

# **Corporate Governance Mechanism on Financial Performance** (Evidence from the Indonesia's Listed State-owned Enterprises)

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#### ABSTRACT

**Objective** – This study aims to find the impact of privatization, which proxied by good corporate governance toward the financial performance of SOEs in Indonesia.

**Methodology** – This study used 16 privatized SOEs that are listed in Indonesia Stock Exchange and also 16 privatized non-SOEs as the comparison. The data is collected from the year 2014 to 2018 and analyzed by using multiple regression panel data.

**Findings** – This study found that director size and board independence have a positive impact toward SOEs financial performance. The director size and board independences have a positive significant impact toward the SOEs financial performance while the privatized non-SOEs is not significantly affected

**Novelty** – This study examines proper governance structure in SOEs and non-SOEs, thus providing new insights about good corporate governance regulation in the Indonesian context.

Keywords: Good Corporate Governance; Privatization; State-owned Enterprises

JEL Classification: G34, L33, P34

Article info: Received 4 March 2021; Revised 8 April 2021; Accepted 4 May 2021

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**Recommended Citation:** Maldini, A. A. K. R., Pasaribu, P., & Pangaribuan, C. H. (2021). Corporate Governance Mechanism on Financial Performance (Evidence from the Indonesia's Listed State-owned Enterprises. Journal of Business, Management, and Social Studies, 1(1), 24-34.

## I. INTRODUCTION

The notion of a performance improvement after privatization unfortunately not having the same effect in different countries. It is further supported by Brown, Earle, and Telegdy's (2004) study, which also found that each country that practicing privatization resulted in different outcomes. The finding shows that the privatization outcomes are often distinguished between developed and developing countries. The result in the developed country showing a preferable performance improvement and often succeeded compared to privatization that is done by developing countries (Boehmer, Nash, & Netter, 2005). However, privatization impact is varied across the countries, most of the governments still practicing privatization. The government takes this action because most of the government believes that privatization is a wise action to boost the economy and welfare of the country by selling some or whole shares of SOE to the private party (Pietrogiovanna, 2009). This phenomenon has shown that privatization has a unique characteristic that should be identified to achieve the core advantages of privatization that the government expects

The phenomenon of a different outcome in the privatization process in the developing country has to take the attention of many scholars. Regarding this, there has been found much research about privatization



#### JOURNAL OF BUSINESS, MANAGEMENT, AND SOCIAL STUDIES Journal Website: www.ojs.ac.id J. Bus. Mgt. Soc. Studies 1(1) xx-xx (2021)

in the developing country. However, it is conveyed specific debate on the performances of the privatized company in developing countries. Some studies show that there is a good privatization practice in developing countries such as China and Indonesia (Nahadi & Suzuki, 2012). Meanwhile, some studies also found the current privatization practice in developing countries, specifically non-OECD countries, Romania, and Indonesia, which are still not experiencing improvement in privatization due to political conditions (Boehmer et al., 2005). This study found that Indonesia is one of the countries that come in the debate issues.

The presence of a potential problem in Indonesia's privatization practice relies on fundamental factors. This factor then differentiated the performances of the privatized company. Some researchers indicate that the current problem of privatization has been influenced by the past performances of the SOE and company structure (Estrin et al., 2007; Omran, 2002). Not only that, but the purpose of privatization is also can influence the privatized company performances. There are two purposes why the government takes the privatization option. The first aim is to expand the market of the privatized company debt. Hence, it is better to sell the SOE to a private party (Pietrogiovanna, 2009). The purpose of privatization to expand the market will lead to better performance rather than privatizing to pay some debts because the company is ready with the changes if the privatization action is not forced by debt. These two factors that influence the performance of privatized SOEs, which are the past performances and government intervention, are highly linked to the corporate governance of privatized SOEs. Therefore, the potential root problem of varied SOEs performances after privatization is the implementation of corporate governance.

Corporate governance is related to privatization and the performance of the privatized firm because this is the fundamental foundation of the company management. The company management is highly vulnerable after a change in ownership (privatization), which further makes the corporate governance matter the factor to influence the privatized company performance (Ciftci et al., 2019). In Indonesia, the regulation of good corporate governance is imposed, but the application and evaluation of good corporate governance are still unclear. More attention is needed in SOEs condition after privatization as government control is still dominant. At the same time, the company has the right to followed what is suitable for the company and not solely based on the government's interest. The effectivity of certain corporate governance characteristics such as the director size, board independence, and publicly held share may be tested toward the financial performance of the privatized SOEs.

The research questions in this study are structured as: (1) Do SOEs have better financial performance after the privatization compared to non-SOEs? (2) Which corporate governance variables that have a significant impact on the financial performance of privatized SOEs? The objective of the study is to analyze whether SOEs have better financial performance after the privatization compares to non-SOEs and to analyze the corporate governance variables that have a significant impact on the financial performance of privatized SOEs.

# **II. LITERATURE REVIEW**

This study suspected that the performance of the privatized company would be improved after privatization. Thus, some theories related to privatization, such as public choice theory Henig (2019), soft budget constraint theory (Maskin, 1996), and property right theory (Alchian & Demsetz, 1972), are used in this study. In past research conducted by Chen and Al-Najjar (2012), the board size influences a company's financial performance in China. Ciftci et al. (2019) also found out that board size positively correlated with a company's performance in Turkey. The financial performance more likely to be improved as a large board size allows the manager to express their idea and judgment openly since many directors served a larger pool of knowledge. In contrast, a study from (Shahid & Abbas, 2019) found that board size negatively correlates with the financial performance of the publicly traded company in India. This result is obtained because the investor in India believes that a large board size reduces a company's profitability. As board size impact varies across the past studies, board size factor relation toward firm performance is interested in exploring.



Numerous studies have examined the effect of independent commissionaire on firm performances. Tulung and Ramdani (2018) present a shred of evidence that an independent board positively affects the performance of the banking industry in Indonesia. This has shown that an independent commissionaire in a company has provided an objective recommendation to the company as no one intervene in their views. The independent board, in this case, has indeed promoted the good corporate governance principle. On the other extreme, Rashid (2017) conveys that board independence brings a negative impact on the financial performance of the publicly listed company in Bangladesh. Zulfikar et al. (2017) also show a similar result where the banking institution in Indonesia offers a negative correlation with firm performance. These mixed findings trigger the writer to revisit the independent commissionaire factor that influences firm performance.

There are two sides of the finding related to the impact of publicly-held shares on the firm's financial performance. In the positive finding, Schoubben and Van Hulle (2006) found that the listed company in Belgian positively impacts firm performance. This result appears because the Belgian firm, mostly a family company, becomes more disciplined and effective when entering the transparent and regulated financial market. On the other extreme, Ongore and K'Obonyo (2011) found that the publicly-held share negatively impacts the listed firms' financial performance (ROA) in Kenya. This can happen because the publicly-held share is owned by diverse entities and individuals, making the monitoring of the management less effective, leading to no financial performance improvement. Based on the analysis, the hypotheses are as follows:

*Hypothesis 1 (H1): Director size affects the financial performance of privatized company. Hypothesis 2 (H2): Board independence affects privatized company's financial performance. Hypothesis 3 (H3): Publicly held share affects the financial performance of privatized company.* 

# **III. METHODOLOGY**

The data that is used is the financial statement and annual report of the company that is privatized before 2014 and the other publicly listed non-SOEs. The period taken in this research is from the year 2014-2018. The sample in this research is chosen using a purposive sampling method based on several criteria that met the research objectives. The criteria of the samples are: (1) Must be privatized between 1991 and 2013, (2) The privatized non-SOEs used as the comparison is based on the level of total assets and the same industry category (see Appendix 1), (3) The SOEs ownership belongs to the government should at least 50% +1, (4) Financial institution excluded from the sample due to strict policy implementation.

Variable	Measurement
ROA	Net Profit divided to Total Assets (Adelaja, 2015)
Board Size	Director Size = $\sum Director member$ (Raheja, 2005)
Board Independence	Total number of Independent Commissionaire divided by total board member (Mukhtaruddin, et al., 2014)
Publicly Held Share	Dividing the share held by the individual with the total shares (Ciftci et al., 2019)
Debt-to-Total Assets	Dividing the total debt with the company's total assets (Tambing, 2016)
Firm Age	Firm age in 2018

Table 1. Variable Operationalization



In this study, the director size, number of independent boards, and publicly held share is the focused variables while the controlled variables are debt-to-total assets ratio and firm age. These independent variables are projected to have an impact toward the dependent variable (financial performances). Each variable is measured in Table 1. The statistical model in this research is structured below.

$$ROA_{ui} = \alpha + \beta_1 DS_{it} + \beta_2 BI_{it} + \beta_3 PHS_{it} + \beta_4 DTA_{it} + \beta_5 FA_{it} + u_{it}$$

Where,

ROA	= the financial performances	α	= the intercept
DS	= the director size	$\beta_1, \beta_2$	= the coefficient
BI	= the board independence	FA	= the firm age
PHS	= the publicly held share	u	= error term
DTA	= the debt to total assets		

## **IV. RESULTS AND DISCUSSION**

The t-test is conducted to compare the performances of SOEs and non-SOEs after privatization. From Table 2, it can be seen that privatized non-SOEs performed better in term of DTA while SOEs have higher total assets. In the ROA and ROE aspect, there is no meaningful difference between SOEs and non-SOEs.

Table 2. T-test

Entity	ROA	ROE	DTA	Firm Size
Non-SOEs	0.0550	0.0985	0.4504	29.7382
SOEs	0.0456	0.0910	0.5447	30.8126
Differences	0.0093	0.0076	-0.0943	-1.0744
$\Pr(T < t)$	0.8470	0.6729	0.0005	0.0000
$\Pr( T  <  t )$	0.3061	0.6542	0.0011	0.0000
$\Pr(T > t)$	0.1530	0.3271	0.9995	1.0000

The data that is used in this research is panel data from 16 SOEs and 16 privatized company listed in Indonesia Stocks Exchange from 2014 to 2018. Before determining the right regression model to explain the research question, the data panel need to be tested through several steps to draw a solid conclusion. In the first place, the right estimator of the model needs to be found through the Chow Test, Hausman Test, and LM Test. These tests aim to find whether the research framework is fit with the fixed-effect model, random effect model, or pooled least square model. Besides these tests, the interest and assumption of this research also take as the consideration to determine the right model that explains the research. After the model is determined, the model should pass the classical assumption test.

Table 3. Classical Assumption Test for SOEs Panel Data

Variable	Value
Multicollinearity (Mean VIF)	1.17
Heteroskedasticity (Prob>Chi2)	0.0000
Autocorrelation (Prob>F)	0.0001

#### **SOEs**

After running each regression model using three estimators, fixed-effect model is determined as the best model that explains the research problem. However, the model has heteroscedasticity and autocorrelation problem as shown in the Table 3.

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According to Hoechle (2007), this condition can be fixed by applying a robust standard error or clustering the standard error. In the model with heteroscedasticity and autocorrelation, it is recommended to cluster the standard error using 'vce' (cluster panelvar) command. After the application of robust error in the panel data regression, the heteroscedasticity and autocorrelation test are not necessary to be tested since the error from this classical assumption violation has been addressed in the robust error. From this approach, the new choices of model are generated as seen in Table 4.

Variable	]	Estimator After Robus	st
v al lable	Fixed	Random	Pooled
DS	0.0171**	0.0151***	0.0105*
BI	0.2056*	0.2242*	0.3588*
PHS	0.0157	0.1637	0.2041***
DTA	-0.1166*	-0.1166**	-0.1152***
FA	-0.0018	-0.0006*	-0.0006*
_cons	0.0576	-0.0414	-0.0552
$\mathbb{R}^2$	0.2118	0.4662	0.4822
Adjusted R <sup>2</sup>			0.4472
Prob > F	0.0042		0.0000
Prob > Chi2		0.0000	

Table 4. Regression Model Panel Data Result After Robust (SOEs)

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Based on the three estimators above, the pooled least square (pls) estimator is less likely to be used in this research since the slope and intercept in the regression equation is constant between the firms and time. Logically, this approach cannot be applied in this research since each company holds a unique characteristic that differs them from one to another. Now, the choices are left between the fixed effect model with the robust error or random effect model with a robust error. To figure out the best model, two supporting studies are used to strengthen the assumption that firm-specific characteristic should be addressed in this study. A study conducted by Clarke et al., (2010) suggest that the fixed-effect model is more preferable over the random-effect model to explain the regression model that addresses each individual or entity characteristic. The research able to capture that specific school characteristic has an influence on student achievement through the use of fixed-effect model because fixed-effect model accommodates the unobservable individual characteristic that matter for the research finding. Thus, the fixed-effect model in this regression panel data is chosen.

After the fixed-effect model with the robust method is justified, the hypothesis tests such as determination coefficient ( $\mathbb{R}^2$ ), F-test, and t-test is conducted. In the determination coefficient test ( $\mathbb{R}^2$ ), Table 4.3 above shows that the value of  $\mathbb{R}^2$  is 0.2118. It is means that the independent variables used in this research are not clearly explained the dependent variable. The variance of independent variables only explains 21.18% of the dependent variable used in this research. Thus, this model is less accurate to predict the financial performance of the privatized SOEs in Indonesia.



Continue with the F-test, the value of the Prob>F as seen in the Table 4.3 is 0.0042. With the confidence level at 95%, the Prob>F value of this model is significantly rejecting the null hypothesis (0.0045<0.05), meaning that all independent variables used in this model simultaneously influence the dependent variables. In other words, the coefficient value of all independent variables is not equal to zero. It can be said that the independent variables in this model are significantly affecting the financial performance of privatized SOEs with a confidence level at 95%.

To specifically know the impact of each variable toward the dependent variables within the model, t-Test is constructed (Appendix 2). Based on the test, it is obtained that two out of three focused variables which are Director Size (DS) and Board Independence (BI) in this research is significantly affecting the dependent variables in positive direction. The variables of interest which are Publicly Held Share (PHS) do not significantly affect the financial performance (ROA). On the other extreme, the control variable which is the Debt to Total Assets (DTA) variable also significantly influence the financial performance of the company in a negative way. This has shown that the impact and direction of Director Size (DS) and Board Independence (BI) variable is in line with the hypothesis applied in this study.

#### **Non-SOEs**

Similar to the step in the previous subchapter, the data processing of privatized non-SOEs perform the same steps. After running the panel data regression model with three different estimators (OLS fixed effect, OLS random effect, and PLS), the recommended model is the OLS random effect model. However, since the interest of this research is to account the firm-specific characteristic in the model, the OLS fixed effect model is chosen as the estimator for the non-SOEs data panel regression model.

Based on Table 5, the OLS fixed-effect model passed the multicollinearity and autocorrelation test but failed to remove the heteroscedasticity effect in the model.

Variable	Value
Multicollinearity (Mean VIF)	1.15
Heteroskedasticity (Prob>Chi2)	0.0000
Autocorrelation (Prob>F)	0.2383

Table 5. Classical Assumption Test for non-SOEs Panel Data

Based on the analysis, the OLS fixed-effect model contains heteroscedasticity problem. According to Hoechle (2007), the heteroscedasticity problem can accommodate by using the robust standard error. Applying robust standard error will remove the problem created by the heteroscedasticity phenomenon. Due to this action, the new model with robust standard error is created as stated in Table 6.

Similar to the selection of the estimator model in the SOEs data processing, the fixed-effect model with robust error is selected as the estimator model in non-SOEs data. The robust fixed effect model is selected to address the firm-specific characteristic in the regression. As the new model is robust against heteroscedasticity, the heteroscedasticity tests no need to be conducted again while the multicollinearity needs to be reconducted. The multicollinearity test number 2 shows the sign of no multicollinearity.

As robust fixed effect model is used to explain the research question, the hypothesis testing such as determination coefficient ( $R^2$ ), F-test, and t-test should be conducted to ensure the output of the phenomenon appear in the model. According to the above Table 6, it can be seen that the value of  $R^2$  (0.0612) is quietly low since the independent variables used in this model only explain 6.12% of the dependent variable. In short, this model is not clearly explained the dependent variables and this model is not accurate to be used as the predictor of financial performance of privatized non-SOEs.

Moving to the F-test, this test is necessary to test whether all independent variables in this model is simultaneously influence the dependent variable. According to Table 6, the Prob F value (0.346) of robust fixed effect model is above the alpha value of 0.05. This value (0.346>0.05) indicate that the null hypothesis



should be rejected, meaning that all coefficient of the independent variables ( $\beta$ ) are equal to 0. Due to this outcome, the independent variable did not simultaneously influence the dependent variable.

To specifically detect which variable that individually may have an impact toward the financial performance, the t-test is conducted to figure out the partial impact of independent variables toward the financial performance (ROA). In the Table 6, it can be seen that all independent variables are not individually affecting the financial performance of privatized non-SOEs.

Mariahla		Estimator after Robus	t
variable –	Fixed	Random	Pooled
DS	0.0030	0.0061**	0.0076**
DI	0.0492	0.0279	-0.0028*
BI	-0.0211	0.0436	0.0702
PHS	-0.0622	-0.1216**	-0.1478***
DTA	-0.0057	-0.0015*	-0.0015**
FA	0.2668	0.1085**	0.1058**
_cons	0.2000	011000	0.1000
$\mathbb{R}^2$	0.0612	0.3947	0.4091
Adjusted R <sup>2</sup>			0.3692
Prob F	0.346		0.0000
Prob > Chi2		0.0000	

Table 6. Regression Model Result After Robust (Non-SOEs)

\*p<0.05; \*\*p<0.01; \*\*\*p<0.001

Based on the t-test result above, the performance between the privatized SOEs and non-SOEs is not at the same level. In the debt-to-assets and total assets, the means different between the privatized SOEs and non-SOEs is meaningful. The DTA and total assets of privatized SOEs are higher than the non-SOEs. This can happen because the performance of privatized SOEs is influenced by the interest of the government as the major shareholder. In the Jokowi era, the infrastructure aspect is aggressively developed. To achieve this target, the burden is transferred to the SOEs as the business unit of the government. The infrastructure development requires some SOEs in infrastructure sector to issue debt to fulfill this infrastructure project (Gumiwang, 2018). Although the SOEs gain a significant profit from this project, the debt rate of these SOEs grows faster.

In the econometric analysis on privatized SOEs shows that the Director Size and Board Independence (BI) are the variables of interest that shows a significant impact toward the financial performances. The proxy of good corporate governance works in the privatized SOEs because there is an early concern that government will intervene the SOEs business. This is in line with the theory of public choice in which the government has a tendency to act based on their self-interest. Due to this condition, SOEs become vulnerable to any action that favoring those beneficiaries in the governmental.

To prevent this kind of possibility, a strict rule about those who sit in the director board is regulated. The hiring process of director should follow the State-Owned Enterprise Ministry Decree Number KEP-09A/MBU/2005 which regulated the fit and proper test of the director candidate in SOEs. This Ministry Decree regulated the procedure, criteria, and independency of the candidates. This strict rule directly improved the quality and effectivity of the directors in SOEs.



Besides the reason above, the larger the size of the director, the more effective the company governance will turn out. Ciftci et al. (2019) also support that the large director size can increase the effectivity of the director role since more director act as the knowledge pooled that help the management to have stronger judgment. More directors serve on the board also allow more diverse perspective and better filtration from outside intervention, in this case, is the government.

The presence of more independent commissionaires also strengthens corporate governance to be free from outside intervention. The independent commissionaire can improve good corporate governance because this type of commissionaire not favor any party when creating a decision. A research from Tulung and Ramdani (2018) also support this finding through the empirical study in which the independent commissionaire is proven to be significantly influence the financial performance of the regional development bank in Indonesia.

# **V. CONCLUSION**

Based on the finding of this research on privatized SOEs and non-SOEs listed in the Indonesia Stock Exchange from 1991 to 2013, the performance of privatized SOEs and non-SOEs is not significantly different in the ROA and ROE aspect while in the debt-to-total assets and total assets there is a significant gap. In addition, the director size and board independences have a positive significant impact toward the SOEs financial performance while the privatized non-SOEs is not significantly affected.

As the finding in this research still need an improvement, the study only accounted three variables (director size, board independence, and publicly held share). This study needs to use more sophisticated methodology to address the endogeneity since it can describe the cause relationship between the director size with the financial performances of privatized SOEs.

The Indonesia government should maintain the fit and proper test procedure when hiring the board member as it is linked to the performance of SOEs. The practitioners may need to increase the size of the director member and independent commissionaire as it is related to the firm performance. The investors are recommended to invest in a firm with good corporate governance as it is proven to have an impact on the firm performance. The future research may need to use the firm sample that has been at least privatized 5 years prior to the observed year to ensure the performance stability of each company after privatization. To describe the causal relationship between the director size and financial performances, the GMM and 2SCS approach can be used in the future study.

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# Appendix 1

No.	Industry	SOE	IPO	Assets (2018)*	Non-SOEs	IPO	Assets (2018)*
1	Dh anna a ar	Kimia Farma	2001	7,942	Tempo Scan Pacific	1994	7,786
2	Pharmacy	Indofarma	2001	1,465	Darya-Varia Laboratoria	1994	1,658
3	Telco	Telkom	1995	201,960	XL Axiata	2005	56,378
4	Coal	Bukit Asam	2004	20,635	Indo Tambangraya Megah	2007	18,864
5	Metal &	Timah	1995	12,460	J Resources Asia Pasifik	2003	13,277
6	Mineral	Aneka Tambang	1997	31,337	Vale Indonesia	1990	31,111
7	Energy	PGN	2003	93,152	Rukun Raharja	2006	2,060
8	Metal	Krakatau Steel	2010	59,638	Steel Pipe Industry of Indonesia	2013	6,655
9		Adhi Karya	2004	26,504	Total Bangun Persada	2006	2,958
10	Construction	Wijaya Karya	2007	54,043	Acset Indonusa	2013	7,063
11	Construction	Waskita Karya	2012	117,604	Surya Semesta Internusa	1997	7,491
12		Pembangunan Perumahan	2010	44,055	Jaya Konstruksi	2007	4,321
13	Transport.	Garuda Indonesia	2011	57,844	Samudera Indonesia	1999	8,662
14	Toll Road	Jasa Marga	2007	87,475	Citra Marga Nusaphala Persada	1995	11,166
15	Germant	Semen Baturaja	2013	5,284	Holcim Indonesia	1977	19,528
16	Cement	Semen Indonesia	1991	49,169	Indocement Tunggal Prakarsa	1989	26,461

# Appendix 2

#### 1. T-test ROA SOE vs non-SOE

. ttest ROA, by(CompType)

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
Non-SOE SOE	80 80	.0549573 .0456268	.0060324 .006796	.0539554 .0607854	.0429501 .0320997	.0669645 .059154
combined	160	.0502921	.0045443	.0574818	.041317	.0592671
diff		.0093305	.0090871		0086174	.0272784
diff = Ho: diff =	= mean(Non- = 0	SOE) - mean(	SOE)	degrees	t = of freedom =	= 1.0268 = 158
Ha: d: Pr(T < t)	iff < 0 ) = 0.8470	Pr( )	Ha: diff != T  >  t ) = (	0 0.3061	Ha: d: Pr(T > t)	iff > 0 ) = 0.1530



#### 2. T-test ROE SOE vs non-SOE

. ttest ROE, by(CompType)

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
Non-SOE SOE	80 80	.0985011 .0909539	.0093185 .0140014	.0833469 .125232	.0799532 .0630849	.1170491 .1188229
combined	160	.0947275	.0083883	.1061039	.0781607	. 1112943
diff		.0075472	.0168188		0256715	.0407659
diff = Ho: diff =	= mean(Non- = 0	SOE) - mean(:	SOE)	degrees	t : of freedom :	= 0.4487 = 158
Ha: d: $Pr(T \le t)$	iff < 0 ) = 0.6729	Pr( )	Ha: diff != T  >  t ) = (	0 D.6542	Ha: d: Pr(T > t)	iff > 0 ) = 0.3271

## 3. T-test DTA SOE vs non-SOE

. ttest DTA, by(CompType)

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
Non-SOE SOE	80 80	.4503653 .5446771	.0200569 .0200083	.1793945 .1789597	.410443 .5048515	.4902876 .5845026
combined	160	. 4975212	.0146074	.1847708	.4686716	.5263708
diff		0943117	.0283304		1502669	0383566
diff = Ho: diff =	= mean(Non = 0	-SOE) - mean(	SOE)	degrees	t : of freedom :	= -3.3290 = 158
Ha: di Pr(T < t)	iff < 0 ) = 0.0005	Pr(	Ha: diff != T  >  t ) = 1	0 D.0011	Ha: d: Pr(T > t;	iff > 0 ) = 0.9995

#### 4. T-test InTA SOE vs non-SOE

. ttest lnTA, by(CompType)

Two-sample t test with	equal	variances
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Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
Non-SOE	80	29.73819	.1146035	1.025045	29.51007	29.9663
SOE	80	30.81255	.1393768	1.246624	30.53513	31.08998
combined	160	30.27537	.0995171	1.258803	30.07882	30.47192
diff		-1.074366	.1804435		-1.430759	7179739
diff : Ho: diff :	= mean(Non- = 0	-SOE) - mean(	SOE)	degrees	t of freedom	= -5.9540 = 158
Ha: diff < 0		Ha: diff != 0			Ha: $diff > 0$	
Pr(T < t) = 0.0000		Pr( T  >  t ) = 0.0000			Pr(T > t	) = 1.0000