

THE EFFECT OF GOVERNMENT OWNERSHIP ON FINANCIAL PERFORMANCE OF LISTED TELECOMMUNICATION COMPANY IN US AND ASIA REGION

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Abstract:

Government intervention on certain companies would increase firm financial performance. Various researches have been conducted to explore the impact of government control on certain company. A research that published by GSMA on the mobile economy 2019 also stated that there are seven countries that account for half of mobile subscribers and two of them were the US and Indonesia. This study uses 38 data Telco from 2014-2018 and finds there are significant relationship in Government Ownership to Financial Performance of Telecommunication Company in US and Asia Region using data panel regression model. The main purpose of this paper is to study and analyze the effect of Government Ownership on performance Telecommunication Company in US and Asia Region by using financial approach which concentrates on measuring impact on Accounting Based and Market Performance. Result of this research *conclude* that Government Ownership was proved significant and positively affects the Telco financial performance in all region.

Keywords: Government Ownership; Financial Performance; ROA; ROE; PER; and Tobin's Q

JEL Classification: G42

1. Introduction:

Financial performance becomes a very important factor that could detect firm sustainability in long term. Without better financial performance, firm cannot expand its own business and grab larger market in the future. As it becomes very important for the firm to maintain their internal operation and its business then firm could achieve better governance and increase all shareholder wealth. Nowadays telecommunication industry becomes one of important sector that support modern lifestyle. Consumers need for Internet access and social media creates demand for goods and services from this industry. As per the 'We Are Social' Global Digital Report 2018, the average mobile connectivity in Southeast Asia was 141 percent in January 2018, encouraging 81 percent mobile broadband infiltration. BMI announced that ASEAN mobile memberships developed by 2.2 percent in 2017, arriving 4 billion.

There are few firms that were controlled and owned by government in each country. Essentially, the government takes a control of these firms on the ground strategic reason or very important industrial sector. The debate about this topic is still continue and the result are still inconclusive. When the firms were controlled less by government, then empirically in China there are some improvements in company's value. The result was this transfer boasts up the company performance based on ROA, ROS and EBIT. Furthermore, in China also suggest by *reducing* government control it could increase company performance (Huang, Z & Wang, K, 2011). In the other way, this research had *the same direction* with the other previous finding in China (Wang, K & Xiao, X, 2009).

Telecommunication Industry and based on ASEAN Investment Report 2018, Telecommunication Industry is a significant contributor to the growth of the regional economy. As more smartphone users grow then this sector gain the benefit and opportunity from this trend. This sector also supports another services and online business that become major trend in creative industry. Furthermore, the trend in mobile and technology has become important aspect on a daily basis in 21st century. Natures of telecommunication companies are capital intensive. It requires a lot of capital to improve and create better services for its subscriber. Telecommunication companies should manage it risk carefully. This is one of the problems that would like to be address in this research. Source of fund becomes very important for these firms. If government supports the fund, it will be easier for the firm to expand their business. Motivation of this research focuses on exploration of does the government ownership have an effect on telecommunication company financial performance in US and Asia Region.

Region in this paper also included Telco in US. As we know, US is one of economic power in the world. This country has been established and well developed compared to the others. This research chooses the US as the benchmark because it's power in international trade and many of technology innovation and advancement were born from this country. Apart from Telco in the US, this research also compares with Telco in Asia Region for the broaden perspective from the previous research. Sampling method that applied in this thesis is probability sampling techniques and specifically purposive sampling method. In order to be taken as sample, research data should meet some criteria (Telco, Regions and Market Capitalization) before proceeds to further analysis.

The objective is to study and analyze the effect of government ownership on financial performance of Telecommunication Companies in US and Asia Region (Developed Countries & Emerging Market). Research the effect of government ownership on financial performance are taken from a few countries: Malaysia, Singapore, Vietnam, Kuwait and China. In Malaysia and Singapore, these finding are consistent with the paper (Najid, NA & Rahman, RA, 2011) that investigates the governance structure of government-linked companies (GLCs) in Malaysia. In 2018, other research from Malaysia had *the same direction* where examined CEOs affect firm performance and whether government ownership moderates the relationship between founder CEOs and firm performance of companies listed in Malaysia between 2002 and 2011 (Ting et al., 2018). There exists a positive relationship between founder CEOs and firm performance in the presence of government ownership from the perspective of growth opportunities although a direct-effect test indicates that government ownership may be detrimental to firm performance. The result paper is given a value *positive* effect that Singaporean GLCs have higher valuations and better corporate governance than a control group of non-GLCs (James S. Ank & David K. Ding, 2006). In Vietnam and Kuwait these finding had opposite direction (Tran et al., 2014), evaluates the net effect of government ownership on firm performance and empirically tests these predictions using a panel dataset of Vietnamese firms in the period 2004-2012. The empirical results estimated from static and dynamic models confirm our propositions of a *negative* effect of state ownership on firm profitability and labor productivity. In Kuwait, explores the effects of institutional and government ownership on the performance of firms listed on KSE in the year 2010 (Alfaraih et al., 2012). Based on regression analysis results show a positive relationship between institutional investors and KSE firm performance, suggesting the powerful and influential role institutional investors play as a corporate governance mechanism. In contrast, a *negative*

relationship is observed between government ownership and KSE firm performance, implying worse market performance when government ownership exists. From China, there are *inconclusive* result regarding this paper (Huang, Z & Wang, K, 2011), exploring the effect of ultimate privatization on the performance of Chinese listed companies. Ultimate privatization is defined as the incidence of transferring the ultimate control of a state-owned company from the government to private owners. Using a sample of 127 Chinese listed companies that have had controlling blocks transferred from the government to private owners, we show that firm performance improved significantly following this transfer. Another paper in China indicating that state ownership remains widespread in China's stock markets (Wang, K & Xiao, X, 2009). They show that 70% of Chinese listed companies are ultimately controlled by government agencies. This study find that the Chinese government controls listed companies directly or indirectly through solely state-owned enterprises (SSOEs). Taking into account the trade-off between political and agency costs, we show that firm value *increases* when some control rights are decentralized from the government to state-owned enterprises (SOEs). Moreover, decentralization improves significantly the performance of local government- controlled, but not central government-controlled firms.

In view of previous journal, the distinction of this paper is an exploration government owned companies effect not only on single country, including as well as in US and Asia Region (Developed Countries & Emerging Market). This paper examination centers around the impact of government ownership on accounting performance (ROA and ROE) and market performance (PER and Tobin's Q) in Telco. This exploration is as yet interesting because the result of all existing studies is as yet inconclusive.

Finding of this research conclude that all independent variables (Government Ownership, Firm Age, Firm Size, Government Percentage (GLC*Size), Debt to Asset, Working Capital to Total Asset, and GDP) from all four models is significant, which means that all fit on financial performance (ROA, ROE, PER and Tobin's Q). These findings in line with Najid (2011), that stated that Government-linked companies have a positive relationship with firm value. The interaction between observed variables are meaningful when it came together.

Result of this research will be useful for telecommunication management in manage their risk. By understand each relationship between the research variable, management could be well informed and make better decision on financing and borrowing the capital. Result between regions may differ, and governments can use this finding to develop proper or beneficial policy for telecommunication industry in each region. It could protect the companies, which also be

considered as national interest. Investors also can use the results obtained from the research to make decisions regarding to telecommunication sector

2. Review of Literature

2.1 Government Control in Financial Performance

Various researches have been conducted to explore the impact of government control on certain company. We found similar research from Asia and Middle East, unfortunately research from US Region is not available. In China, some companies were transferred from state owned to private. The result was this transfer boasts up the company performance based on ROA, ROS and EBIT. Furthermore, research in China also suggest by diminishing government control it could expand company performance (Huang, Z & Wang, K, 2011). This examination had same heading with past finding in another paper in China (Wang, K & Xiao, X, 2009). When the firms were controlled less by government, then empirically in China there are some improvement in company's value. In Kuwait had opposite direction and found that more government control the firms, then the result might decrease their financial performance (Alfaraih et al., 2012). Interesting points from this finding, some researches also argue this and gave different result. In contrast with two researches from China, research had conduct to the ownership/control structure of Khazanah Holdings, the government holding entity, which typically owns substantial cash flow rights to manage Malaysian GLCs, examine GLCs and non GLCs of Malaysian GLCs over a 6 years period from 2001 to 2006 (Najid, NA & Rahman, RA, 2011). Based on a sample of 47 GLCs and 47 non-GLCs companies listed on Bursa Malaysia over a 6-year period of 2001-2006, the current study found that there is a significant difference in various corporate performance measures (financial and market) between these two groups of companies. The results based on multiple regression show that government involvement in GLCs has a *positive* significant relationship on firm performance among Malaysian GLCs and found government control *improved* company performance based on Malaysia empirical data. Government control could increase investor trust and also contribute to economic equality. Another empirical finding in Malaysia also confirmed that firm performance *enhanced* by government ownership (Ting et al., 2018). Based on Vietnam market, government-controlled firms were proven to be more *profitable* in large size companies than non-government firms. Furthermore, this research also stated that more control from government in big size companies then it also *increased* firm profitability and also labor productivity as the experience and marginal utility of learning curve (Tran et al., 2014). The

debate on this topic is still ongoing and uncertain and the results of this paper are still in line with predictions where government ownership in all region has a positive impact on Telco financial performance.

2.2 Debt to Assets Ratio (Leverage) in Financial Performance

Debt to assets ratio defines the level of leverage a company has taken. The higher the ratio, the higher the degree of leverage and consequently, financial risk. Few review of these major studies is as follows: the capital structure does have statistically *significant impact* on the profitability of firms (Chisti et al., 2013), analyze the impact of capital structure on the profitability of a firm. The relationship between the capital structure of NBFCs and their Net Profit, Return on Capital employed, Return on Equity, Return on Assets and Interest Coverage (Ratio Chavali, K & Rosario, S 2018). The purpose is to understand the capital structure of non-banking finance companies listed in NSE and to identify and understand the relationship between capital structure and profitability of non-banking finance companies in Indian context. The findings reveal that debt to equity, debt to total asset and long-term debt to total asset are positively *correlated* with ROE. Research from US how to determine whether there is a relationship between capital structure and firm performance of US firms in the Industrial, Healthcare, and Energy Sectors (Corey Cole et al., 2015). The relationship between profit margin and capital structure as follow: capital structure (long-term debt to asset ratio) *positively correlated* with profit margin in Industrial Sector and negatively correlated in Energy Sector and has no relationship in the Healthcare Sector.

2.3 Working Capital (Liquidity) in Financial Performance

The more working capital a company has, the lower its liquidity. Effective working capital management needs to allow companies to invest in future growth, repay short-term financing and reduce financial costs. The review of such major studies is as follows:

This paper examined the impact of working capital management (WCM) on corporate performance (CP) in Vietnam. Resulted relationship between Working Capital and Company Performance was nonlinear (inverted U shape) (Van, HTT et al., 2019). Empirical research of Czech companies on the relationship between working capital and the performance of a company. Models are created that describe the dependency of earnings on the components that determine working capital. Purpose this paper to conduct empirical research of Czech companies on the relationship between working capital and the performance of a company. Resulted Working Capital level affect the corporate performance which company should aim

to keep as close to the optimal level as possible (Irena Honkova, 2019). The relationship between working capital management and firm performance for a sample of 437 non-financial Indian companies (Nufazil Altaf & Farooq Shah, 2017). Resulted relation between working capital and firm performance confirmed as inverted U-shape. This paper examines the working capital management of the Food and Beverage Corporations from the USA and Canada during the 10 years study period from year 2000 to 2009 (Priya Darshini Pun THAPA, 2013). The results suggest the existence of concave relationship between the working capital management and profitability. The influence of strategic choice on working capital configurations and observe how the relationship between working capital ratio and operational performance differs depending on strategy. The empirical results suggest that working capital is configured and adjusted to its target in different ways under different competitive strategic choices, capital configuration and operational performance (Chuan-guo Li et al., 2014).

2.4 Firm Size and Firm Age in Financial Performance

The size of a firm assumes a significant job in deciding the sort of relationship the firm appreciates inside and outside its operating environment. The bigger a firm is, the more prominent the impact it has on its stakeholders. The review of such major studies is as follows: This paper study mainly aims to examine the relationship between firm size, age and financial performance in listed companies on Tehran Stock Exchange (Ghafoorifard, M, 2014). The achieved findings show that there is a significant relationship between firm size, age and financial performance. The relationship between company age, company size and profitability against the background of the learning by doing and structural inertia hypotheses. Resulted Positive relationship between firm age and profitability, positive relationship between firm size and profitability, Negative relationship between board size and profitability (Ilaboya, OJ & Ohiokha, IF, 2016). Another study purposes to determine the effects of age, size, leverage, and group affiliation to firm performance in Indian IT industry (Jighyasu Gaur & Ritu Gupta, 2018). Research found out that older firms performed financially better, larger firms performed better than small firms, group affiliated firms performed better than unaffiliated firms, and less leveraged firms were better than highly leveraged firms. For the synthesizes theory and evidence on processes of firm-level aging. Empirical studies found that performance has a non-linear relationship with firm age, which warrants empirical approaches that have quadratic terms for age, or logarithmic transformations (Alex Coad, 2018). To examine the relationship between corporate growth and firm size and age (Byeongyong Paul Choi, 2010). The research found that younger firms' growth faster than the older, cost-efficient firm growth faster and

concentrated business line firm grow faster. Economist of scope are positively related to firm growth. However firm growth does not predict firms' future growth.

2.5 Gross Domestic Product in Financial Performance

The growth of GDP could have an impact on a firm's performance. Most studies argue that percentage changes in GDP has positive effects on firm performance while few studies show less effect of macroeconomic shocks on performance of firms (Higson et al., 2004). The review of such major studies is as follows: this paper examines impacts of macroeconomic news on Vietnamese state-owned enterprises' (SOEs) performance (Lee et al., 2017). Resulted show that interest rate is found to be significantly negative associated with firm performance but changes in GDP and firm performance are positively related. The impact of macroeconomic conditions on sales performance in Nigeria. Resulted GDP per Capita (GDPC) have statistically insignificant impact on sales performance in Nigeria (Adeola, O 2016). Another paper discovers the relationship between GDP growth rate and stock market return (Jian Qiang Wu, 2012). Resulted of GDP cannot explain the performance of stock market returns, Aggregate Corporate Earnings, and Annual growth rate of EPS. Resulted there is no significant relationship between stock market returns and GDP growth rates in the U.S. stock market. The effect of GDP growth on bank profitability in China over the period of 2003-2009. Resulted higher GDP growth leads to lower bank profitability in China (Yong Tan* and Christos Floros, 2012). In Malaysia, there are analyze the financial performance of Islamic banks in Malaysia measured using ratio analysis of profitability, liquidity, credit risk and impaired financing performance (Siew Chun Hong et al., 2015). Resulted nominal GDP has significant and positive impact on ROAA and liquidity ratio and EQL, and inflation rate has negative correlation.

3. Data Sources & Collection

Source of data in this research consider as secondary data. Data are collected using various sources of financial reports and database (IDX, Yahoo Finance, Bloomberg Data, and World Bank). Population of this research is 38 the largest market capitalization Telco in US and Asia Region (Developed Countries and Emerging Market). This research also limits the observation period from year 2014 to 2018 which makes total sample data that will be analyzed is 190 data. This paper examines comprises of telecommunication company from US from 124 population where 5 organizations have possession by government and the others 4 organization isn't claim

by government. In Asian Develop Market with 102 population, where 5 organizations possess by government and 11 organization private. Also, from Asian Emerging Market from 95 population, where 8 organizations possess by government and 5 organizations are private.

Related to descriptive finding, there are 38 companies that have been taken as sample in this research. Furthermore, there are 5 telcoes in US are owned by government with less than 1% ownership. In developed and emerging countries, there are 5 and 8 firms are classified as government owned respectively. The proportion of government ownership on these companies was found very diverse one and another. The highest portion was 52.00% ownership on Telkom Indonesia and followed by Telekom Malaysia Berhad with 49.00%. In total, there are 9 companies in US, 29 companies from Non-US (16 companies from Asia Developed Countries and 13 companies from Asia Emerging Market). The proportion of total government owned companies in this research is 53% while the other (non-controlled firms) is 47%. More than a half of research sample is considered as government-controlled firms.

Based on inferential analysis, finding in this paper as predicted that government ownership *positively effects* to financial performance Telco in all region. Interestingly, in separated result there are certain pattern that Government Ownership had an *effect* to Market Performance in US and to Accounting Performance in Non-US.

3.1 Research Model & Research Framework

The objective of this paper is to study and analyze the effect of Government Ownership on performance Telecommunication Company in US and Asia Region (Developed Country and Emerging Market) by using financial approach which concentrates on measuring impact on Accounting Based (ROA & ROE) and Market Performance (PER & Tobin's Q). To fully capture the dynamic processes between the performance and variable, a panel data model is established as follows.

$$\text{PERFORMANCE}_{i,j} = a + b_1\text{Gov}_{i,j} + b_2\text{DTA}_{i,j} + b_3\text{Size}_{i,j} + b_4\text{Age}_{i,j} + b_5\text{WC}_{i,j} + b_6\text{Size}*\text{GovOwn}_{i,j} + b_7\text{GDP}_{ij} + e_i \quad (1)$$

Performance used are Accounting Base (ROA & ROE) and Market Base (PER & Tobin's Q), The subscript i is the i = telecom company in US and Asia Region (t = 1, ... ,38) while the subscript j the j th annual data company (j = 2014, ... ,2018).

3.2 Variable Operationalization

Table 1. Variable Operationalization

| Variables | Operational Definition | Previous Research |
|-------------------------------|--|---|
| <i>Government Ownership</i> | <i>Dummy Variables of Government Ownership (GLC)</i> | <i>(Najid, NA & Rahman, RA, 2011), (Huang, Z & Wang, K, 2011), (Wang, K & Xiao, X, 2009), (Alfaraih et al., 2012), (Ting et al., 2018), (Tran et al., 2014)</i> |
| <i>DTA</i> | <i>Total Debt / Total Asset</i> | <i>(Chisti et al., 2013), [3], (Corey Cole et al., 2015)</i> |
| <i>WC/TA</i> | <i>Working Capital / Total Asset</i> | <i>(Van, HTT et al., 2019), (Irena Honkova, 2019), (Nufazil Altaf & Farooq Shah, 2017), (Priya Darshini Pun THAPA, 2013), (Chuan-guo Li et al., 2014)</i> |
| <i>Firm Size Firm Age</i> | <i>Ln (Market Capitalization) Firm Age start from it is first operating until n period of time</i> | <i>(Ghafoorifard, M, 2014), (Ilaboya, OJ & Ohiokha, IF, 2016), (Jighyasu Gaur & Ritu Gupta, 2018), (Alex Coad, 2018), (Byeongyong Paul Choi, 2010)</i> |
| <i>GDP</i> | <i>Countries Gross Domestic Product</i> | <i>(Lee et al., 2017), (Adeola, O 2016), (Jian Qiang Wu, 2012), (Yong Tan* and Christos Floros, 2012), (Siew Chun Hong et al., 2015)</i> |

Research Model of this paper will follow this figure below:

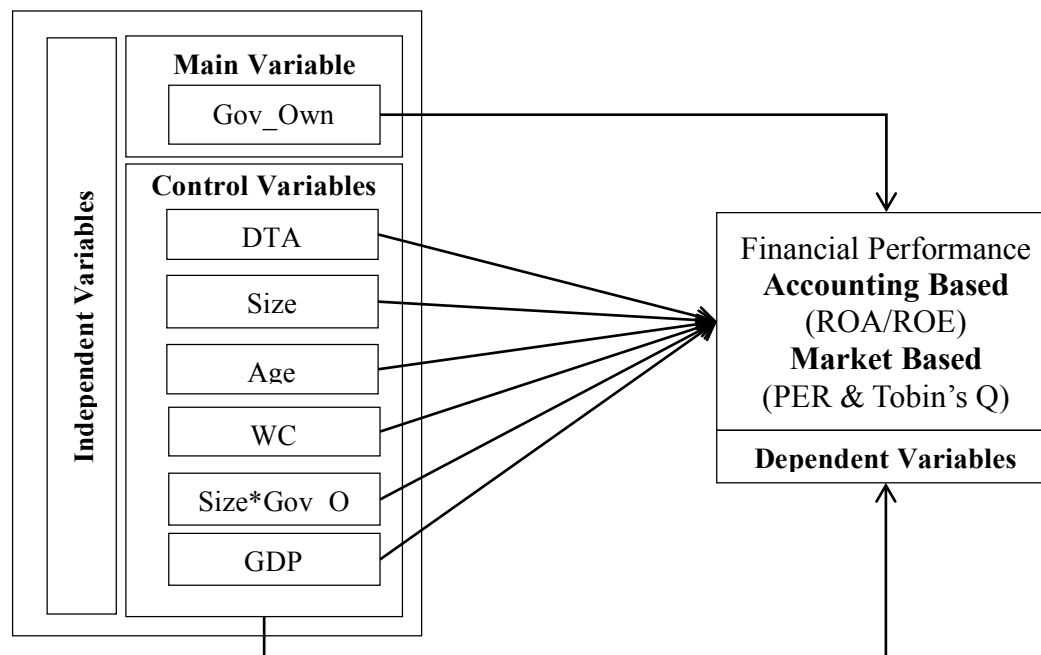


Fig 1. Model Government Ownership and Financial Performance

3.3 Financial Performance Indicator

First ratio that would like to be observed in this research is ROA. It measures by the ratio between net income and total asset [5]. Second ratio that related to accounting performance and profitability ratio is ROE. It measures by the ratio between net income and total equity. Third financial performance indicator for market is Price Earnings Ratio (PER). This ratio could be presented in Market Price divided by Earning per share (EPS). James Tobin defines Tobin's Q as: One, the numerator, is the market valuation: the going price in the market for exchanging existing assets. The other, the denominator, is the replacement or reproduction cost: the price in the market for newly produced commodities. They believed that this ratio has considerable macroeconomic significance and usefulness, as the nexus between financial markets and markets for goods and services. While Tobin is frequently credited as its maker, this proportion was first proposed in a scholastic distribution by business analyst Nicholas Kaldor in 1966. In prior writings, the proportion is once in a while alluded to as "Kaldor's v." It expressed by Total Market Value divided by Total Asset Value of Firm.

4. Results & Discussion

4.1 Descriptive Statistic Analysis

Against of the research findings descriptive result for all region the result could be express in the table below:

Table 2. Descriptive Results for All Region

| <i>Average Dependence Variable</i> | <i>Mean</i> | <i>Min</i> | <i>Max</i> | <i>Std. Dev</i> |
|------------------------------------|---------------|---------------|---------------|-----------------|
| <i>ROA</i> | <i>0.065</i> | <i>0.060</i> | <i>0.069</i> | <i>0.004</i> |
| <i>ROE</i> | <i>0.176</i> | <i>0.144</i> | <i>0.199</i> | <i>0.022</i> |
| <i>PER</i> | <i>17.728</i> | <i>16.360</i> | <i>20.060</i> | <i>1.563</i> |
| <i>TOBINSQ</i> | <i>1.734</i> | <i>1.590</i> | <i>1.870</i> | <i>0.105</i> |

Based on the table 2, average ROA shown the highest score is 6.9%. Same pattern also founded in average ROE the peak is 19.9%. For average PER the lowest point is 16,36% increased at the highest 20,06%. For average Tobin's Q Ratio, hit the lowest point at 1.59 and the highest at 1.87.

Table 3. Descriptive Results for US and Non-US

| <i>Average Dep Variable</i> | <i>Region</i> | <i>Mean</i> | <i>Min</i> | <i>Max</i> | <i>Std. Dev</i> |
|-----------------------------|---------------|--------------|--------------|--------------|-----------------|
| <i>ROA</i> | <i>US</i> | <i>4.018</i> | <i>2.560</i> | <i>6.250</i> | <i>1.421</i> |
| | <i>Non-US</i> | <i>7.280</i> | <i>6.720</i> | <i>7.700</i> | <i>0.403</i> |

| | | | | | |
|----------------|---------------|---------------|---------------|---------------|--------------|
| <i>ROE</i> | <i>US</i> | <i>13.064</i> | <i>5.110</i> | <i>18.310</i> | <i>4.884</i> |
| | <i>Non-US</i> | <i>18.738</i> | <i>16.270</i> | <i>19.850</i> | <i>1.452</i> |
| <i>PER</i> | <i>US</i> | <i>20.374</i> | <i>5.270</i> | <i>27.720</i> | <i>8.996</i> |
| | <i>Non-US</i> | <i>16.596</i> | <i>15.470</i> | <i>17.790</i> | <i>0.895</i> |
| <i>TOBINSQ</i> | <i>US</i> | <i>1.384</i> | <i>1.040</i> | <i>1.600</i> | <i>0.212</i> |
| | <i>Non-US</i> | <i>1.824</i> | <i>1.620</i> | <i>2.020</i> | <i>0.144</i> |

From the table above of this descriptive for Non-US region, Financial Performance: ROA, ROE and Tobin's Q tend to be higher than in US region. For PER in the US region tend to be slightly higher than in the Non-US further checking would be conducted to review this phenomenon.

4.2 Result and Regression Analysis

Based on the inferential statistic this research concluded that the result for all models ROA, ROA, PER and Tobin's Q are fit and there are simultaneously effect of all independent variables such as: Government Ownership, Firm Age, Firm Size, Government Percentage (GLC*Size), Working Capital and GDP on telecommunication financial performance for R Square and Adjusted R Square on table 4. below:

Table 4. R² and Adjusted R² Results

| <i>Indicator</i> | <i>Model 1 (ROA)</i> | <i>Model 2 (ROE)</i> | <i>Model 3 (PER)</i> | <i>Model 4 (Tobin's Q)</i> |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------------|
| <i>R Square</i> | <i>22.3%</i> | <i>20.8%</i> | <i>9.9%</i> | <i>25.6%</i> |
| <i>Adjusted R Square</i> | <i>19.3%</i> | <i>17.8%</i> | <i>6.4%</i> | <i>22.7%</i> |

4.2.1 Analysis

Based on the finding from hypothesis testing, government ownership is proven has an impact on financial performance on both accounting and market performance. But this result should be carefully analyzed because the value of adjusted R² value is relatively low especially on PER model 3 (Table 4). The variability in PER is quite high compares with the other financial performance. The result is explanatory power in PER model is less than 10%. It is only can explain 6.4% the effect of independent variables on PER. For further elaboration, this research also observed the same model on two different samples. After the sample is split, then it boasts up the explanatory power (value of adjusted R²) that can be seen in table 5.

4.2.1.1 Government Ownership in Financial Performance

The impact of government ownership on financial performance (for both accounting and market based) is clearly confirmed in this research. T-test result shows that on four observed models consistently reject null hypothesis. This finding similar with previous research in Malaysia (Najid, NA & Rahman, RA, 2011) which indicate there is a *positive* relationship between government ownership and firm performance in Malaysia. This finding also similar with others Malaysia research which indicate that government ownership plays an important role in strengthening the positive relationship between CEO's and firm performance (Ting et al., 2018). This finding also had a same direction with research in China which indicate that increased state ownership in larger firms seems to enhance the performance of such large firms in terms of profitability and efficient use of labour (Huang, Z & Wang, K, 2011). Hence, the larger the firm the higher the likelihood that the "helping hand" dominates the "grabbing hand". This finding indicated that the role of government support is very crucial to help and improve telecommunication companies. Government generally has many roles to support strategic industries such as telecommunication. The role included a controller to maintain effective market conditions and set guideline for private industries. Another role included a builder to provide physical infrastructure that would allow citizens to access information on the internet. Another role included a regulator to create an environment for fair competition. Last but not least included an investor to invest in technology and to be producer and buyer of Telco-ICT related products.

Table 5. Inferential Statistic

| | | All Region | | | | US Region | | | | Non-US Region | | | |
|-------------|-------------|-----------------|-----------------|-----------------|----------------------|----------------|-----------------|-----------------|----------------------|-----------------|-----------------|----------------|----------------------|
| | | Model 1 ROA | Model 2 ROE | Model 3 PER | Model 4 Tobin's Q | Model 1 ROA | Model 2 ROE | Model 3 PER | Model 4 Tobin's Q | Model 1 ROA | Model 2 ROE | Model 3 PER | Model 4 Tobin's Q |
| Constanta | Coefficient | 41,712 | 39,001 | -4,728 | 7,123 | -303,545 | 250,791 | -991,951 | -54,549 | 60,026 | 117,228 | 10,933 | 8,678 |
| | Sig t | 0 | 0,24 | 0,824 | 0 | 0,292 | 0,838 | 0,401 | 0,029 | 0,000 | 0,004 | 0,620 | 0,000 |
| GLC_D | Coefficient | 3,26 | 9,365 | 6,93 | 0,597 | -5,111 | 14,184 | 50,785 | 1,245 | 6,472 | 15,400 | 2,203 | 0,767 |
| | Sig t | 0.004*** | 0.014*** | 0.005*** | 0.000*** | 0,066 | 0,228 | 0.000*** | 0.000*** | 0.000*** | 0.000*** | 0,316 | 0.000*** |
| Firm Age | Coefficient | 0,013 | 0,018 | -0,013 | -0,004 | -0,31 | -0,007 | -0,093 | -0,008 | 0,035 | 0,094 | -0,001 | -0,001 |
| | Sig t | 0,521 | 0,802 | 0,775 | 0,124 | 0,18 | 0,944 | 0,326 | 0.000*** | 0,164 | 0,286 | 0,990 | 0,719 |
| Firm Size | Coefficient | 0,326 | 2,929 | -0,138 | -0,013 | 0,616 | 6,451 | -6,732 | -0,126 | 1,565 | 5,539 | 0,999 | 0,140 |
| | Sig t | 0,111 | 0.000*** | 0,76 | 0,649 | 0,059 | 0.000*** | 0.000*** | 0.000*** | 0.000*** | 0.000*** | 0,086 | 0.005*** |
| GLC*Size | Coefficient | -0,546 | -2,03 | 0,038 | -0,056 | -19,737 | -368,596 | 1,693 | -3,383 | -1,000 | -2,663 | 0,392 | -0,082 |
| | Sig t | 0.001*** | 0.000*** | 0,917 | 0.014** | 0,18 | 0.000*** | 0,977 | 0,009*** | 0.000*** | 0.000*** | 0,207 | 0.002*** |
| DTA | Coefficient | -0,095 | -0,04 | -0,009 | -0,009 | 0,002 | 0,004 | -0,227 | -0,006 | -0,196 | -0,195 | -0,033 | -0,015 |
| | Sig t | 0.000*** | 0,651 | 0,872 | 0.011** | 0,944 | 0,978 | 0,103 | 0.033** | 0.000*** | 0,066 | 0,571 | 0.002*** |
| WC_TA | Coefficient | 4,824 | 0,882 | -7,063 | -1,03 | -11,268 | 0,483 | -41,223 | -1,549 | 8,644 | 0,773 | -5,550 | -0,966 |
| | Sig t | 0,095 | 0,929 | 0,268 | 0.009*** | 0.048** | 0,984 | 0,087 | 0.003*** | 0.002*** | 0,935 | 0,288 | 0.031** |
| Ln-GDP | Coefficient | -1,449 | -3,111 | 0,813 | -0,174 | 9,825 | -11,748 | 37,298 | 1,921 | -3,094 | -8,169 | -0,659 | -0,357 |
| | Sig t | 0.000*** | 0.002*** | 0,199 | 0.000*** | 0,299 | 0,77 | 0,337 | 0,020** | 0.000*** | 0.000*** | 0,403 | 0.000*** |
| Adjusted R2 | | 19.30% | 17.80% | 6.40% | 22.70% | 21.30% | 60.40% | 44.80% | 59.00% | 43.90% | 27.20% | 5.20% | 27.60% |

Government Regulation:

The government ownership in the telco company highly related with the government system in each country and this paper explain on several countries as follow:

- Malaysia: The Malaysian Communications and Multimedia Commission (MCMC) was established in 1998 through the Malaysian Communications and Multimedia Commission Act to regulate the communications and multimedia industries in Malaysia. The government maintains interests in fixed-line incumbent Telekom Malaysia (TM) which dominates the country's wireline services market and mobile operator Celcom through its stake in regional player Axiata. The government has implemented Mandatory Standard on Access Pricing (MSAP) on broadband wholesale prices, which will reduce broadband access rates by 25%. This regulation is the government proactive efforts to improve the affordability of broadband services. Clearly in Malaysia government regulated Telco to serve and maintain affordability for all Malaysia citizen and this finding in line with previous research (Najid, NA & Rahman, RA, 2011).
- United State: The United States Federal Communications Commission (FCC) actively regulating universal access to telecommunications services in the United States. Subsidize and managed fee system created by the FCC to regulate universal access through The Universal Service Fund (USF). This regulation is based on The Communications Act of 1934 stated that every person shall have access to nationwide telecommunication service with sufficient quality and reasonable price. In May 2019, FCC declared it would be recommending that the merger of T-Mobile US and Sprint Corporation go through, after the companies provided 'significant' concessions. The FCC believes the deal will speed up the deployment of 5G throughout the US and bring faster mobile broadband to people living in rural areas. FCC as telecommunication regulatory body in the US taking stance as independent regulator with wide range of tools it can avail to ensure fair competition. In US, government did not involve Telco but more focused on maintain fair competition, and author did not find research related with government ownership in Telco. Related with the result in this paper government ownership in US impact on PER and Tobin's Q as we explained company with government ownership represented that Telco obey the rule and could give better return than others.
- Japan: The Ministry of Internal Affairs and Communications has long been a proactive regulator and has constantly pursued regulatory action to boost competition in the market. The basic laws governing the Japanese telecommunications industry in 1985 reformed competition through the issue of licenses in all categories of telecommunications services and laid the groundwork for the privatization of the two national monopoly operators. These were NTT (domestic services) and KDD (international services). The latter was

renamed KDDI following its merger with domestic long-distance carrier DDI and cellular operator Nippon IDOU Tsushin (IDO) in October 2000. (Fitch Solutions Group Limited, 2020). The government has severely restricted the ownership of one of them in the Telco Industry which is in "national security" from foreign ownership. These are a form of the Japanese government's role as controller (protect Telco from foreign ownership), regulator and investor. Based on this paper, average government ownership in Develop country is 5,8% and did not impact all variables (ROE, ROE, PER, Q). Result on this paper expected could be a reference for the next researcher could explore further government effect on company performance in Develop country.

4.2.1.2 GDP (affect Telco Financial Performance)

It is clear that GDP is one of indicator for global economic activity. In line with the PWC research, this result implored that when the economy flourish (high GDP), then this telecommunication sector *enjoyed* the growth in sales, which lead to high financial performance. This finding similar with research in Vietnam which indicate positive correlated between changes in GDP and firm performance (Lee et al., 2017). This finding also similar with research in Malaysia which indicate GDP has *positive* impact on profitability and liquidity (Siew Chun Hong et al., 2015). This research *confirmed* that on three models (ROA, ROE, Tobin's Q) GDP indeed has important impact on financial performance.

4.2.1.3 Firm Size-Market Capitalization (only significant in ROE)

Based on the firm size, only on ROE model it has *significant* impact on financial performance. Despite the large market capitalization, telco firms, in general (all regions) it could not increase ROA, PER and Tobin's. This finding similar with research in Nigeria which indicate positive relationship between firm size and profitability (Ilaboya, OJ & Ohiokha, IF, 2016). This result suggests that without any big market capitalization (company size), telco still can succeed.

4.2.1.4 Firm Age

Based on the firm age, from all regions, this control variable *does not* have any impact on financial performance. It was found on 4 research models. This result implied that it doesn't matter how old the firm, in author experience, innovation is more important than the age of the firm. This research proves that despite very long operational age, this industry has no relevancy between age and financial performance. This condition indicated because the absorption of

new technology is very quick and adaptive so the result telecommunication industry should be very cautious to keep improvising and innovate in order to survive. Another point of view, this result also could be interpreted as new comers can easily adapt and enter this industry as long as have sufficient (or very large amount of fund) and the most advance technology and with smaller equity/ capex. (Telco now are in disruptive by Over the Top Company).

4.2.1.5 DTA (Debt to Assets)

Only on ROA and Tobin's Q, DTA ratio has *significant impact*. There are only 2 of 4 observed model clarified this result. This finding is similar with research in India which indicate *positive correlated* between debt to asset ratio with profitability ratio (Chisti et al., 2013). Based on this result, indicated leverage only can boast up ROA as the utilization of the debt could generate more income per total asset but not income per total equity. Debt also cannot play important role to shape market price as the PER does not affected by this variable.

4.2.1.6 Working Capital to Total Assets

It suggests telco company that needs heavily invested is more focused to its capital expenditure to expand its market, and the working capital *is not directly impact* to the company profitability. This result in line with previous research in Vietnam if working capital should be optimal that balanced benefits, cost and to support the company in daily operation (Van, HTT et al., 2019). So far, this research success to find the same result and support for government control on certain firm could boast financial performance. What could be improvement in the research about telecommunication financial performance could add some human factors and lag analysis on the future research.

5. Conclusion & Recommendation

In all region, the impact of government ownership indeed found has significant effect on financial performance (for both accounting and market) is clearly confirmed in this research. This finding indicated that the role of government support is very crucial to help and improve telecommunication companies. Government generally has many roles to support strategic industries such as telecommunication. The role included a controller to maintain effective market conditions and set guideline for private industries. Another role included a builder to provide physical infrastructure that would allow citizens to access information on the internet.

Another role included a regulator to create an environment for fair competition. Last but not least included an investor to invest in technology and to be producer and buyer of Telco-ICT related products. When it was split on various region the result was inconsistent in US region, Non-US Region, Developed Countries, and Emerging Countries. This result implied that government ownership was not really matter in Developed Countries, as the market consider more mature and well-established. So, telecommunication business in these countries are focus on competition and market penetration. These findings in line with previous research, that stated that Government-linked companies have a positive relationship with firm value (Najid, NA & Rahman, RA, 2011). When Government Ownership combined (moderated) by size, it seems that it has some implication on financial performance. Big telecommunication firms without any support and government channel, didn't has any impact on their ROA, ROE, PER or Tobin's Q. So, small firms also have same opportunity with big firm as long as it has creative campaign and market penetration. It is clear that GDP is one of indicator for global economic activity and GDP indeed has important impact on financial performance. This result implored that when the economy flourish (high GDP), then this telecommunication sector enjoyed the growth in sales, which lead to high financial performance.

Based on the firm age, from all regions, this control variable does not have any impact on financial performance. This result implied that it doesn't matter how old the firm, in author opinion and experience, innovation is more important than the age of the firm. This research proves that despite very long operational age, this industry has no relevancy between age and financial performance. This condition indicated because the absorption of new technology is very quick and adaptive so the result telecommunication industry should be very cautious to keep improvising and innovate in order to survive. adapt and enter this industry as long as have sufficient (or very large amount of fund) and the most advance technology and with smaller equity/ capex. Telco industries now are in disruptive by Over The Top.

Based on the firm size, only on ROE model it has significant impact on financial performance. Despite the large market capitalization, telco firms, in general (all regions) it could not increase ROA, PER and Tobin's. This result suggests that without any big market capitalization (company size), telco still can succeed.

There are only 2 on ROA and Tobin's Q of 4 observed model clarified DTA ratio has significant impact. Based on this result, indicated leverage only can boast up ROA as the utilization of the debt could generate more income per total asset but not income per total equity. Debt also cannot play important role to shape market price as the PER does not affected by this variable.

For working capital, it suggests telco company that needs heavily invested is more focused to its capital expenditure to expand its market, and the working capital is not directly impact to the company profitability, itself, perhaps it is still very important aspect for company expansion and daily operation but not an instantly enjoyed by firm in current time. The availability of working capital could make the company more flexible to decide and execute some strategy that could impact on their financial performance in the future so there might be some lag effect here. This research showed the range of this value around only 6.4% up to 22.7%. The variability of financial performance could only explain by research model less than 25%. It is true that t-test showed that Government Ownership has some impact on financial performance, but its impact only slightly explained the ROA, ROE, PER and Tobin's Q.

Based on the findings, there are some recommendations: some phenomena that could be explored further were the pattern between a well- established country and an emerging market region. Government Ownership indeed proven has significant impact on four financial performance indicators. But unfortunately, this result still needs to be criticized because of it lack explanatory power. This research result expected could be a reference for the next researcher could explore further government effect on company performance in the same company with the broad region including Europe and Africa or in various industries with the specific country, region or several regions, and still needs to be improvised and addition or variable replacement could be considered.

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APPENDIX 1 LIST OF TELCO COMPANY

| NO | COUNTRY | COMPANY NAME | TOTAL |
|-----------|--------------------------|---|--------------|
| 1 | United States of America | AT&T INC, VERIZON COMMUNICATIONS INC, CENTURYLINK INC, SHENANDOAH TELECOMMUNICATION, VONAGE HOLDINGS CORP, LICT CORPORATION, NUVERA COMMUNICATION INC, OTELCO INC-A, FRANKLIN WIRELESS CORP | 9 |
| 2 | Japan | NIPPON TELEGRAPH & TELEPHONE, NTT DOCOMO INC, SOFTBANK GROUP CORP, KDDI CORP | 4 |
| 3 | Singapore | SINGTEL | 1 |
| 4 | Taiwan | CHUNGHWA TELECOM CO LTD, TAIWAN MOBILE CO LTD, FAR EASTONE TELECOMM CO LTD | 3 |
| 5 | Hong Kong | HKT TRUST AND HKT LTD-SS, PCCW LTD, CITIC TELECOM INTERNATIONAL, SMARTONE TELECOMMUNICATIONS, CHINA TELECOM CORP LTD-H | 5 |
| 6 | South Korea | SK TELECOM, LG UPLUS CORP | 2 |
| 7 | Japan | OKINAWA CELLULAR TELEPHONE | 1 |
| 8 | Indonesia | TELEKOMUNIKASI INDONESIA PT, SMARTFREN TELECOM TBK PT, INDOSAT TBK PT | 3 |
| 9 | Thailand | ADVANCED INFO SERVICE PCL, INTOUCH HOLDINGS PCL | 2 |
| 10 | Malaysia | MAXIS BHD, TELEKOM MALAYSIA BHD, TIME DOTCOM BHD | 3 |
| 11 | Philippines | GLOBE TELECOM INC, PLDT INC | 2 |
| 12 | Bangladesh | GRAMEENPHONE LTD | 1 |
| 13 | Vietnam | FPT CORP | 1 |
| 14 | China | DR PENG TELCOM & MEDIA GR-A | 1 |