As the government have a limited budget to spend for tackling crimes, then the optimum level of deterrence should be estimated. Consequently, the authority has two options, firstly by setting low probability of conviction with high intensity of punishment. Secondly, the authority setting high probability of conviction with low intensity of punishment.

In this study, given the defendants were found guitly, the probabilities of receiving a particular type of punishment have been estimated using Logistic regression. Logistic regression is part of limited dependent variable analysis, whereby the values of the dependent variable are binary (e.g. 1 or 0, yes or no, male or female, etc) as a function of a stream of explanatory variables. The result obtained from Logistic regression provides information on the direction and the level of significant of each explanatory variables in affecting the likelihood even in the dependent variable. Thus far, the coefficients in the Logistic regression do not mean anything apart from providing information on the direction and the variables. The contribution of each explanatory

variables to influenced the dependent variable will be obtained if we estimate the marginal effect of the Logistic regressions.

The intensity of each punishment would be estimated by the use of Tobin's Logistic (TOBIT) regression. The TOBIT analysis has been used since the value of dependent variable is bounded below, namely the data cannot be negative. As the minimum value of any type of punishment is zero, the parameter estimate would be biased if we use least square method. In order to overcome the problem, the TOBIT regression, which is part of maximum likelihood method, has been used to estimate the impact of various criminogenic factors to the intensity of various punishment.

### 7.1. Imprisonment

Logistic and Tobit regression models sentencing imprisonment by the Supreme Court to defendants who involved in substance misuse cases were given in equations below:

BivariateImprisonmentSC <sub>i</sub>				
$= \alpha + \beta_1 \ln \_SocialCost_i + \beta_2 D\_ImprisonmentMC_i + \beta_3 D\_FinesMC_i$				
$+ \beta_4 D_E viMC_i + \beta_5 D_S eller_i + \beta_6 D_U ser_i + \beta_7 D_U nemployed_i$				
+ $\beta_8 D_F armer \& Blue_Collar_i + \beta_9 D_G ender_i + \beta_{10} \ln Age_i$				
ImprisonmentSC <sub>i</sub>				
$= \alpha + \beta_1 SocialCost_i + \beta_2 ImprisonmentMC_i + \beta_3 FinesMC_i + \beta_4 CashEviMC_i$				
+ $\beta_5 D_GoodsEviMC_i + \beta_6 D_Seller_i + \beta_7 D_User_i + \beta_8 D_Unemployed_i$				
+ $\beta_9 D_Farmer \& Blue_Collar_i + \beta_{10} D_Gender_i + \beta_{11} Age_i$				

Where:

- BivariateImprisonmentSC<sub>i</sub> : The verdict of Supreme Court to drop imprisonment to defendants, 1= given imprisonment, 0= not given imprisonment
- D\_FinesDC<sub>i</sub>: Dummy variable for fines penalty by District Court to defendant, 1= given fines, 0=not given fines
- D\_ImprisonmentDC<sub>i</sub>: Dummy variable for imprisonment by District Court to defendant, 1= given imprisonment, 0=not given imprisonment
- D\_EviDC<sub>i</sub>: Dummy variable for the evidence's seizure (evidence in cash and unmoving object) by the officials of District Court to defendants, 1= given search warrant to seize evidence to be state property, 0=not given search warrant to seize evidence to be state property
- ImprisonmentSC $_i$ : Variable of the length of imprisonment charged by Supreme Court to defendant (in Month)
- SocialCost<sub>i</sub>: Variable of how big of social cost caused by defendant of narcotic/psychotropic misuse (in Rupiah)
- FinesDC<sub>i</sub>: Variable of how much the fines penalty given by District Court to defendant (in Rupiah)

- ImprisonmentDC<sub>i</sub>: Variable of the length of imprisonment charged by District Court to defendant (in Month)
- CashEviDC<sub>i</sub>: Variable of how much the evidence seizure in cash by District Court to defendant (in Rupiah)
- D\_GoodsEviDC<sub>i</sub>: Dummy variable for the evidence's seizure in unmoving object by the officials of District Court to defendants, 1= given search warrant to seize evidence to be state property, 0=not given search warrant to seize evidence to be state property
- Age<sub>i</sub>: Age of defendant when prosecuted for narcotic and psychotropic by Prosecutor

The use of independent variable in the equation above is based on the assumption that there are few conditions that Judge should consider before giving a sentence to defendant, which are (a) social cost inflicted by the defendant, in which in the action found the value of narcotic and psychotropic taken from the offender and the financial loss that the country has to suffer; (b) imprisonment penalized by the previous court, which is District Court. The verdict of the High Courts was not taken into account since in many cases Prosecutors who made appeal from the District Court straight to the Supreme Court; (c) the equality before the law principal that should be obeyed in giving charges, in order to discover that this research uses variables of occupation status, age, and gender of defendants, and; (d) cost and benefit from the combination of sentencing options.

The sentencing options that are applied broadly nowadays in every nation are imprisonment, fines, and the seizure of evidence<sup>6</sup>. Bowles and Florackis (2007) reported that for the case in England and Wales, offenders who were previously punished with imprisonment had a smaller probability to repeat the offence in comparison to other offenders who were sentenced with other types of punishment. The study shows that imprisonment has a better deterrence effect in comparison to the other disposals. It should be noted, however, that imprisonment tend to be costly (Polinsky and Shavell, 1984; Bowles and Pradiptyo, 2005). Indeed, fines tend to be more economical in term the cost to impose the sentencing option, however, Polinsky and Shavell (2005) argued that the deterrence effect from fines itself is not optimal if the gain of the crime action is bigger than his/her wealth so that it will need extra penalty in the form of imprisonment in order to optimize the deterrence effect of punishment.

<sup>&</sup>lt;sup>6</sup> According to Indonesian Penal Code article 10 (KUHP) written by Moeljanto (2003), there are two kinds of penal laws: main penalty and additional penalty. Main penal law consists of capital punishment, imprisonment, light imprisonment and fines punishment. Additional punishment consists of revocation of certain rights, seizure of possession, and the announcement of Judge's verdict.

Dependent Variables: D_ImprisonmentSC				Dependent Variables: ImprisonmentSC		
1 = The Supreme Court Gives the Imprisonment to Defendant 0 = Otherwise				Length of Imprisonment Given by Supreme Court to Defendant		
Independent Variables	Coeffi cient	Prob.	Marginal Effect	Independent Variables	Coeffic ient	Prob.
Constant	-1.232	0.73	-	Constant	19.297	0.071
ln_SocialCost	-0.056	0.559	-0.003	SocialCost	0.000	0.134
D_ImprisonmentDC	0.702	0.227	0.048	ImprisonmentDC***	0.938	0
D_FinesDC***	3.904	0	0.517	FinesDC	0.000	0.752
D_EviDC	-1.428	0.14	-0.139	CashEviDC	0.000	0.522
				D_GoodsEviDC	-16.178	0.105
D_Seller	-0.806	0.497	-0.055	D_Seller*	13.211	0.063
D_User	-0.103	0.924	-0.006	D_User	-4.358	0.485
D_Unemployed	-0.500	0.544	-0.033	D_Unemployed	-6.438	0.278
D_Farmer&Blue- Collar	0.300	0.724	0.015	D_Farmers&Blue- Collar	-1.162	0.842
D_Gender	0.310	0.702	0.019	D_Gender	-10.208	0.105
ln_Age	0.401	0.692	0.023	Age	-0.244	0.321
Total Observation = 189				Total Observation	= 190	
Prob. = 0.0000			Prob. =	= 0.0000		
Pseudo R2 =	- 0.4023			Pseudo R2 =	= 0.1598	

Table 12: Logistic and Tobit Regressions of Imprisonment

The logistic regression analysis in Table 12 shows that the social cost inflicted by defendants does not become a significant factor for Judges in the Supreme Court in sentencing defendants with imprisonment. The interesting point that can be taken is that in giving the imprisonment, the Supreme Court does not consider if the District Court gives imprisonment or not. Nevertheless the Supreme Court considers the fines given by the District Court before sentencing the imprisonment (significance level 1%), whereas, if defendants is charged with fines by the District Court, seen from the value of marginal effect, the defendant has 51.7% higher probability to be given imprisonment by the Supreme Court compared to other defendants.

The result shows that the Supreme Court tends to consider the high cost of imprisonment, leading to another consideration whether there should or should not be fines given by the District

Court to cover the high cost of imprisonment. This result has its reason considering the total and probability of defendant to suffer fines by the Supreme Court is influenced by the District Court's verdict in giving fines to defendant that can be seen to the analysis in the fines penalty by Supreme Court in the next section.

Pradiptyo (2009), in his research about the verdict of Supreme Court in Indonesia in handling the corruption cases finds that defendant who has occupation as Civil Servant has smaller probability to receive imprisonment by the Supreme Court compared to other defendants. In contrast, the result of logistic regression in this research does not show any violation of equality before the law by the Supreme Court in giving imprisonment as discovered in Pradiptyo's (2009) study.

Although the probability of defendant to suffer the imprisonment by Supreme Court is not influenced by the condition whether there is a imprisonment given by District Court or not, the result of Tobit regression analysis shows that the length of the imprisonment given by Supreme Court to defendant is influenced by the length of the imprisonment given by District Court (significance level 1%). The positive value of variable's coefficient shows that the longer of the imprisonment given by District Court, the longer of the imprisonment will be given by Supreme Court to defendant. Furthermore, the length of imprisonment given by Supreme Court is not influenced by the amount of fines given by District Court.

Table 12 shows that defendants who acted as seller tend to receive longer imprisonment as oppose to the other defendants. This finding is inline with Law of Narcotic and Psychotropic and the concept of fairness explained previously, where the penalty given to defendant who produce, supply, and sell narcotic and psychotropic is generally higher than the user or distributor. It should be noted that the finding is significant only at level of 10%.

#### 7.3. Fines

#### 7.3.1. Logistic Regression Analysis of Fines Penalty by Supreme Court

Logistic regression model used to discover significant variables that influences the verdict of Supreme Court in giving fines to defendant is as followed:

 $\begin{aligned} BivariateFinesSC_i \\ &= \alpha + \beta_1 \ln \_SocialCost_i + \beta_2 D\_FinesMC_i + \beta_3 D\_ImprisonmentMC_i \\ &+ \beta_4 D\_EviMC_i + \beta_5 D\_Seller_i + \beta_6 D\_User_i + \beta_7 D\_Unemployed_i \\ &+ \beta_8 D\_Farmer\&Blue\_Collar_i + \beta_9 D\_Gender_i + \beta_{10} \ln \_Age_i \end{aligned}$ 

 $\begin{aligned} FinesSC_{i} &= \alpha + \beta_{1}SocialCost_{i} + \beta_{2}FinesMC_{i} + \beta_{3}ImprisonmentMC_{i} + \beta_{4}CashEviMC_{i} \\ &+ \beta_{5}D\_GoodsEviMC_{i} + \beta_{6}D\_Seller_{i} + \beta_{7}D\_User_{i} + \beta_{8}D\_Unemployed_{i} \\ &+ \beta_{9}D\_Farmer\&Blue\_Collar_{i} + \beta_{10}D\_Gender_{i} + \beta_{11}Age_{i} \end{aligned}$ 

Where:

- FinesSC : Variable of the fines penalty that is charged by Supreme Court to defendant (in Rupiah).
- BivariateFinesSC<sub>i</sub> : Verdict of Supreme Court to drop fines penalty to defendant, 1= given fines, 0= not given fines

The assumption in the equation above is the same with the equation of logistic regression for the imprisonment in previous section, where the Supreme Court is assumed to consider the social cost inflicted by defendant, equality before the law principal, cost and benefit from the combination of penalty, and the status of defendant as user or seller in giving the fines penalty to defendant.

Table 13 shows the estimation of the logistic regression model of fines. The value Prob<0.01 indicates that the model has significant reliability with 189 total observation (defendants). Then, the value of Pseudo  $R^2 0.7767$  that comes from the estimation result indicates that the variance of independent variables in the model can explain 77.67% variance of dependent variables.

Dependent Variables: BivariateFinesSC				Dependent Variables : FinesSC		
1 = Supreme Court Charges Defendant with Fines Penalty 0 = Otherwise			Total Financial Fines Charged by Supreme Court to Defendant			
Independent Variables	Coeffi cient	Prob.	Marginal Effect	Independent Variables	Coefficie nt	Prob.
Constant	-2.255	0.675	-	Constant	5520845	0.674
ln_SocialCost***	0.492	0.005	0.037	SocialCost**	0.03	0.44
D_FinesDC***	7.060	0.000	0.930	FinesDC***	0.81	0
D_ImprisonmentDC	-0.540	0.614	-0.035	ImprisonmentDC**	134271.9	0.024
D_EviDC	0.054	0.978	0.004	CashEviDC	2.629451	0.576
				D_GoodsEviDC	-5156594	0.666
D_Seller	-1.322	0.505	-0.134	D_Seller	-3218299	0.71
D_User	-2.175	0.189	-0.139	D_User	-1347296	0.86
D_Unemployed	0.327	0.804	0.022	D_Unemployed	-3775606	0.605
D_Farmers&Blue- Collar	-0.640	0.589	-0.058	D_Farmers&Blue- Collar	-8150611	0.271
D_Gender	1.139	0.347	0.123	D_Gender	-3047229	0.695
ln_Age	-1.698	0.287	-0.127	Age	-289503.2	0.346
Total Observation = 189			Total Observation = 190			
Prob. = 0.0000			Prob.	= 0.0000		
Pseudo R2 =	= 0.7767			Pseudo R2	= 0.0379	

#### **Table 13. Logistic and Tobit Regression Analyses for Fines**

The result indicates that defendant charged with fines by the District Court has 93% higher probability to suffer fines by Supreme Court compared to other defendants (significance level 1%). This result explains that the Supreme Court tend to be in accordance with the verdict of District Court in giving the fines penalty to defendant.

The logistic regression result also shows that the social cost inflicted by defendant is a significant variable to Supreme Court to sentence fines, whereby the higher the social cost inflicted by defendant, the higher the probability to suffer fines penalty given by Supreme Court (significance level 1%). The marginal effect of variable ln\_SocialCost is 0.0367 which indicates that if the social cost inflicted by defendant is higher than 1 from the average value of ln\_SocialCost, then the defendant has 3.67% higher probability (compared to other defendants) to receive fines by the Supreme Court, and so on, vice versa, ceteris paribus.

The result raises the next question: why is the social cost amount still higher than the fines penalty given to defendant? This question will be answered from the next Tobit model analysis in the next section. The result of Tobit model explains that the social cost inflicted by defendant does not influence fines penalty given by the Supreme Court. This certainly answers the question why the social cost caused by defendant is bigger than the fines penalty given by the Supreme Court.

The amount of fines penalty given by Supreme Court is actually influenced by the amount of fines penalty and imprisonment given by District Court to defendant, whereas the higher the fines penalty (significance level 1%) and imprisonment (significance level 5%) given by the District Court, the higher the fines penalty given by the Supreme Court. This finding shows that the Supreme Court tends to considers the high cost of imprisonment so that the longer a person will serve in prison, the higher the fines penalty given to cover the cost of the imprisonment. This result has its reason considering the result of Tobit model earlier that suggests that the longer the imprisonment given by District Court, the longer the imprisonment given by the Supreme Court. This result also supports the result of logistic regression earlier which suggests that the Supreme Court tends to be in accordance with the decision of District Court in giving fines penalty.

#### 7.4. Seizure of Evidence

#### 7.4.1. Logistic Regression Analysis of Evidence's Seizure by the Supreme Court

Logistic regression model used to discover significant variables that influence the verdict of Supreme Court in seizing evidence in the form of goods and cash to defendant is as followed:

BivariateEviSC <sub>i</sub>
$= \alpha + \beta_1 \ln \_SocialCost_i + \beta_2 D\_EviMC_i + \beta_3 D\_ImprisonmentMC_i$
+ $\beta_4 D_F ines MC_i + \beta_5 D_S eller_i + \beta_6 D_U ser_i + \beta_7 D_U nemployed_i$
$+ \beta_8 D_F armer \& Blue_Collar_i + \beta_9 D_G ender_i + \beta_{10} \ln Age_i$

 $\begin{aligned} CashEviSC_{i} &= \alpha + \beta_{1}SocialCost_{i} + \beta_{2}CashEviMC_{i} + \beta_{3}D\_Seller_{i} + \beta_{4}D\_User_{i} \\ &+ \beta_{5}D\_Unemployed_{i} + \beta_{6}D\_Farmer\&Blue\_Collar_{i} + \beta_{7}D\_Gender_{i} + \beta_{8}Age_{i} \end{aligned}$ 

Where:

- BivariateEviSC<sub>i</sub> : The verdict of Supreme Court in seizing evidence (whether in the form of cash or unmoving object) to defendant to be state property, 1= seizing evidence to be state property, 0 = not seizing evidence to be state property.
- CashEviSC<sub>i</sub>: Variable of the warrant amount in the form of cash given by Supreme Court to defendant (in Rupiah).

The assumption used in the equation above is the same with the equation of logistic regression for imprisonment and fines penalty. Supreme Court is assumed to consider the social cost inflicted by defendant, equality before the law principal, cost and benefit of penalty combination, and status of defendant as seller or user in seizing evidence in the form of goods/cash from defendant. The result of logistic regression in Table 14 shows that the verdict of Supreme Court to seize evidence whether cash or goods from defendant is influenced by the verdict of District Court in seizing evidence (significance level 1%). If defendant is charged with evidence's seizure by District Court, then the defendant has 21.86% more probability to be charged with evidence's seizure by the Supreme Court compared to other defendants.

The result of logistic regression in Table 14 also suggests that the social cost inflicted by defendant is not a significant factor to Supreme Court in giving the warrant to seize evidence. Although it is not stated in the law of narcotic and psychotropic, ideally, the social cost amount becomes a consideration to Supreme Court in seizing evidence in the form of cash or goods from defendant to cover the state loss that is included in the social cost inflicted by defendant.

Dependent Variables: BivariateEviSC				Dependent Variables: CashEviSC		
1 = Supreme Court Seize Evidence in the Form of Cash & Goods from Defendant to be State Property, 0 = Otherwise				The Amount of Cash Evidence Seized by Supreme Court from Defendant to be State Property		
Independent Variables	Coeffic ient	Prob.	Marginal Effect	Independent Variables	Coefficient	Prob.
Constant	-0.209	0.96	-	Constant	-1799711	0.039
ln_SocialCost	0.070	0.475	0.002	SocialCost	0.000	0.561
D_EviDC***	2.382	0.004	0.219	CashEviDC***	1.157051	0
D_FinesDC	0.479	0.533	0.015			
D_ImprisonmentDC	0.483	0.568	0.015			
D_Seller*	2.247	0.064	0.138	D_Seller	264239.8	0.597
D_User	-0.128	0.917	-0.004	D_User	-241378.3	0.618
D_Unemployed	-1.316	0.289	-0.030	D_Unemployed	-206665.8	0.678
D_Farmer&Blue- Collar	0.558	0.495	0.023	D_Farmers&Blue -Collar	130818.2	0.742
D_Gender	0.872	0.465	0.022	D_Gender	807944.4	0.199
ln_Age	-1.822	0.144	-0.062	Age	-17458.12	0.403
Total Observation = 201				Total Observation = 202		
Prob. = 0.0067			Prob.	= 0.0000		
Pseudo R2 =	0.2283			Pseudo R2	= 0.1085	

#### Table 14. Logistic and Tobit Regression Analyses for the Seizure of Evidence

Pradiptyo (2009) in his research of the Supreme Court's verdict in penalizing the corruptors in Indonesia, finds violation of equality before the law principle in the verdict of search warrant to seize evidence by Supreme Court, where male defendant has a higher probability to be charged with search warrant to seize evidence by Supreme Court. As opposed to the result of logistic regression in this research, defendant's occupation, gender, or even age of defendant of narcotic/psychotropic misuse is not considered by Supreme Court in giving the warrant to seize evidence.

Tobit model used to discover significant variables that influence the amount of cash that can be seized by Supreme Court is as followed. In the equation of Tobit analysis above, the dependent variable used is the warrant of seizure in the form of cash instead of goods because of the uncertainty in converting goods evidence seized into monetary value. The assumption used in the equation above surely differs from the previous equation because in this issue Supreme Court is not to decide the value of cash seized from defendant, but the cash evidence seized from defendant is determined by some criminogenic factors and status of defendant.

Assumption used in the equation above is that the amount of cash evidence seized from defendant will be influenced by the amount of narcotic/psychotropic seized from the defendant and country's financial loss that is caused by defendant which can be simply stated as social cost. Subsequently, the status of defendant as seller and user is assumed to influence the amount of cash evidence seized by Supreme Court from defendant. As explained earlier, it is assumed that seller receives monetary profit from the action and not so to the user. Thus the amount of cash evidence seized from defendant will be influenced by the status of defendant. Meanwhile, the status of occupation, age, and gender of defendant are considered as criminogenic factor that can influence the amount of cash evidence seized by Supreme Court from defendant. For the variables of previous verdict, the assumption used is still the same with the assumption used in the previous section which is the Supreme Court has the right to give consent toward the court's decision or to deny it and make an alternative decision.

The result of Tobit analysis shows that cash evidence seized by District Court becomes a consideration to Supreme Court in giving warrant to seize cash evidence from defendant (significance level 1%). Variable coefficient that has positive value indicates that the more cash evidence seized by District Court, the more Supreme Court will give the warrant to seize evidence. This result supports the logistic regression analysis earlier that Supreme Court tends to be in accordance with the verdict of District Court in giving warrant to seize evidence in the form of cash from defendant.

## 8. Concluding Remarks

In this research, it was discovered that the Supreme Court has not yet considered the social cost inflicted by defendant of narcotic and psychotropic cases in making the verdict. The result of logistic regression suggests that the higher the social cost inflicted by narcotic/psychotropic case defendant, the bigger the probability of defendant to suffer fines penalty by the Supreme Court. However, the result of Tobit model shows that the high social cost inflicted by defendant does not influence the amount of fines penalty given by Supreme Court to defendant. The result of analysis can explain why the financial punishment given by the Supreme Court is not sufficient to cover the social cost inflicted by defendant.

Financial punishment given by Supreme Court could only cover 23.2% of the social cost inflicted by defendant. The social cost of narcotic/psychotropic goes up to Rp 23.7 billion (about US\$ 2.37 million), and the financial punishment given by Supreme Court is only Rp 5.5 billion (about US\$ 550,000). The difference of the social cost that could not be covered by the financial punishment will eventually leave society and government to suffer.

Furthermore, the logistic regression and also the tobit model show that the social cost inflicted by defendant does not become a consideration to Supreme Court in giving imprisonment or warrant to seize evidence. When the social cost does not become a consideration in giving imprisonment or warrant to seize evidence, it might cause inequality between the intensity of the punishment and the impact inflicted by defendant's crime action. The inequality of punishment intensity and the impact inflicted by defendant can definitely weaken the deterrence effect and the expectation of sanction of defendant and all society.

The next logistic regression analysis shows that defendant charged with fines penalty by District Court has 51.7% higher probability to receive imprisonment by the Supreme Court compared to other defendants. While, the Tobit model analysis explains that the longer imprisonment given by District Court to defendant, the bigger fines penalty will be given by Supreme Court to defendant. To consider whether there should or should not be a punishment in order to give another punishment has been exercised by Supreme Court and that indicates that the Supreme Court has evaluate the cost and benefit of penalty combination.

Even though there is no violation of equality before the law by Supreme Court in regards of occupation status, age, even gender of defendant in this research, Supreme Court should reconsider the social cost caused by defendants in making the verdict. Therefore, the amount of punishment could match the impact caused by defendant and deterrence effect from the punishment will generate a better outcome.

#### References

Becker, G.S. (1968) 'Crime and Punishment: An Economic Approach', Journal of Political Economy 76.

BNN (*National Narcotic Agency*) & CHR-UI (*Center of Health Research-UI*) (2004) 'Studi Biaya Ekonomi dan Sosial Penyalahgunaan Narkoba Di Indonesia Tahun 2004' [*The Study of Economic and Social Cost of Drugs' Abuse in Indonesia in 2004*], Depok: CHR-UI.

- BNN (*National Narcotic Agency*) (2009) 'Data Kasus Tindak Pidana Narkoba Di Indonesia Tahun 2001-2008' [*Data of Narcotic and Pyschotropic Penal Crime in Indonesia During* 2001-2008], accessed 19 May 2009 at <http://www.bnn.go.id/portalbaru/portal/konten.php?nama=DataKasus&op=dl\_data\_kas us&namafile=Data%20TP%20Korban%202001-2008.pdf>.
- BNN (National Narcotic Agency) & CHR-UI (Center of Health Research-UI) (2009) 'Laporan Survei Penyalahgunaan Narkoba Di Indonesia: Studi Kerugian Ekonomi dan Sosial Akibat Narkoba, tahun 2008' [The Report of Drugs' Misuse Survey in Indonesia: Study of Economic and Social Cost Inflicted by Drugs, 2008] Puslitkes UI, Depok.
- Bowles, R., and Florackis, C. (2007) 'Duration of the Time to Reconviction: Evidence from UK Prisoner Discharge Data', Journal of Criminal Justice, 35, 2005, 365-378.
- Collins, D., *et al.* (2000) 'Economic and Social Costs of Substance Abuse', Bulletin on Narcotics, Volume LII, Nos. 1 and 2.
- Directorate General of Customs & Excise (2007) 'Buku Tarif Bea Masuk Indonesia 2007' [Indonesian Customs Tariff Book 2007].
- Dwiyana, R. (2008) 'Equality before the Law VS Impunity: Suatu Dilema' [Equality before the Law VS Impunity: a Dilemma], accessed 30 May 2010 at <a href="http://rusmadwiyana.files.wordpress.com/.../equality-before-the-law-vs-impunity-1108.doc">http://rusmadwiyana.files.wordpress.com/.../equality-before-the-law-vs-impunity-1108.doc</a>>.
- Farley, J.E. (2004) 'Majority Minority Relations', Upper Saddle River, NJ: Prentice Hall.
- Grobman, G.M. (1990) 'Stereotypes and Prejudices', accessed 31 May 2010 at <a href="http://remember.org/guide/History.root.stereotypes.html">http://remember.org/guide/History.root.stereotypes.html</a>
- Gujarati, D.N. (2003) 'Basic Econometric: Fourth Edition', DCGraw-Hill Press: Singapore.
- Hiariej *et al* (2006) 'Bunga Rampai Hukum Pidana Khusus' [*Potpourri of Special Penal Law*], Jakarta: Pena.
- Levitt dan Miles (2007) 'Empirical Studi Of Criminal Punishment', Handbook of Law and Economics, Volume 1, Chapter 7, Edited by A. Mitchell Polinsky and Steven Shavell. Elsevier B.V.
- Moeljanto (2003) 'Kitab Undang-Undang Hukum Pidana (KUHP)' [Indonesian Penal Code], Bumi Aksara, Jakarta.
- Nagin, D. (1998) 'Criminal Deterrence Research: A Review of Evidence and a Research Agenda for the Outset of the 21st Century', In: Tonry, M. (Ed.), Crime and Justice, vol. 23, pp. 1–42. Journal of Law and Economics 38 (1), 107–139, accessed 28 May 2010 at <a href="http://archives.drugabuse.gov/economiccosts/Chapter7.html">http://archives.drugabuse.gov/economiccosts/Chapter7.html</a>>.
- ONDCP-Office of National Drug Control Policy (2000) 'Drug Related Crime', accessed 28 May 2010 at <a href="http://www.whitehousedrugpolicy.gov/publications/factsht/crime/index.html">http://www.whitehousedrugpolicy.gov/publications/factsht/crime/index.html</a>.
- Polinsky, A.M., & Shavell, S (1984) 'The Optimal Use of Fines and Imprisonment', Journal of Public Economics 24, 89–99.
- Polinsky, A.M., & Shavell, S (2005) 'The Theory of Public Enforcement Law', National Bureau of Economic Research, Cambridge.
- Pradiptyo, R. (2009) 'A Certain Uncertainty; An Assessment of Courts Decision for Tackling Corruption in Indonesia 2001-2008', Department of Economics, Faculty of Economics and Business, Universitas Gadjah Mada, Indonesia.
- Undang-Undang Republik Indonesia No.22 Tahun 1997 Tentang Narkotika [Law of The Republic of Indonesia number 22 of 1997 Concerning Narcotic].

Undang-Undang Republik Indonesia Nomor 5 Tahun 1997 Tentang Psikotropika [Law of The Republic of Indonesia number 5 of 1997 Concerning Psychotropic].

UNICEF (2004) 'HIV-AIDS Booklet', accessed 30 May 2010 at <a href="http://www.unicef.org/indonesia/id/HIV">http://www.unicef.org/indonesia/id/HIV</a> AIDSbooklet\_part4.pdf>.

- UNODC (2009) 'World Drug Report 2009', accessed 16 April 2010 at <a href="http://www.unodc.org/documents/wdr/WDR\_2009/WDR2009\_eng\_web.pdf">http://www.unodc.org/documents/wdr/WDR\_2009/WDR2009\_eng\_web.pdf</a>>.
- UNODC (1994) 'Drugs and Development', accessed 28 May 2010 at <a href="http://www.unodc.org/pdf/Alternative%20Development/Drugs\_Development.pdf">http://www.unodc.org/pdf/Alternative%20Development/Drugs\_Development.pdf</a>>.
- UNODC (2007) 'A Century of International Drug Control', Bulletin On Narcotics Volume LIX, Nos. 1 and 2.
- UNODC (2010) 'HIV and AIDS', accessed 28 May 2010 at <a href="http://www.unodc.org/unodc/en/hiv-aids/index.html?ref=menuside">http://www.unodc.org/unodc/en/hiv-aids/index.html?ref=menuside</a>>.
- UN-United Nations (2010) 'The Universal Declaration of Human Right', accessed 30 May 2010 at <a href="http://www.un.org/en/documents/udhr/index.shtml">http://www.un.org/en/documents/udhr/index.shtml</a>.
- Volkow, N.D. (2009) 'Comorbidity: Addiction and Other Mental Illnesses', National Institute on Drug Abuse 2009, accessed 30 May 2010 at <a href="http://drugabuse.gov/researchreports/comorbidity/">http://drugabuse.gov/researchreports/comorbidity/</a>.
- WHO-World Health Organization (2010) 'Amphetamine-type stimulants', accessed 4 June 2010 at <a href="http://www.who.int/substance\_abuse/facts/ATS/en/index.html">http://www.who.int/substance\_abuse/facts/ATS/en/index.html</a>.

# Appendices

# **Appendix A:**

Table A.1.: Criminal Offense and Its Sanction Dropped Based on the Law of The Republic of Indonesia number 22 of 1997 Concerning Narcotic

Num.	Form of Narcotics Violation	Type of Punishment
1	Growing, keeping, having in quantity, possessing,	1. Serving in prison between 2 years to
	storing or controlling narcotics, whether in plant	15 years
	form or non-plant form (article 78 and 79)	2. Fines between Rp 25 million (US\$
		2,500) to Rp 5 billion (US\$ 500,000)
2	Producing, managing, extracting, converting,	1. Capital punishment
	assembling or providing (article 80)	2. Sentence to life
		3. Serving in prison between 4 years to
		20 years
		4. Fines between Rp 200 million (US\$
		20,000) to Rp 7 billion (US\$ 700,000)
3	Carrying, delivering, transporting, distributing	1. Capital punishment
	narcotics without privileges and breaking the law	2. Sentence to life
	(article 81)	3. Serving in prison between 2 years to
		20 years
		4. Fines between Rp 100 million
		(US\$10,000) to Rp 5 billion (US\$
		500,000)
4	Importing, exporting, offering to sell, distributing,	1. Capital punishment
	selling, buying, handing, receiving, being an	2. Sentence to life
	intermediary in buying/selling or trading	3. Serving in prison between 4 years to
	narcotics without privileges and breaking the law	20 years
	(article 82)	4. Fines between Rp 200 million (US\$
5		20,000) to Rp 7 billion (US\$ 700,000)
5	Persuading others to use narcotics or handing	1. Serving in prison between 5 years to
	narcotic to others for consumption without	10 years 2. Fines between Rp 250 million (US\$
	privileges and breaking the law	2. Fines between Rp 250 million (US\$ 25,000) to Rp 750 million (US\$
		75,000) to Kp 750 minion (03\$
6	Using narcotics for self consumption without	Serving in prison between 1 year to 4 years
0	privileges and breaking the law	Serving in prison between 1 year to 4 years
7	Parents or guardians from an underage user who	1. Imprisonment up to 6 months
,	intentionally do not report the crime	<ol> <li>Fines for Rp 1 million (US\$ 100)</li> </ol>
8	Using underage subjects to execute narcotic's	1. Sentence to life
0	crime	2. Serving in prison between 5 years to
		20 years
		3. Fines between Rp 20 million (US\$
		2,000) to Rp 600 million (US\$ 60,000)
		2,000) to tep 000 minion (0.5\$ 00,000)

9	An addict in legal age or family (parents) who intentionally do not report the crime	<ol> <li>Serving in prison between 3 months to 6 months</li> <li>Fines between Rp 1 million (US\$ 100) to Rp 2 million (US\$ 200)</li> </ol>
10	Medicine manufacture staff who does not do the due diligence according article 41 and article 42, not labeling the package of narcotics and publicizing narcotics outside of medical-science and pharmacy printed-media (article 89)	<ol> <li>Serving in prison up to 7 years</li> <li>Fines up to Rp 200 million (US\$ 20,000)</li> </ol>
11	Obscuring or complicating investigation, prosecution or examination (article 92)	<ol> <li>Serving in prison up to 5 years</li> <li>Fines up to Rp 150 million (US\$ 15,000)</li> </ol>
12	Ship captain and pilot that without privilege do not abide by the law in article 24 and article 25, not making a report about narcotic carriage to the local customs office (article 93)	<ol> <li>Serving in prison up to 10 years</li> <li>Fines up to Rp 150 million (US\$ 15,000)</li> </ol>
13	Prosecutor who does not abide by the law in article 69 and article 71, does not seal and make a report, inform or handing over possession in seizure, destruct narcotic plant found on sight (article 94)	<ol> <li>Serving in prison up to 6 months</li> <li>Fines up to Rp 1 million (US\$ 100)</li> </ol>
14	Witness who gives false statement in court (article 95)	<ol> <li>Serving in prison up to 10 years</li> <li>Fines up to Rp 300 million (US\$ 30,000)</li> </ol>
15	Submit to narcotic crime outside of Indonesia's territory	Apply to the Law of The Republic of Indonesia number 22 of 1997

Source: Hiariej et al (2006)

# Appendix B

# Table B.1: Criminal Offense and Penalty Based on the Law of The Republic ofIndonesia number 5 of 1997 Concerning Psychotropic

<b>.</b>	indonesia number 5 of 1777 concerning r sycholopic					
Num.	Form of Psychotropic's Crime	Type of Sanction				
1.	Using, producing, distributing, importing, owning,	1. Capital punishment				
	keeping, carrying, shipping, exporting, labeling and	2. Life sentence				
	making an advertisement of psychotropic that are in	3. Serving in prison between 3 bulan to				
	opposition with the Amendments (article 59 to 63)	20 years				
		4. Fines between Rp 60 million (US\$				
		6,000) to Rp 5 billion (US\$ 500,000)				
2.	Complicating an attempt to get a treatment/rehab and	1. Serving in prison up to 1 year				
	hold a rehabilitation facility without legal permit	2. Fines up to Rp 20 million (US\$				
	(article 64)	2,000)				
3.	Fail to report a practice/possession of psychotropic	1. Serving in prison up to 1 year				
	illegally (article 65)	2. Fines up to Rp 20 million (US\$				
		2.000)				
4.	Exposing the identity of eyewitness in	Serving in prison up to 1 year				
	psychotropic's case (article 66)					
5.	Using an under 18 year old child to commit	Penal warning and 1/3 addition of the				
	psychotropic's crime (article 72)	existing penal law				
C C	Source: Hiariai at al (2006)					

Source: Hiariej et al (2006)