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Editorial

Information Management and Business Review (IMBR) provides a unique platform to scholars around the world to share their knowledge and publish research work in the fields of information management, business, management and related disciplines. The work submitted for publication consideration in IMBR should address empirical and theoretical developments in the subjects related to scope of the journal in particular and allied theories and practices in general. Scope of IMBR includes: subjects of finance, accounting, auditing, cost & management accounting, financial psychology, financial literacy, marketing, information management, human resource management, knowledge management, innovation, change management, enterprise management, e-commerce and information system. Author(s) should declare that work submitted to the journal is original, not under consideration for publication by another journal, and that all listed authors approve its submission to IMBR. It is IMBR policy to welcome submissions for consideration, which are original, and not under consideration for publication by another journal at the same time. Author (s) can submit: Research Paper, Conceptual Paper, Case Studies and Book Review. The current issue of IMBR comprises of papers of scholars from Philpines, Indonesia, Thailand and Malaysia. Profitability & company value, tax compliance decision analysis, influence of funding sources & business diversification on financial performance, effect of motivation**,** organizational culture and commitment on employees' performance, influence of social support on entrepreneurial inclination among business students, determinants & potentials of savings in households and social media perception affecting the business are some of the major practices and concepts examined in these studies. Journal received research submission related to all aspects of major themes and tracks. All the submitted papers were first assessed by the editorial team for relevance and originality of the work and blindly peer reviewed by the external reviewers depending on the subject matter of the paper. After the rigorous peer-review process, the submitted papers were selected based on originality, significance, and clarity of the purpose. Current issue will therefore be a unique offer, where scholars will be able to appreciate the latest results in their field of expertise, and to acquire additional knowledge in other relevant fields.

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PAPERS

Information Management and Business Review (IMBR)
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Profitability and Company Value: Empirical Study of Manufacture Companies in Indonesia Period 2009 - 2014

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Abstract: Maximizing the value of the company is one of the financial issues are interesting to study. Profitability is one of the factors that influence value of enterprise be in accordance with asset and equity owned. The purpose of this research is to describe the correlation between profitability and company value. Based on the problem and purpose research, the research is designed as quantitative research. Secondary data used as the basis for the analysis was obtained from ICMD with observation period of 5 years to 10 companies. Data analyzed by using linear regression multiple analyses. Empirical results show that profitability variability explains change of company value. Return on Investment and Return on Equity has positive and significant effect on company value, but Net Profit Margin negatively and significantly affects company value.

Keywords: *Company value, profitability, and manufacture*

1. Introduction

The main goal for a firm going public is to increase the shareholder welfare by increasing the value of a firm (Salvatore, 2005). The firm value is very important, as higher firm's value will increase the welfare of the stockholder (Brigham et al., 2006). The company's value is often associated with stock price growth, so the increase of stock price will also increase the value of the firm. The welfare of the shareholder and value of the firm are commonly represented on the stock price, which implicitly represent the investment decision, financing and asset management. Company value is one of the management's success in managing the company activities and decision making process. Besides that, firm value also reflects of market response to the company. Stakeholder theory explains that the increase in the value of the company which can be measured by the share price that showed shareholder wealth (Mursalim et al., 2015). Therefore, the increase in share prices will result in changes in the level of welfare. In a fiercely competitive environment, in order to both survive and develop, companies must work to achieve the cheapest way to carry out their investment plans and to maximize firm value and shareholder wealth.

In some financial literature, the market capitalization becomes a proxy for the value of the company. Market capitalization is calculated by multiplying the value of company stock market price by the number of shares outstanding. Therefore, the higher the company's share price and a larger number of shares outstanding in the market, the greater the company's market capitalization. Considering number of outstanding shares to be constant (except in the case of buyout or split share), the firm's value is largely affected by market price of firm (Rajhans and Kaur, 2013). Determining the value of a company has always been a challenge to economists and market practitioners, due to its importance and difficulty, because it requires a credible relation between accounting values and market value (Vergos et al., 2016). Baye (2006) defines firm value as the present value (PV) of current expected future cash flows. Shin-Ping and Hui-Ju (2011) state that shareholder's wealth, growth; dividend-payout, ratio and leverage are key determinants of firm value. Other research found company value is determined by assets, cash flow, relative worth and intangible assets such as corporate image/reputation and human resource (Huselid and Becker, 1997). However, in general, investors are more concerned with profitability as a basis for assessing a company. In addition, the ability company have benefited are also become factors of the best value of enterprise. Companies that obtain greater profit will be an option by investors. Theoretically, profit is a dividend variable that calculated by the firm each period. Therefore, through this study will be analyzed the effect of profitability on company value.

2. Literature Review

Company Value: The conventional measure of firm value is obtained by adding the market value of equity to the market value of debt. However, this firm value measure includes all assets owned by the firm including its cash holdings. Netting cash out from firm value yields enterprise value, which can be considered to be the market value of just the operating assets of the firm. It means that, value also shows the performance achieved by the company from management activities are carried out effectively and efficiently. Stakeholders will respond positively demonstrated through the development of demand for the company's stock is issued to every success. Value is not only interested for stakeholders. It also determines the sustainability of the company in the future. Companies that are able to develop value in a sustainable manner will be a competitive company than others. Thus, the company's management is required to manage the activities and the ability to be able to create value. Meanwhile, Van Horne & Wachowicz (2009) describes that value of the firm is determined by market price of the firm's common stock, which in turn is a reflection of the firm's investment, financial and dividend decisions.

Profitability: Profitability can be defined as the ability of a firm to generate profits. Sarngadharan & Rajitha (2011) differentiate profit from profitability based on how it measure the earning capacity, in which profit is an absolute measure of earning capacity but profitability is a relative measure of earning capacity. Profit indicates a firm's earning during a specified period. While, profitability denotes whether these profits are constant or improved or deteriorated, how and to what extent they can be improved. That is why profits of two different firms might be identical, however not for the profitability. Company profitability was company's ability to generate net income from the activity undertaken in an accounting period. Profitability can become an important consideration for investors in their investment decisions. With a bid to get the high profits, was expected to attract investors in investing. Many leaders use financial performance as basis for company's performance. Companies that can get huge profits can be said to be successful, or have a good financial performance (Moeljadi, 2014). Profitability was the end result of a number policy and decision management (Brigham et al., 2006). Company profitability was a company's ability to generate net income from the activities carried out in an accounting period.

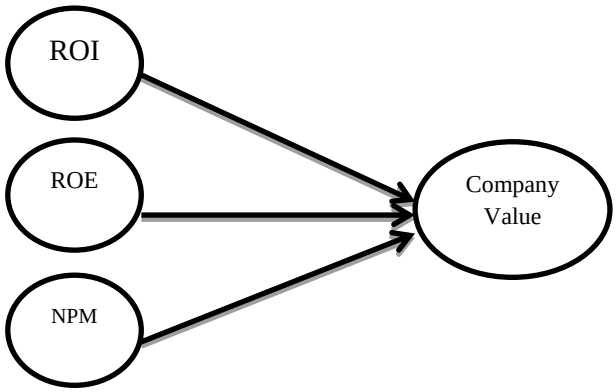
3. Methodology

This study is a causality research which designed to test correlation between profitability and company value. Research samples are manufacturing companies listed in Indonesia Stock Exchange 2009-2014. Criteria used to determine the sample are:

1. Manufacturing companies that regularly publish financial statements the period 2009 – 2014
2. During the study period, the company makes a profit

Based on these criteria, then there are 10 companies sampled. The analytical techniques used to examine the relationship between variables are multiple regression analysis.

Figure 1: Conceptual framework

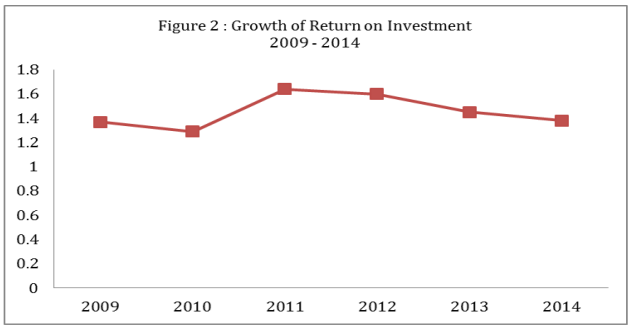


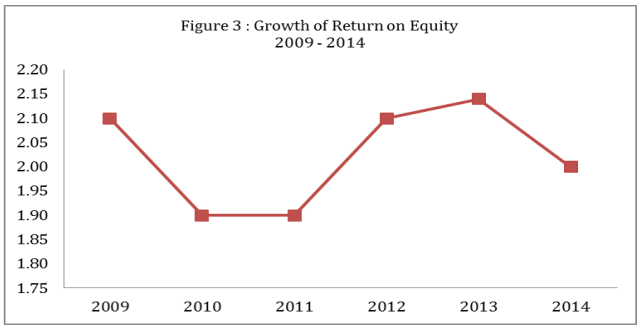
Based on the research problems, the purpose, and conceptual framework, then the hypothesis proposed are;

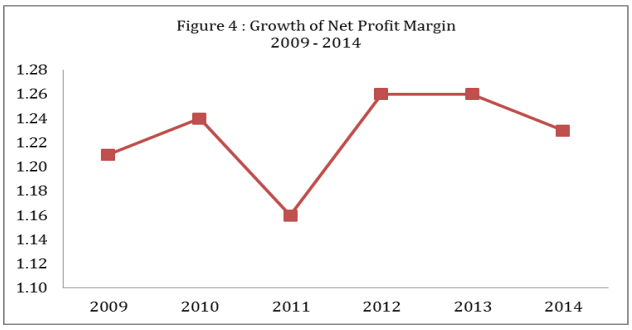
- Return on Investment has positive and significant on company value
- Return on equity has positive and significant on company value
- Net profit margin has positive and significant on company value

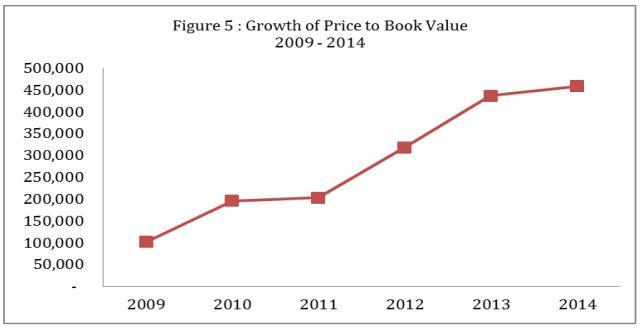
4. Results and Discussion

Figure 2, 3, 4, and 5 showing the growth of dependent variable Return on Investment (ROI), Return on Equity (ROE), Net Profit Margin (NPM) and independent variable Price to Book Value (PBV) of period 2009 – 2014. Based on figure data, it seems that the growth each variable vary of ROI, ROE, NPM and PBV. The firm ability have benefited from investment done varies amount 1, 29 – 1, 64 which the highest in 2011. This means companies in the sample able to manage asset owned so with optimally management can be obtained profit. Profitability which measured with ROE amount 1, 90 – 2, 14 which the highest in 2013. Profitability of firm can be achieved from NPM amount 1, 16 – 1, 26 which the highest in 2012 and 2013.









Source: Lestari & Armayah (2016)

In contrast of independent variable growth which inclined to fluctuate? Dependent variable, PBV shows positive trend. The lowest PBV was in 2009 and the highest in 2014. It means that manufacture selected value in this research of period 2009 – 2014 tend to increased. Based on calculation about the effect of profitability on company value the results as follow as:

Table 1: Summary of regression calculation

Variables	Coefficient	Tolerance	VIF	Probability
Constant	-7.8153, 306	-	-	0,000
ROI	436922,782	0,335	2,982	0,022
ROE	439033,120	0,338	2,962	0,010
NPM	-375045.468	0,645	1,549	0,004
F *Statistic*	14,827			
Probability	0,000			
R^2	0,443			
R Adjusted	0,413			
D-W	1,329			

Source: Lestari & Armayah (2016)

Discussion: Table 1 displays result of regression of the test for the effect of profitability toward Manufacture Company's value. Table 1 presents the empirical results of the regression of model using PBV as the company variable. The value for the R^2 in the model is 0.44 which shows that 44% of the variation in the dependent variable is explained by the independent variables of the model. The 56% variation in the dependent variable remains unexplained by the independent variables of the study. The value for the F-statistic is 14.82 and is significant endorsing the validity and stability of the model relevant to the study. The results of variables suggest that there is a positive relationship between the ROI, ROE and PBV. This positive relationship shows that the ROI and ROE of a manufacture firms affects the value of the manufacture firms. The higher the ability of company has benefited from asset and equity owned, ceteris paribus, the higher value of company. The results of study consistent with research by Sun & Kim (2011) and Jacinta (2015). In contrast, NPM shows negative relationship between firm values. This result shows that a fall in NPM has had a negative impact on firm value. This means that the higher the margin is set by the company, this value the company would be down. A high gross margin basically will have an impact on the selling price products or services company. The fact that would be the grounds that investors do not want the selling price products company set high because in the long run will affect competitiveness company.

5. Conclusion

Based on the analysis of results and discussion, it can be concluded that Return on Investment and Return on Equity has positive and significant effect on company value, but Net Profit Margin negatively and significantly affects company value.

Limitations: (1). Examines the relationship between non-financial variables on company value, (2). Expand the object of the study to banking and finance industries or transportation sector.

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Tax Compliance Decision Analysis: Audit Strategy, Audit Rate, Perceived Probability of Audit, and Taxpayer Ethics

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Abstract: This study aims to provide empirical evidence that audit strategy, audit rate, perceived probability of audit and taxpayer ethics have impact on tax compliance. This Research employs the experimental laboratory method with multiple treatment design to refer behavioral change in tax compliance decision. 156 voluntary student participants were recruited from three major; accounting, management, and economics major. The participants grouped into random and fixed group adaptable with audit strategy treatment. Random selection is used to establish participant to each group. Audit rate treatment was classified in four audit level; uninformed audit rate, 10%, 20%, and finally 30%. Perceived probability of audit treatment; subjects determine the percentage of perceived audit. Furthermore taxpayer ethics treatment uses tax ethics film. The results provide empirical evidence that in the random group, strategy random audit, audit rate, perceived probability of audit and taxpayer ethics have significant relationship with tax compliance decision. Conversely, fixed group disprove that audit fixed strategy insignificantly with tax compliance decisions. Audit fixed strategy and audit rate have indirect relationship to tax compliance decision by perceived probability of audit. These results from both of group may suggest that taxpayers will increase the tax compliance decision when his possibility to be audited is high. Taxpayer ethics has significant impact on tax compliance decision at all audit level. Taxpayer ethics plays an important role of increased tax compliance decision. This study has implication for judgment theory to consider taxpayer ethics.

Keywords: *Audit strategy, audit rate, perceived probability of audit, taxpayer ethics and tax compliance decision*

1. Introduction

Recent studies of tax compliance expand to consider social and psychology factors instead of economics factors. These factors are based on the tax compliance decision which related to morale contract between taxpayers and government (Directorate General of Taxes of Republic Indonesia Direktorat Jenderal Pajak) that taxpayers have to pay for using public facilities. Indonesia applies self-assessment system where a taxpayer is required to assess his tax liability by determining his taxable income, computing his tax liability and submitting his tax returns based on existing tax laws issued by tax authorities. Actually, Indonesia still has great tax potential because the existing number of taxpayers just reached 11,17 million from Indonesia's total population of 242 million (December, 2014). Last couple years tax revenue does not meet the target, e.g. first-half of year 2013, the tax revenue just at 89,1 percent and the end of December 2014, tax acceptance 981,9 trillion. Tax revenue fails to meet the target—tax revenue only reached at 91,5 percent from the set target or 90 trillon tax shortfalls[1]. These fact data may suggest that tax reform conducted by government does not yet reached the aims rising of tax ratio and tax compliance ratio. Currently the ratio of tax compliance in Indonesia, only 13.5% compared to average ratio of tax compliance in Asia of 20%. The substantial disparity between reachable potential and actual tax denotes that tax compliance is serious problem and it needs to be reviewed carefully.

Tax reform should be not only reforming the tax regulations, but also the tax administration and the strategies to emerge compliance by altering public perception over tax. The increase of tax compliance ratio could raise tax revenue and eventually it could help government in financing development and in paying government debt. Taxpayer compliance can be increased through economic and psychological aspect. Becker (1968) is the first author who employs economic approach in conducting the empirical study of tax compliance. Recently, instead of economic approach, many empirical studies emphasize psychological aspect

[1] See *http://www.cnnindonesia.com/ekonomi*, MenkeuBambang Brodjonegoro, December 15, 2014.

in terms tax compliance (Hanno and Violate, 1996; Milliron, 1985; Milliron and Toy, 1988). Henderson & Kaplan (2005) extends a model that examines the relationship between ethical beliefs, ethical evaluation and tax compliance. His result provides favorable empirical evidence for explaining the relationship between ethical evaluation and tax compliance proxy by multidimensional ethical scale (MES). Prior studies show that the efforts to increase taxpayer compliance should not ignore economic and psychology factor such as tax payer ethics and audit strategy. This study aims to provide empirical evidence concerning the presence of behavioral changes as attributed to the differences of audit strategy and audit rate over tax compliance decision. Further, this study demonstrates that perceived probability of audit constitutes moderating variable in tax compliance decision. In this study, I also examine taxpayer ethics as a moderating variable between perceived probability of audit and tax compliance decision.

Five important differences with previous studies to this study should be noted. First, this study uses Multidimensional Ethical Scale (MES) to measure taxpayer ethics. Prior studies such as Gosh and Crain (1996) use ethical standard to measure tax ethics. MES has the advantage that it can measure the tax ethics more specifically than general ethics. Second, this study uses experimental method with software and tax video which has customized, so that it simplifies the selection of audited subjects and quickly notices the changes of subjects' attitudes when the treatments given to them. Third, I emphasize two approaches of tax compliance decision. Those are economic (e.g. audit strategy and audit rate) and psychological approach (e.g. perceived probability of audit and taxpayer ethics). Fourth, this study has specific design with respect to the framing of tax case in Indonesia. The framing of the tax case is shifted into gain and loss tax. Previous studies (Poputra, 2009; Makhfatih, 2005; Ghosh & Crain, 1996) never discovered such this design. Fifth, this study controls several variables that influenced on tax compliance decision, such as tax rate, penalty, and income. Other experimental studies do not employ the control variable, but emphasize on the assumptions (Poputra, 2009; Makhfatih, 2005). This study contributes to literature, methodology, and policy. First, when making ethical decision concerning tax compliance decision should not ignore the factor such as ethics. Second, this experimental design uses structured procedure and has favorable internal validity that accordance with the taxation condition in Indonesia. This favorable experimental method adequate to demonstrate that psychological approach would be better able to predict of the tax compliance decision than expected utility model. Third, this study contributes to better changes of tax audit system by upholding on random audit strategy and to higher audit rate which provides an opportunity for potential audit in enhancing tax compliance.

2. Literature Review

Theories underlined Tax Compliance Decision Research: Becker (1968) examines tax evasion that underlined on the criminal economic theory. His result suggests that the probability of detection and the size of fine imposed, determine the amount of income evaded. The Becker model is also applied to tax evasion by Allingham and Sandmo (1972) who use not only the criminal economic theory, but also the agency theory that there is contract between citizen and state in terms of tax payment. Essentially, citizen never formally signed the contract of tax payment; however they must pay payroll tax for income they earned.[2] There is a psychological tax contract that portrays the relationship between taxpayers and tax authorities. The psychological tax contract is influenced by government policy, tax authorities' behavior, and state institutions (Feld and Frey, 2005), which in turn emerges moral hazard and adverse selection due to asymmetric information between taxpayers and tax authorities and divergence interests among counterparts. Taxpayers, therefore, taken to be a "quasi-voluntary" with emphasis on his self-interest (Levi, 1988). On the other hand, tax authority optimally chooses the way dealing with the taxpayers by acknowledging that external interventions in the form of rewards or sanctions may increase taxpayers' motivation to pay taxes. There are two arguments proposed that there is a gap between theoretical studies and empirical evidence in terms of tax compliance (see the surveys by Andreoni et al., 1998; Slemrod and Yitzhaki, 2002; Torgler, 2003). First, it argues that the probability of being detected is subjective, implying that individual perceptions of being caught when cheating on the tax code much higher than objective probabilities of detection. This argument portrays the psychological impact related to tax compliance decision. The second argument is traditional tax

[2]*Tax is a contribution from citizen who owed by individuals or entities that are forced by law, with not a direct reciprocal and used for state purposes to attain the prosperity of the people". See UU No. 28 Tahun 2007 about KetentuanUmumdan Tata Cara Perpajakan.*

compliance that only focuses on the main economic arguments in terms of tax compliance decision. The empirical evidence, however, indicates that the standard economic model is unable to portray the extent of tax compliance in more favorable way (Frey and Feld, 2002).

The certainty on audit encourages taxpayer to make carefully decision. Slemrod et al. (2001) find that taxpayers who informed to be audited may report carefully the income on subsequent period than taxpayers who uninformed to be audited. This finding is consistent with Friedland et al. (1978), Becker et al. (1987), and Webley et al. (2006). In addition to the certainty on audit, the uncertainty of audit also encourages taxpayer to make carefully his tax decision. When government implements the system of audit random, taxpayers tend to report carefully his income, mainly risk-averse taxpayers Snow and Warren (2005) argue that audit selection return, which based on the random strategy and procedure may have impact on the increasing tax compliance. Recently, IRS has re-established audit random programs for estimating tax compliance and has updated audit formula for running audit strategy[3]. IRS has demonstrated the importance of randomization and confidentiality of audit strategy as instruments for enhancing the tax compliance[4]. The studies that describe the impact of audit uncertainty on the increasing of tax compliance decision have been conducted by Spicer and Thomas (1982), Alm et al. (1992a), and Clark et al. (2004). They employs experimental design and provide empirical evidence that the audit random is able to achieve the highest tax compliance. Nevertheless, there are some studies that provide dissimilar result that there is no significant impact of audit on tax compliance (Reiganum and Wilde, 1985; Cowell, 2006; Erad and Feinstein, 1994). The results suggest that tax compliance is not only based on the audit, but also on the perceived probability of audit. The tax compliance increases when taxpayer perceives having opportunity to be audited.

Utility theory affords to explain the appealing findings related to the contradictive of audit probability in terms of elaborating the tax compliance decision. Some studies of tax compliance decision which employing utility theory provide inconsistent evidence (Allais, 1953; Ellsberg, 1961). Futhermore, subsequent studies of tax compliance begin to employ utility theory with various models, such as the rack-dependent expected utility model by Quiggin (1982) and Yaari (1987), the decision weighting model by Kahn and Sarin (1988), and cumulative prospect theory advanced by Tversky and Kahneman (1992). They argue that nobody likes paying taxes, and if in case he has to pay tax, he will maximize his utility firstly. Individual decision to maximize his utility does not only depend on extent to which he obtain the information of audit certainty, but also on extent to which tax savings performed. Taxpayers who risk averse will evade losses due to penalties in case being audited, but risk taker will calculate the extent to which tax savings being performed in case being unaudited. Numerous studies of tax compliance behavioral employ prospect theory. The prospect theory developed by Kahneman and Tversky(1979) whom argue that individual provides different attitudes in decision making in the framing of losses and gains condition. I, therefore, design distinctive tax case in framing of gain and loss. The behavior aspects such as the characteristic of personality and situational factor afford to influence tax compliance decision. The exploration of tax compliance behavior has been developed after the psychological and sociological theories provide important contributions to the studies of tax compliance decision. Some of them are ethical theories such Justice Theory, Relativism Theory, Teleology-Egoism Theory, Deontology Theory, and Teleology-Utilitarianism Theory. Rest (1979), Brandt (1959), Reidenbach (1988), Beck (1991), and Alm (1988) apply ethical theory on the studies of business and accounting behavioral.

Tax Compliance Decision: Compliance is act up to applicable rules. If taxpayer fails to meet his tax obligation, either intentionally or unintentionally, then it may be a decision to conduct noncompliance. Hence, personality characteristic plays an important role in ethical decision-making, whether his decision relies on rational or intuitional decisions (Schwartz, 1967; Grasmick & Green, 1980; Grasmick & Scott1982; Kaplan, 1985). Alm and deJuan (1995) examine that economic and non-economic factors influence tax compliance. Their result supported by prospect theory of Kahneman and Tversky (1979) whom convey that individual provides different responses dealing with losses or gains conditions. Alm and Vazquez (2001) employ two approaches to examine taxpayer compliance. First, they treat taxpayer as a potential criminal subject, which the approach has impact on audit frequency and penalty for noncompliance tax efforts. Second, they examine

[3]See IRS News Release IR-2002-05, January 16, 2002.
[4]SeeRoberts v. Internal Revenue Service, 584 Federal Supplement 1241 (Eastern District, Michigan), 1984.

the social institution's role in term of portraying taxpaying compliance. The second approach has impact on social norm and the tax authority administration. Uppal (2005) conducts tax compliance study in Indonesia. He measures tax compliance rate by employing ratio between number of taxpayers whom fill in tax report and of registered potential taxpayers. The result shows that tax compliance rate in Indonesia equivalent to 2.5 percent of total registered taxpayers. This result suggests that tax compliance rate in Indonesia is low. Recently, tax compliance rate in Indonesia goes up to 13.3 percent, less than average rate of tax compliance in Asia. The low rate of tax compliance leads Indonesia lost the potential tax revenues, unfavorable taxation system, and unreliable tax for sources of revenues. The disadvantage implications contradict the government's effort to promote revenues from taxes.

Audit Strategy: Preliminary studies portray tax compliance modeling as a game between taxpayer and tax authority because there are conflicting interests concerning taxpayers' welfare maximization and government's revenues maximization (Beck, 1989; Reiganum and Wilde, 1985). Alm et al. (1993) argue that there are several ways and strategies for tax audit selection, namely random audit rule and fixed audit rule. Numerous studies provide empirical evidence that random audit strategy will enhance tax compliance because non-compliant taxpayers tend to avoid the penalty risk (Ghosh and Crain, 1996; Beck, 1991; Jackson and Milliron, 1986). Prior studies clarify that the assumption of asymmetric information between Dirjen Pajak (principal) and taxpayer (agent) perhaps require monitoring. The objective of monitoring is to accurately capture whether taxpayer performs compliance or vice versa. In context of tax, monitoring closes to examination which performed by Dirjen Pajak. This examination aims to avoid the possibility of moral hazard or adverse selection which performed by taxpayers when they fill in the tax report (SPT). Thus, when determining the date and the reason of taxpayer's examination should consider appropriate examination strategy. The hypotheses, therefore, proposed as follows:
H1a. Random audit strategy has positive impact on tax compliance decision.
H1b. Fixed audit strategy has positive impact on tax compliance decision.
H1c. Random audit strategy has more impact on the increasing tax compliance decision than fixed audit strategy.

Audit Rate/Level: Higher audit rate, higher tax compliance. Consequently, higher possibilities of taxpayer to be examined which in turn has impact on taxpayer attitude that may be more conservative. Friedland et al. (1978) find that decreased audit rate in random audit strategy will have impact on probability of increased income taxable report. This finding is consistent with Beck (1991), Alm (1991), and Alm et al. (1992a, 1993) that find tax compliance increased when audit rate is higher in random audit strategy. The decreased of audit rate has impact on the decreased of collecting tax income (Dubin et al., 1990). Dubin (2004) finding support previous empirical evidence that the decreased of audit rate has impact on the decreased of tax compliance decision. In contrary, Slemrod et al. (2001) do not provide actual information about individual tax compliance because their experiment employs reported tax data, not the actual tax data. Thus, this study investigates the following hypotheses:
H2a. Audit rate has impact on the increased tax compliance decision.
H2b. The Increased audit rate has positive impact on the increased tax compliance decision.

Perceived Probability of Audit: Numerous empirical evidence explore the impact of perceived probability of audit on tax compliance. Milliron and Toy (1988) investigate seven key compliance features and they imply that audit probability determines tax compliance decision. Alm (1988) investigates perceived probability of audit that relies on a relationship between the principal (tax institution) and the agent (taxpayer). The relationship between tax authority and taxpayer generates audit selection rules. If individual report income lower than the cutoff level, he is more likely will be audited, and vice versa. Kahneman & Tversky (1979) provide empirical evidence that individual considers that the probability of being audited is lower, so individual systematically believes that their audit probability is lower than actual probability. According to explanations above, it implies that individual will report income which possible to him not to be audited by considering the possibility of being audited. This finding is consistent with Ghosh and Crain (1996) whom provide empirical evidence that higher perceived probability of audit, lower tax noncompliance rate Beck and Jung (1991) also find that reported income increased when perceived probability and penalty rate increased. Taxpayer who under uncertainty condition of audit probability tends to be conservative and avoid

noncompliance (Jackson and Milliron, 1986; Beck et al.1989). According to explanations above, this study examines the following hypotheses:

H3a. Perceived probability of audit has positive impact on tax compliance decision.
H3b. Random audit strategy has positive impact in increasing tax compliance decision through perceived probability of audit.
H3c. Fixed audit strategy has positive impact in increasing tax compliancedecision through perceived probability of audit.
H3d.The increased audit rate has positive impact in increasing tax compliance decision through perceived probability of audit.

Taxpayer Ethics: Prior studies examine the role of ethics on tax compliance such as Schwartz and Orleans (1976) that focus on social commitment aspect to tax compliance. Later, Jackson and Miliron (1986) develop the study by defining ethics in two measurements of ethical orientations and ethical evaluations. Grasmick and Green (1980), Grasmick and Scott (1982), Kaplan and Reckers (1985), and Reckers et al. (1994) define tax noncompliance behavior as judgment that behavior is morally fault or immoral. Their results suggest that there is a positive relationship between ethics and tax compliance, but Webley and Eidjar (2001) provide negative evidence. Ghosh and Crain (1996) define ethics as feeling that individual will manipulate in order to achieve his goal called intentional noncompliance tax. Henderson & Kaplan (2005) finding shows that ethics orientation affects ethics evaluation and in which turn positively affects tax compliance. He develops a model that portrays directly and indirectly relationship among ethics orientation, ethics evaluation, and tax compliance. Psychological process of tax ethics depends on *self-determination* and *self-esteem* influenced by tax audit, because tax institution able to use tax audit for enhancing tax morale in terms of taxpayer having higher *self-determination* (Deci et al., 1999). It concludes that individual behavioral play a role of decision making concerning tax compliance. Systematically, tax institution affects morale and tax ethics, so that taxpayers voluntarily willing to pay tax. There is a psychological contract between taxpayer and tax institution in terms of determining fiscal changes including loyalty and ethics of counterparts (Feld and Frey, 2005). Theological theory provides basic understanding for individual in decision-making and realizes the consequences of his decision. This understanding conforms to individual decision concerning tax compliance decision, because he must accept the consequences of either compliant or noncompliant. This research employ MES to test taxpayer ethics. Shaub (1994) reveals that using MES is more favorable measurement than others (e.g. defining issues test or general ethics) because it particularly identifies the rationalization behind morale reasoning and provides an understanding of respondents' reasons believing particular behavior as ethical behavior. According to prior studies, this study examines following hypotheses:

H4a. Taxpayer ethics has impact on increased tax compliance decision.
H4b. Taxpayer ethics moderates a relationship between perceived probability of audit and tax compliance decision attributed to existing of random audit strategy.
H4c. Taxpayer ethics moderates a relationship between perceived probability of audit and tax compliance decision attributed to existing of fixed audit strategy.

3. Methodology

Experimental Design: This study uses experimental method because it can capture taxpayer behavior and economic factor regarding the influences toward tax compliance. In order to prevent maturation, I create attractive experiment by using audiovisual (video) and software application. The video contains film that reflects multidimensional ethics such as relativism, contractual and moral equity. It also contains particular treatment for taxpayer ethics with multiethicalscale (MES)design that adopts taxation condition in Indonesia. The software application contains experimental treatment for subjects. The treatments consist of numerous conditional questions that reflect audit strategy, perceived probability of audit, and taxpayer ethics with measurement items and manipulation check regarding tax compliance. This research uses laboratory experiment with multiple treatment design. According to Kardes (1996), experimental method provides maximum results as if the subjects close to the real phenomena. Thus, the subjects of this study are graduate and post-graduate students with various major. The subjects, on average, have been imposed tax liability for income they earned and have performed tax paying activities. Total number of subjects is 156 students. All of

participants studies at Faculty of Economic and Business of Universitas Gadjah Mada with accounting, management, and economics major. The subjects are grouped into two group based on audit strategy, namely random and fixed audit strategy. Audit level consists of uninformed and informed about the level. For uninformed level, the subjects do not know the level of audit. Conversely, the informed subjects know the audit level which consists of level of 10 percent, 20 percent, and 30 percent. The following table describes experimental design. Futhermore, The subjects watch the video before answer the ethics questionnaire on software application.

Descriptive Statistics: The experimental subjects recruited from three major, namely 96 subjects of accounting major (61 percent), 51 subjects of management major (33%), and 10 subjects of economics major (6 percent). Subjects of 96 have worked and of 60 have not worked before. These demographic results conform to author's expectation that subjects constitute taxpayers and potential taxpayers. The subjects grouped into random group and fixed group. The manipulation test results show significance level of 0.000 for all treatments including audit strategy, audit rate, perceived probability of audit, and taxpayers' ethics. These results indicate that all of subjects have known and understood well of each procedure, and have similar interpretation concerning the given treatments. In other words, manipulation test results of experimental treatment are effective. The test results of instrument quality indicate that all of measurement items meet the standard. The results of each test show that the score of each indicator are greater than score of 0.6. The whole employed constructs meet the reliability and validity requirement because composite reliability and conbrach alpha are above the score of 0.7.

Group	**Random**	**Fixed**
Total Subjects	78	78
Treatments:		
Audit Strategy	Random	Fixed
Audit Level/Rate	uninformed audit level	
	10% 20% 30%	10% 20% 30%
Perceived probability of audit	Subjects determine the percentage of perceived audit.	Subjects determine the percentage of perceived audit
Taxpayer Ethics	Subjects are shown video regarding regulations and tax fraud	Subjects are shown video regarding regulations and tax fraud

4. Results

This study applies SmartPLS to evaluate structural model by pointing out R-square for dependent variable and coefficient scores of path (β) for independent variable. Validity test of random and fixed group show that the proposed model is fit because GoF score closes to 1 (random group score equivalent to 0.693526768 and fixed group score equivalent 0.691364291). The random group treated with uncertainty audit level that means each subject has same audit possibility. The percentage of taxpayers ethics equivalent to 31 percent is highest than other variables, therefore, taxpayers ethics is key feature in capturing tax compliance decision. Audit rate and perceived probability of audit have significant relationship with tax compliance decision. The R-square score of 51.7 percent indicates that the percentage of all independent variables contribute to tax compliance decision is 52 percent. Fixed group is. In other words, the subjects of fixed group will be audited as if taxable income is overpaid. The result show that fixed audit strategy provides direct effect with coefficient of 0.16, but it is insignificant affect on tax compliance (prob. > 0.05). Taxpayers ethics contributes coefficient of 0.21 on tax compliance. All of relationships are significant at level of 0.05. Table 1 is the summary results of random and fixed group.

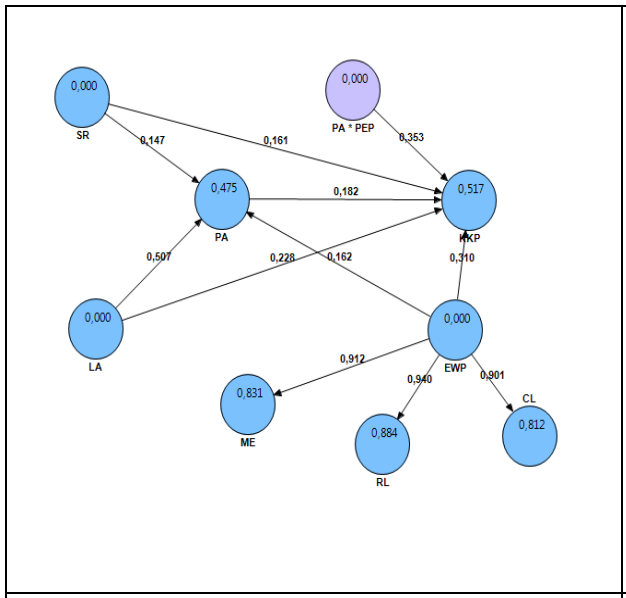

diagram1. *partial least square report from random group, as diagram is drawnon tax compliance decision*

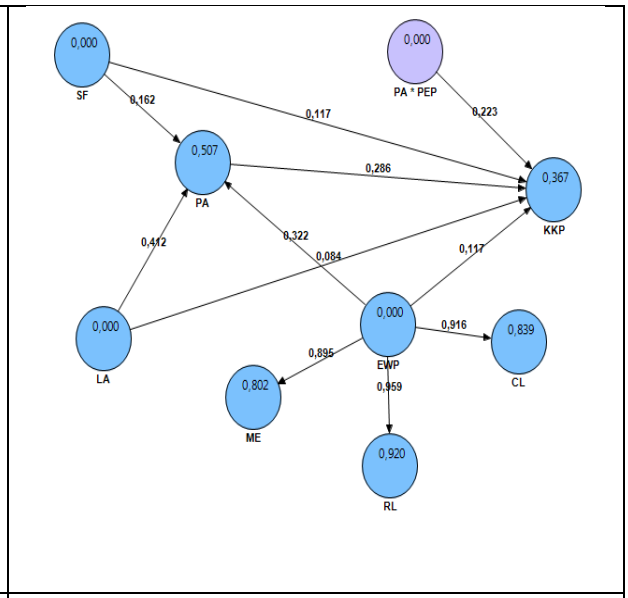

diagram2. *partial least square report from fixed group, as diagram is drawn on tax compliance decision,*

Table 1: The Results Summary of Random and (Fixed) Audit Strategy

No	Hypotheses	t-value	Results
1	H1a.Random audit strategy has positive impact on tax compliance decision.(supported)	2,725091	Significant
2	H1b.Fixed audit strategy has positive impact on tax compliance decision. (unsupported)	(1,571354)	Insignificant
3	H2a. Audit rate has impact on the increased tax compliance decision. (supported)	3,985569 (2,340224)	Significant
4	H3a. Perceived probability of audit has positive impact on tax compliance decision.(supported)	2,425964 (3,503009)	Significant
5	H3b. Random audit strategy has positive impact in increasing tax compliance decision through perceived probability of audit. (supported)	2,434151	Significant
6	H3c. Fixed audit strategy has positive impact in increasing tax compliance decision through perceived probability of audit. (supported)	(2,2959)	Significant
5	H4a. Taxpayer ethics has impact on increased tax compliance decision.(supported)	5,435047	Significant
7	H4b. Taxpayer ethics moderates a relationship between perceived probability of audit and tax compliance decision attributed to existing of random audit strategy.(supported)	5,330293	Significant
8	H4c .Taxpayer ethics moderates a relationship between perceived probability of audit and tax compliance decision attributed to existing of fixed audit strategy. (supported)	(3,782113)	Significant

Sig. t-value> 1,94

Table 1 provides empirical evidence that random audit strategy increases tax compliance decision than fixed audit strategy, therefore, hypothesis H1b supported. Multiple treatment design test within subjects shows that audit rate of 10 percent, 20 percent, and 30 percent denote the increased tax compliance. Audit level of random group have impact on tax compliance with audit rate of 10 percent and 30 percent (sign. t > 1.94), whereas audit level of fixed group has impact on tax compliance at all level audit of 10 percent, 20 percent,

and 30 percent. These results indicate that audit level having impact on the increased tax compliance decision is higher, therefore, hypothesis H2b supported. Indirect relationship shows significant result on all of audit level. These results may suggest that taxpayers will increase the tax compliance decision when his possibility to be audited is high. Fully mediation generated for indirect relationship between audit level and tax compliance decision through perceived probability of audit (AL→PCP→TCD) at audit level of 10 percent, 20 percent and, 30 percent. Taxpayer ethics (TPE) has significant impact on tax compliance decision at all audit level with t-value of above 1.94.

Discussion: Previous studies provide empirical evidence that random audit strategy has more significant impact than fixed audit strategy's impact on increased tax compliance decision. It indicates that taxpayer with higher uncertainty audit will be more compliant than taxpayer with certainty audit. Alm et al. (1993), Ghosh and Crain (1996), Beck (1991), and Jackson and Milliron (1986) provide similar results. This study's result may suggest that taxpayer of fixed audit strategy gains learning process when he determines the amount of taxable income reported. It means taxpayer will perform trial and error for initial reporting. This learning process induces taxpayers to assure the period of being audited and unaudited. In contrast with random audit strategy, all taxpayers has same opportunities to be audited for tax reporting, so that taxpayers will determine the amount of taxable income more carefully. Audit level of fixed audit group shows significant influence on the increasing of tax compliance decision at either uninformed or informed audit level (10, 20, and 30 percent) This finding may indicate that there is certainty for taxpayer likely audited Taxpayers, therefore, will determine the amount of taxable income carefully. In contrast with fixed audit group, there is appealing finding of the influence of audit level in random audit group. The finding shows that there are significant influence at uninformed audit level and at audit level of 10 percent and 30 percent. There is significant influence of increased tax compliance when audit level of 10 percent and in contrary, become insignificant when audit level turns into level of 20 percent, and is significant when audit level increases to level of 30 percent. These results may attribute to subjects begin to fully appreciate when audit level of 30 percent, so that when audit level of 20 percent the influence is insignificant toward tax compliance decision These findings are consistent with Friedland and Rutenberg (1978), Beck (1991), Alm (1991), and Alm et al. (1992a,1993).

Perceived probability of audit of audited taxpayers is substantial variable for tax compliance decision because it will induce taxpayer to determine the amount of taxable income carefully. This finding provides empirical evident that perceived probability of audit influences the increased of tax compliance decision either as a dependent variable or a moderating variable in both random and fixed group. The findings are consistent with Alm (1988), Gosh and Crain (1996). In fixed group, the perceived probability of audit has dominant impact on increasing tax compliance. It attributes to taxpayers make decision whether they will be audited or not, so that if there is audit uncertainty then they will report the taxes carefully. Initially, in random audit group, taxpayers have high uncertainty of audit, so that the score of perceived probability of audit decreased at low-level audit, vice versa. Taxpayers, therefore, the perceived probability of audit at uninformed audit level is high because uncertainty audit is high and they will report the taxes carefully. Taxpayer ethics contributes to tax compliance either in random or fixed group. These findings are consistent with Henderson & Kaplan (2005). Ethical values such as moral equity, relativism and contractualism, can raise taxpayer awareness and eventually affect tax compliance decision. Moral equity, relativism and contractualism reflect social and individual norms. Certainly, taxpayers consider these values in determining the taxes reporting. The findings provide empirical evidence that taxpayer ethics has impact on increased tax compliance decision either directly or indirectly. Taxpayer ethics plays an important role of increased tax compliance decision because it based on culture, religion, and tax norms that provide completely comprehension over taxation.

5. Conclusion

Taxpayer with random audit strategy tends to be more compliant than with fixed audit strategy. This attributed to taxpayer with random audit strategy has highly uncertainty audit. In respect with uninformed audit level/rate, audit level of 10, 20, and 30 percent, the results are significant toward increased tax compliance for both audit strategies. The results provide empirical evidence that perceived probability of audit affect the increased of tax compliance decision. The perceived probability of audit is not only as dependent variable, but also as moderating variable concerning with the relationship between audit strategy

and tax compliance. Likewise, concerning with the relationship between audit level and tax compliance, perceived probability of audit serves as moderating variable. This study finds two important variables, namely perceived probability of audit and tax compliance ethics. The interaction effect of both variables shows that the higher perceived probability of audit and tax compliance ethics, the higher tax compliance decision, vice versa. Taxpayer whom aware of his obligation as a citizen and of the tax benefits will be compliant paying tax. This study has implication for government efforts to increase tax compliance. Government should consider audit policies; promote ethical values of taxpayers in education institutions; continuously provide sustainable tax counseling for societies. Moreover, this study has implication for judgment theory to consider individual ethics. This study has five limitations. First, this study only controls three extraneous variables, such as income, tax rate, and penalty. Second, the experimental consists of six sessions that likely provide different bias in historical effect. Third, the limited capacity of experimental laboratory causes the subjects quickly count the number of audited subjects at each audit level treatment, so that uncertainty audit decreased. Fourth, there is maturation effect attributed to simultaneously session shift. It would be to conduct new experiments with appropriate experimental design to have subjects understand on proposed variables. It would also be to improve research design regarding risk preference. Future study should stress on both risk averse and risk taking.

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Resources of Funding and Diversification Business to Financial Performance of Regional Water Company Jayapura Regency

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Abstract: To examine and analyze the influence sources of funding consisting of long-term debt and capital to diversification business and financial performance of Regional Water Company Jayapura Regency. Methods of collecting data used were observation, interviews and secondary data such as financial statements and other documents that have to do with research. Data were analyzed descriptively and quantitatively using the financial ratio analysis, Du Pont analysis and financial ratios specified by Decree 47 of 1999. The results showed that: the effect on the long-term debt diversification Regional Water Company Jayapura regency primarily on the acquisition of Long-Term Debt laba. Dan also affect the financial performance of Regional Water Company redgional Water Company Jayapura regency precisely at the level of solvabilitas, where based on research results Regional Water Company Jayapura Regency has a high level of solvabilitas, high solvabilitas is caused by injection of funds from the government charged as long-term debt. The use of equity capital effect on business diversification and financial performance of the Regional Water Company Jayapura regency. This is evidenced by a decrease in profit resulting from lower equity and the amount of long-term debt. Which due to the lack of balance between long-term debt and equity. And diversification efforts affect the financial performance of the Regional Water Company Jayapura Regency

Keyword: *Resources of Funding, Diversification, Financial Performance*

1. Introduction

The Regional Water Company Jayapura Regency as Regional Owned Enterprises (enterprises) are specially engaged in water management is expected to contribution optimally meet the water needs of society and contribution to local revenues. Regional Water Company Jayapura Regency in order to provide water service to the public is confronted by various obstacles, especially the financial crisis and economic downturn since mid-1997, which shook the joints of many people's lives, as well as business continuity in the field of water management. Constraints in question, either in relation to financial constraints and the rising price of materials the company's operational needs, so that if this continues could of course lead to costs incurred far greater than the revenue generated. Regional Water Compani Jayapura Regency that serves as the manager of clean water and at the same time a source of local revenues, are required to have a healthy financial performance for its survival in the future. Regional Water Company Jayapura Regency as manager of the expected role of clean water to meet the needs of cleans water to the community and can contribute to local revenues. With it required to always have a healthy financial performance, to its survival in the future. In doing water service to the community confronted over various obstacles related to both financial constraints and rising prices for materials company's operational needs, so that the costs incurred far greater than the revenue generated, consequently Regional water compani Jayapura Regency suffered losses every year for 5 (five) last year. The losses, caused by low levels of financial performance Regional Water Compani Jayapura Regency. So with the necessary research to find out more on the company in question, by analyzing data on the financial statements of the company, which is derived from the balance sheet and profit and loss.

2. Literature Review

Van Horne & Wachowics (2002: 2) argues that financial management is as activities related to the acquisition financing and asset management with some of the overarching goal. Riyanto (2001: 13) says that, in essence financial management problems are related to the financial balance of the company. Thus the financial management holds the balance between assets and liabilities is required, along with the search for the qualitative composition of the assets and liabilities as well as possible. Selection of the qualitative composition of the assets will determine the structure of the company's assets; sedangakn election qualitative composition of liabilities will determine the company's capital structure. To be able to get a picture of a

company's financial development in the necessary financial data reflected in the financial statements. Munawir (1993: 13) says balance is a systematic statement of assets, liabilities and capital of a company at a time tertentu. Tujuan balance sheet is to show the financial position of a company at a certain date, usually at the time when the books are closed and determined the end of the period remaining on a physical or calendar year. Weston and Thomas (1993: 17) explain that, both the balance sheet and income statement contains the presentation of the company in the past and may provide clues to the establishment of policies in the future. According to Riyanto (2001: 325) reveals that, connecting elements of various assets to each other and the elements of the various liabilities to each other and connecting the elements of assets and liabilities at a given moment can be obtained much description of the position or financial condition of a company. Sartono (1994: 45) argues that, financial ratio analysis is the main tool of a wide range of financial analysis, because the analysis is able to answer questions about the company's financial condition. So the financial ratio is an effort to standardize financial information so as to produce a useful comparison. Van Horne & Wachowics (2002: 133) argues that, financial ratios or indices that connects two accounting numbers and is obtained by dividing one number by another number.

3. Methodology

Decree of the Minister of Interior of the Republic of Indonesia Number 47 of 1999 dated May 13, 1999. Thus the results of the analysis of financial ratios, can give an idea of the level of financial performance of the Regional Water District Jayapura.

1) The ratio of long-term debt to equity: This ratio is meant to assess the balance between the two sources of funding used to finance corporate assets, capital and debt. The use of loan funds that exceed the balance of the equity would have an impact on high interest expense to be borne and will result in low ability to generate profits, while the value of the performance indicators as follows:

Ratio	Value
<=0,5	5
>0,5 s/d 0,7	4
>0,7 s/d 0,8	3
>0,8 s/d 1,0	2
>1,0	1

Formula of long-term debt ratio to equity

$$= \frac{Long\text{-}term\ debt}{Equitas}$$

2) The ratio of operating profit before depreciation cost of the principal and interest due: This ratio is used to measure the potential of the profit generated to fulfill the obligation to pay the principal and interest due. The aim is to measure the extent of industrial development financed with loan funding source can generate income to meet the obligations associated with the loan income, the value of the performance indicators as follows:

Ratio	Value
> 2,0	5
> 1,7 s/d 2,0	4
> 1,3 s/d 1,7	3
> 1,0 s/d 1,3	2
<= 1,0	1

Formula operating profit ratio before depreciation costs against the principal and interest maturity:

$$= \frac{\text{Operating Income before Depreciation Costs}}{\text{Installment Principal + Interest Maturity}}$$

Of the two indicators then, the value of financial performance taps can be formulated as follows:

$$\text{Financial performance value} = \frac{\text{The total value of the indicator}}{\text{The maximum value of indicator}} x\ weight$$

Where :
The maximum value of the indicator = 60,-
Weight = 100,-

Based on the decision of the Minister of Interior No. 47 of 1999 dated May 31, 1999 such that the level of financial performance taps divided by five (5) categories:

Category Financial Performance	Value Financial Performance
a. Excellent	> 75
b. Good > 60 – 75	
c. Enogh	> 45 – 60
d. Less > 30 – 45	
e. Not Good	<= 30

4. Results

Assessment of financial performance Regional Water Company Jayapura Regency systematically done using taps financial performance appraisal system set out in the decision interior minister of the Republic of Indonesia Number: 47 of 1999. The assessment results once used to test the research hypothesis that Regional Water Company Jayapura Regency are healthy or unhealthy, Referring to the guidelines for assessment of financial performance taps, by decision of the interior minister of the Republic of Indonesia Number: 47 of 1999, the financial performance of Jayapura District 2008-2012 can be done by first calculating the value of the company's financial performance indicators, which are presented in Table 1 as follows:

Table 1: Calculation of Financial Performance Ratio Regional Water Company Jayapura Regency Year 2008-2012

No	Financial Performance Indicators	Ratios Formulas	Ratio 2008	Ratio 2009	Ratio 2010	Ratio 2011	Ratio 2012
1	2	3	4	5	6	7	8
1	The ratio of long-term debt to equity	Long-term debt / Equities	0,38	0,44	0,28	0,24	0,23
2	Ratio operating profit before depreciation charges against the principal and interest maturity	Operating Income before Depreciation / Principal + Interest due	3,56	2,81	0,78	(1,98)	0,97

Source: Processed Data

The table above calculation shows that, Regional Water Company Jayapura Regency in 2008 to obtain the total value of financial performance indicators by 10, thus still below that stipulated in the Decree of the Minister of Interior of the Republic of Indonesia No. 47 of 1999 which is the maximum value of 10 for two indikator . Later in 2009 gained a total of 10 , whereas in 2010 gained a total of 6 (reduced by 4 of the maximum value), then in 2011 declined again by 6 (decreased by 4 from the maximum value), and in 2012 decreased by a total of 6 (4 is reduced from the maximum value). Based on the table 3 above Regional Water Company Jayapura Regency in 2008 to obtain the value of financial business is 100, this means the value obtained on the classification of the value of financial performance greater than 45 in the Decree of the Minister of Interior of the Republic of Indonesia Number: 47 of 1999, so that the level of financial performance achieved quite enough (quite healthy). Then in 2009 obtained a value of 100 performance (Excellent), where in 2010 value by 60 (Good), 2011 velue in 60 (good), and year 2012 value by 60 (Good). Long-term debt affects the financial performance of Regional water company Jayapura Regency is to cost interest bicause the regional water company Jayapura Regency to get aid resource of fanding from local goverment, and makes cost interest so regional water company Jayapura Regency losses from year to year.

Table 2: Value Calculation of Financial Performance Indicators Regional Water Company Jayapura Regency Year 2008-2012

No	Financial Performance Indicators	Ratios Formulas	Ratio 2008	Ratio 2009	Ratio 2010	Ratio 2011	Ratio 2012
1	2	3	4	5	6	7	8
1	The ratio of long-term debt to equity	Long-term debt / Equities	5	5	5	5	5
2	Ratio operating profit before depreciation charges against the principal and interest maturity	Operating Income before Depreciation / Principal + Interest due	5	5	1	1	1
	JUMLAH		10	10	6	6	6

Source: Processed Data

Table 3: Calculation of Financial Performance Assessment Regional Water Company Jayapura Regency Year 2008-2012

Year	Discription	Total value Indicator	Weight	Maximum value of Indicator	Value of Financial Performance (6 = 3x4 / 5)	The Level of Financial Performance
1	2	3	4	5	6	7
2008	2 financial performance indicators	10	100	10	100	Excellent
2009	2 financial performance indicators	10	100	10	100	Excellent
2010	2 financial performance indicators	6	100	10	60	good
2011	2 financial performance indicators	6	100	10	60	good
2012	2 financial performance indicators	6	100	10	60	good

Regional Water Company Jayapura Regency has a low rate of return and it is also its return on investment is very low, and this is because the company obtained profit margin is relatively smaller than the zero (gain value minus). And the total cost is much greater than the income earned, as well as lower the total asset turnover, which is due to due to investments in the total assets are less productive..Guided by the decision of the Minister of Interior No. 47 of 1999, Regional Water Company Jayapura Regency has a financial level decreased from 2008 s / d of 2012. The level of financial performance terkhir that in 2012 obtained PDAM Jayapura Regency is categorized as less healthy. Factors that have a strong influence on lowering the level of financial performance Regional Water Company Jayapura Regency is not yet optimal utilization of assets, and the imbalance in the structure of financing of assets that are significantly housed in debt resulting in higher interest expense, and waste in finance operational activities.

5. Conclusion and Recommendations

- To the leadership of regional water company Jayapura regency, in order to conduct negotiations on the part of creditors to reschedule the payment of loans and interest long-term loans of up to five years into the future, so using it easy to fix the financial performance.
- In an effort to increase the liquidity and solvency of the company, are expected to no longer carry out a new loan, but made additional equity capital through the allocation of revenue and expenditure budget (APBD) district budget every year.
- It is expected that Regional Water Company Jayapura regency, can enhance the accounts receivable turnover rate, by increasing the number of violations to increase the sales volume of water, monitoring and control of pipeline leaks and intensify collection of accounts receivable every year especially.
- And most importantly, it is expected to Regional Water Company Jayapura regency, to seek to increase return on investment by improving profit margins and asset turnover of the company, namely by pressing the operating costs and increase revenue both to increase sales volume and an increase in selling price / installation water connections on the customer gradually

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Effect of Motivation, Organizational Culture and Commitment to the Performance of Employees: Department of Education and Culture of Papua

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Abstract: The purposes of this study were: 1). To examine and analyze the influence of Motivation, Organizational Culture and Employee Commitment to Employee Performance in the Office of Education and Culture of the province of Papua, and 2) to examine and analyze the factors that most dominant influence on Employee Performance Office of Education and Culture of the Province of Papua. Data collection methods used were observation, interviews and questionnaires. Data were analyzed descriptively and quantitatively using Multiple Linear Regression Analysis. The sampling technique using the technique of "Sample Saturated" The results showed that: Partial factor in motivation (X1), Cultural Organization (X2), and Employee Commitment (X3) significantly affects the Employee Performance Office of Education and Culture of the Province of Papua. Simultaneous and motivation factor (X1), Cultural Organization (X2), and Employee Commitment (X3) significantly affects the Employee Performance Office of Education and Culture of the Province of Papua. The most dominant variable influence on Employee Performance Office of Education and Culture of the province among the three variables above is the motivation factor.

Keyword**:** *Motivation, Organizational Culture, EmployeeCommitment, employee performance*

1. Introduction

Human resource development needs and strategic step for each local government. Substance important human resource development facing local autonomy and good governance is a paradigm shift, attitudes, values and behavior of the government apparatus. Therefore, there are several things to note, as barikut: 1) the need to restore or menginggatkan the mission and goals of bureaucracy / organization / public administration, so that what is done by bureaucrats or government officials right on target, 3) the demands of government officials which direform is government officials who are not related by control, order, prediction but rather lead to government officials who focus on alignment creativity and empowerment. Basically calls for a policy that is oriented to the principles of loose and tight, which is used as a political commitmen direction or guidance rather than political authority, and 4) government officials should be aware that they are public or civil servant whose job is to serve the public. Government organizations as public organizations present to organize and serve activities related to efforts to improve people's welfare. As an educational organization, aspects of the service becomes the main activity that employee satisfaction and community satisfaction as indicators of the organization's performance.

For that there are three (3) basic elements that underlie the regulation authority, among other things: 1) the activities that are routine for each organizational unit designated as official duties, 2) these tasks are relatively stable means no change -change means and authority to implement it fully bound by the rules that apply, and 3) there is no regularity in both the mechanisms and procedures, means that is standard to ensure the continuity of performance of duties by employees who qualify according conditions applicable provision.

Employee motivation is a condition or energy that drives self-employees are directed to achieve organizational goals (Mangkunagara, 2005: 61). The most important thing possessed by every employee who works for the organization of government are: 1) the mental attitude psychophysical (prepared mentally, physically, situation and goals), which means that the employee in performing the work are mentally prepared, physically healthy, understand the situation and conditions and strive to achieve employment targets as goals of the organization, 2) psychological aspect is very important in work motivation of employees to be able to work productively with full responsibility, among other things: a) employees should be encouraged to cooperate in the organization, b) employees always encouraged to work and tried in accordance with the demands of work, and c) an employee is able to maintain and develop human resources

in the organization, and 3) the relationship between work motivation, work ability and cultural achievement in supporting the performance grouped into three categories, namely: 1) approach to the contents (content theory), 2) a process approach (process theory), and 3) approaches amplifier (reinforcement theory).

Stephen (1996: 143), suggests that organizational culture is one factor that is important in influencing the performance of the company. This is because the organizational culture is an integral part of the internal environment of the organization. The cultural diversity that exists in an organization as numerous as the number of individuals in the organization. Culture can influence the behavior of members of the organization. Furthermore, Davis & Newstrom (2000: 112), there are two (2) changes experienced by an individual, namely: 1) the transfer from one place to another with the culture of others, and 2) change slowly in the environment they are now. Employees need to learn to adjust to both of these situations to avoid negative consequences. If the organizational culture has touched fundamental in driving behavior and optimizes the ability of employees continuously in accordance with the objectives, then the organization's survival will last a long time.

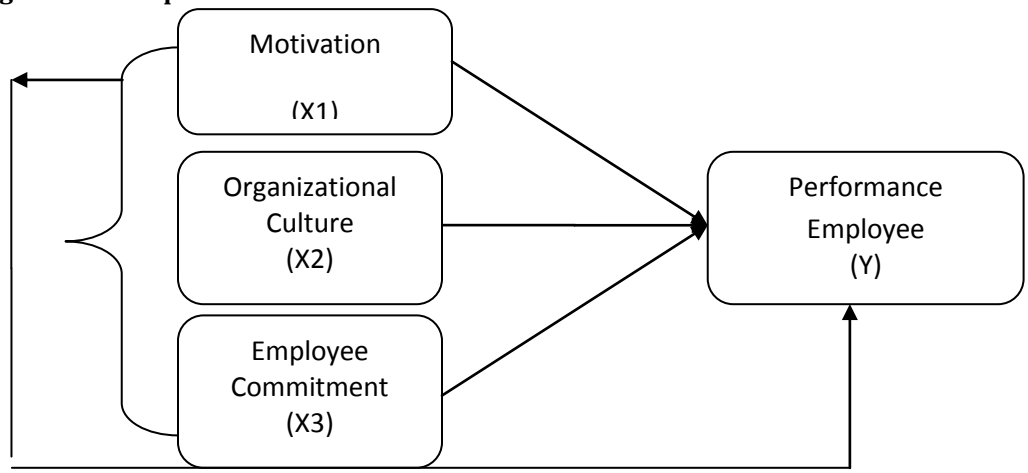
2. Literatur Riview

Mangkunagara (2005: 73), the implementation of the theory of motivation at work can be divided into four sections, among other things: 1) intervention programs, the managerial skills that must be mastered by a leader. By understanding the important role of employee motivation will facilitate leaders expect achievement and job satisfaction of employees, 2) pay incentive plans, incentives granted to employees greatly affect the motivation, performance, and the performance of the employee, 3) job redesign, the process of influence in a sustainable manner and changes in work related to the characteristics of specific jobs expected to be more motivated employees, and 4) behavior modification, behavior modification related to work motivation with respect to: a) the value of the award is expected of employees, b) perception of employees in the attempt to achieve the award, c) business must be carried out, d) the ability and nature, e) the perception of the role, f) performance, g) award intinsik, h) the perception of a fair award, i) the level of job satisfaction is achieved by employees.

Hofstede, Hofstede and Minkov (2010: 165), the concept of culture has become mainstream in anthropology from the very beginning and gained attention in the early development of organizational behavior studies. However, only recently raised to the surface the concept of culture as a major dimension, understanding organizational behavior. Schein (1992: 78), suggests that a lot of work lately argued about the key role of organizational culture to achieve organizational excellence. Stephen (1996: 98), organizational culture as a common perception held by members of the organization ¬anggota and became a system of shared meaning. Meanwhile, Schein (1992: 145) chose a definition that can explain how culture develops, how it becomes a culture like this, or how culture can be changed if the organization's survival is at stake. It required a definition that can help understand the forces that influence the dynamic evolution of a culture to evolve and change. Employee commitment is the level of trust in accordance with the objectives of the organization and have a desire to remain in the organization (Robert & Jackson, 2002).

3. Methodology

Figure 1: Conceptual Framework



Research Hypothesis

- Factors of motivation, organizational culture and employee commitment partially significant effect on the performance of employees in the office of the Department of Education and culture of Papua Province.
- Factor motivation, organizational culture and commitment to employees simultaneously significant effect on the performance of employees in the office of the Department of Education and culture of Papua Province

Analysis Method: This study uses multiple regression analysis is used to determine the influence of independent variables on the dependent variable. Multiple regression analysis is as follows:

a. Multiple Regression Analysis .Because the research hypothesis formulated refers to the correlative study, the data analysis techniques using multiple regression statistical methods (multiple regression analysis). Data collected was processed using SPSS. While the model used in the analysis are:

Y = bo+ b1x1+b2X2+b3X3+e
Where:
Y= Value Variable Bound (Performance)
bo = Value Y, if X1 and X2 = O
b1 = amount Changes in the value of employee performance (Y) in units, if there is a change Motivation (X1) in one unit, while Cultural Organization (X2) and Employee Commitment (X3) Constant
b2 = magnitude Change in value of employee performance (Y) in units, if there is a change Cultural Organization (X2) in one unit, while the motivation (X1) and employee commitment (X3) Constant.
b3 = amount performance value changes (Y) in units, if there is a change employee commitment (X3) in one unit, while the motivation (X1) and Cultural Organization (X2) Constant.
e = Standard Error

4. Results

In this study assumes that the motivation (X1), Cultural Organization (X2) and Commitment Employees (X3) on work performance (Y) at the office of the Department of Education and culture of Papua Province assuming other variables are constant, it can seen in Table 1as follows:

Tabel 1: Hasil Analisis Regresi Metode Enter

Variabel Penelitian	Regresi (*Enter Method*) Koef. Regresi (*B*)	SE	t_{hitung}	Sig. T (*p*)
Konstanta	0,471	0,176	2,669	0,000
Motivasi(X_1)	0,675	0,146	4,621	0,000
Budaya Organisasi (X_2)	0,301	0,171	3,055	0,006
Komitmen Pegawai(X_3)	0,267	0,150	2,783	0,009
F ratio		153,209		0,000
Multiple R		0,939		
R Square		0,881		
Adjusted R Square		0,875		

Keterangan: F_{tabel} (*df 3;65* = 2,75 (α = 0,05), *two-tail test Sumber : Data Diolah, 2014*

In Table 1, we can see the results of the regression analysis method showed that multiple regression coefficient (multiple R) obtained at 0.939 or 93.90%, and F ratio of 153.209 at a significance level of p (0.000 <0.05). Thus it can be said that all the independent variables, namely motivation (X1), Cultural Organization (X2), and Employee Commitment (X3) significantly and very strong to employee performance (Y) at the office of the Department of Education and Culture of the Province of Papua. Furthermore, the coefficient of determination (R2) obtained at 0.881 or 88.10% indicates the level of accuracy (goodness of fit) regression lines were established from the data of observation. This can be explained that the independent variable motivation (X1), Cultural Organization (X2), and employee commitment (X3) amounted to 88.10% and was not explained by 11.9% or 100 - 88.10%. Variables that are not explained by 11, 9% are the other variables that also affect employee performance variable (Y) beyond the motivation variable (X1), organizational culture (X2), and employee commitment (X3). This can happen because many factors can also affect employee performance beyond the three aforementioned factors or variables that have been studied were correct, it can be answered by conducting advanced research in connection with the performance of employees. However because researchers only limit on three variables are seen its influence on employee performance then the results can be expressed appropriate statistical test showed that. So it can be said that the variable of employee performance (Y) influenced by other variables outside the model of 11.9%.

5. Conclusion and Recommendation

- The issue of employee performance at the office of Education and Culture of the Province of Papua is an important issue, therefore the duties and functions of the office are particularly worth noting motivation, organizational culture and commitment to employees. Of the three factors that can be taken directly by the leadership policy is the motivating factor, it is necessary to note the increase in employee motivation and based on research motivating factor most dominant.
- To meet expectations as a Civil Servant (PNS) demands that can not be avoided, so that the pattern of service bureaucracy must be abandoned and replaced with the pattern of community service (customer focus) that puts people at the forefront as the basis of the presence of local government officials in organize and serve the public interest. It means that each employee to do the work that the results are good, it is worth noting three interactions employee motivation, namely: 1) the strength of themselves or their needs, 2) willing to succeed, and 3) the value of the incentives inherent in the goal.
- This research is very open to further research. It is therefore recommended to observers of the problems of motivation, organizational culture and commitment to employees, can conduct studies relating to the factors of what makes seseoarang or high performing employees.

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The Influence of Social Support on Entrepreneurial Inclination among Business Students in Indonesia

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Abstract: The objective of this study is to investigate the influence of social support on student's inclination toward entrepreneurship. It also aims to test whether gender can moderate the relationship between SS and entrepreneurial intention among business students in Indonesia. Quantitative analysis was conducted using SPSS version 22. This study conveniently distributed 1,230 self-administrated questionnaires to the business students at public and private universities in Indonesia. This data collection process yielded back with 381 usable responses that were used in the statistical analysis for assessing the relationship between SS and EI as well asthe difference between male and female students in terms of entrepreneurial intention.This study reveals that, there is a positive relationship between social support system and student's inclination toward entrepreneurship and there is a difference between male and female students in terms of entrepreneurial intention.

Keywords: *Social Support, Entrepreneurial Intention, Business Students, Quantitative Study*

1. Introduction

Entrepreneurship is a worldwide phenomenon closely associated with economic growth. Entrepreneurs are the "engines" that can accelerate economic growth (Acs, 2006; Baron & Shane, 2008). They have brought about enormous positive contributions to a country's economic growth and social development. As mentioned by Morrison, Breen and Ali (2003), entrepreneurs play a pivotal role in creating jobs, innovating, creating wealth, improving health and even in economic advancement. Since entrepreneurship is synonymous with self-employment, it is believed to be an effective strategy for handling the issue of employability, particularly among the youth (Koe, Sa'ari, Majid & Ismail, 2012). Entrepreneurship entities enable reduction in the unemployment rate or what has been termed as the Schumpeter Effect (Musa & Semasinghe, 2013; Schumpeter, 1934). Apart from that, the unemployment rate among youngsters continues to grow nowadays since the number of youth in Indonesia aged below 30 years dominates more than half of the total population. Consequently, Indonesia has a huge number of workforces. This can trigger a demographic disaster if these workers cannot be absorbed by industries (Indonesia-investments, 2015). The World Bank representative recently gave a warning on Indonesia's unemployment problem among youth. It is due to the fact that the highest rate of unemployment in Indonesia is dominated by people aged 15 to 24 years. This is very ironic since the fresh university graduates, vocational school graduates as well as secondary school graduates face difficulty in looking for a job (Indonesia-investments, 2014).

Based on the report, there are around 20% of Indonesia's young men and one-third of the young women beingneither unemployed nor going to school. The total number of young men aged 15 to 24 years in Indonesia reached approximately 20.5 million; and the total number of young women aged 15 to 24 years is around 20.2 million. Although the number of unemployed females has reduced significantly compared to their male counterparts, gender disparity is still a challenge in Indonesia. Despite several key areas like education and health showing considerable progress, there are still many women working in the informal sector (twice as many as the number of men). Moreover, they are paid lower wages compared to men for similar work (Indonesia-investments, 2014). However, economic development cannot be realized without active participation of women in all segments of life (Sarfaraz, Faghih & Majd, 2014). Many scholars have agreed that women can play a pivotal role in entrepreneurship activities. Women's contribution to economic development mainly depends on equal support as for men from relevant institutions. Despite women comprising about 50% of the world's population, they have less opportunity to take part in decision-making (Revenga & Shetty, 2012). Since 2008, i.e. after the financial crisis, women have been experiencing greater difficulties in earning capital than men and the economic crisis has had an adverse impact on women (Malach-Pines, Lerner, & Schwartz, 2010). Further, Malach-Pines et al. (2010) found that the number of

women entrepreneurs is less than men. The proportion of female entrepreneurs is higher in countries where the general income per capita is at a lower level, where women have to work for a living. However, Balea (2015) argued that women are starting to change the scenario nowadays in terms of an entrepreneurship career even though there are still only a few studies that have focused on the factors influencing entrepreneurial intention among female students (Aaijaz & Ibrahim, 2013). Thus, there is a need to do further investigation to figure out if there is any difference in terms of gender and entrepreneurial intention, especially among young business students in Indonesia.

Linking education and entrepreneurship with academic institutions clearly points out that universities have become strategic places to nurture entrepreneurial spirit among students (Nastiti, Indarti, & Rostiani, 2010). Universities have a crucial role in enhancing entrepreneurial education in order to encourage the students to become self-employed once they graduate from university. Therefore, the purpose of higher education institutions is not only to produce graduates to become job seekers, but also job creators. The small number of entrepreneurs in Indonesia indicates the lack of entrepreneurship among the academic community, including their activities in the university environment. The discourse and application of the entrepreneurial university are becoming hot topics in the academic world. However, many of the universities focus on academia and few have plunged into the world of practitioners and entrepreneurship. Among 2,679 private universities and 82 state universities in Indonesia, only a few universities are concerned with the importance of entrepreneurship on campus (Kuswara, 2012). Of the 4.8 million university students in Indonesia, only 17.4% have the right entrepreneurial spirit and orientation to venture into entrepreneurship after completing their studies. Meanwhile, more than 83% of university graduates in 2012 preferred to become employees in any of the leading companies or government institutions (Amrullah, 2012; Subachtiar, 2013; Sutarto, 2012; Temonsoejadi.com, 2013). Interestingly, the industries are only able to accommodate up to 10-15% of the university graduates each year. As a result, the rate of the educated unemployed increases every year (Yusuf, 2012).

According to Indarti (2004), entrepreneurial intention of students in Indonesia is weak. This is reinforced by Hidayat (as cited in Masykur, 2007) who claimed that most students do not have a plan for being self-employed and are more likely to work in large companies. Intention plays a distinctive role in directing action or behavior. Entrepreneurial intention plays a pivotal role as the link between consideration to engage in entrepreneurship and the entrepreneurial activities conducted by the entrepreneurs themselves (Supatra, 2009). Apart from that, the social support system is considered as a vital aspect for developing entrepreneurial intention. Some related aspects, like environmental support and parental support, play an important role in influencing a person's desire for entrepreneurship (Indarti & Rostiani, 2008; Lee, Wong, Foo, & Leung, 2011; Suharti & Sirine, 2011). This opinion is reinforced by Kasmir (2006), who stated that the support of family, especially parental support, is imperative to increase the motivation to become an entrepreneur. Thus, family support is a primary driving force to foster students' mind-set and motivation (Kasmir, 2006). The jobs of parents are also instrumental for career choice of their children after being graduated from college. According to Mustikawati & Bachtiar (2008), parents play an undeniably significant role in providing support and motivation to their children to enable them to be socially competent, confident and responsible to realize their intentions to become entrepreneurs. However, studies have found that the presence of significant social risk experienced by an individual in setting up a business is an anxiety of being degraded and derided when the risk of failure is imminent and this will lead to negative opinions of their inability (Phikala & Vesatlenein, as cited in Astuti, 2009). They lack parental support because parents prefer for their children to be employed rather than being self-employed. Mustikawati & Bachtiar (2008) found that a number of parents go against their children's wishes to become entrepreneurs and unconsciously try to impose their will on their children's desire.

Students do not have support from their family and friends to do entrepreneurial activities. Instead, their parents and friends always discourage them when they want to start a business (Astuti, 2009; Mustikawati & Bachtiar, 2008; Susanti, 2012). Most of the parents of university graduates associate the prospects of being an entrepreneur with high risks (Hartanto, 2011). Such pessimistic supposition could sometimes be a hindrance and discourage the children from initiating an entrepreneurship project. Amalia (2012) found through her study that students tend to display low self-confidence in their ability to become entrepreneurs. They lack parental support because parents have a preference for their children to be employed rather than

be self-employed. Mustikawati & Bachtiar (2008) found that a number of parents go against their children's passionto become entrepreneurs and unconsciously try to impose their will on their children's desire because being an entrepreneur is perceived as a less prestigious profession in Indonesia, although entrepreneurship activities can significantly contribute to GDP.

Economic development cannot be realized without active participation of women in all segments of life (Sarfaraz, Faghih & Majd, 2014). Many scholars have agreed that women can play a pivotal role in entrepreneurship activities. Women's contribution to economic development mainly depends on equal support as for men from relevant institutions. Despite women comprising about 50% of the world's population, they have less opportunity to take part in decision-making (Revenga & Shetty, 2012). Since 2008, i.e. after the financial crisis, women have been experiencing greater difficulties in earning capital than men and the economic crisis has had an adverse impact on women (Malach-Pines, Lerner, & Schwartz, 2010). Further, Malach-Pines et al. (2010) found that the number of women entrepreneurs is less than men. The proportion of female entrepreneurs is higher in countries where the general income per capita is at a lower level, where women have to work for a living. However, Balea(2015) argued that women are starting to change the scenario nowadays in terms of an entrepreneurship career even though there are still only a few studies that have focused on the factors influencing entrepreneurial intention among female students (Aaijaz & Ibrahim, 2013). Thus, there is a need to do further investigation to figure out if there is any difference in terms of gender and entrepreneurial intention, especially among young business students in Indonesia.

2. Literature Review

Social Support: Much of the literature on entrepreneurship refers to social support as a potential entrepreneur's beliefs and expectations about the assistance and advice that he/she may receive from his/her social groups(Rani, 2012; Sahban, Kumar, & Sri Ramalu, 2014). These social groups include primary groups, such as parents, siblings,and spouse; and secondary groups, such as reference groups, comprising friends, colleagues and teachers. Social support is supposed to help and assist the potential entrepreneur in setting up a business or running its activities (León, Descals & Domínguez, 2007). Sarason et al. (1987) defined social support as the intensity of interaction of entrepreneur with his/her friends and family to whom he/she feels attached to. In other words, social support is the extent of assistance and attachment of an individual with the social group he/she interacts with directly or indirectly who make that individual feel loved and/or cared. Social support, therefore is considered as building blocks for social and psychological integration of entrepreneurs in the society. Experts have classified social support into two main dimensions: support by family; and support by peer groups (Ismail et al., 2013; Rani, 2012; Zafar, Yasin, & Ijaz, 2012). Social support from these sources tends to play various roles and functions and has different outcomes. Both family and friends' support needs to be considered distinctively because different cultures ascribe a different level of reliance on or benefits from both sources (Procidano & Heller, 1983).

Family Support: When an individual intends to initiate a new venture, he/she seeks support from multiple sources. Sources of support for the entrepreneurship activity of individuals are usually family, partner and peers to whom they can trust to share the entrepreneurship ideas, the potential problems to be encountered along with the way and the means to handle these issues (Mustikawati & Bachtiar, 2008). Accordingly, as the closest environment, the support of family can synergize the interest in entrepreneurship. The family plays a pivotal role in inspiring children to choose entrepreneurial careers; parents also tend to encourage their children to take a more challenging career that allows self-freedom and independence (Buang & Yusof, 2006). Families play a crucial part in the new venture creation process. The role of family support, therefore, needs more consideration by research studies focusing on understanding entrepreneurship. The family relationships serve as strongest business ties in the business networks. Thus, the family of an entrepreneur is considered as offering a number of resources, ranging from professional to non-professional resources, which have a strong effect on new venture creation and its activities.As mentioned by Anderson and Jack (2005) family takes a substantial part in new venture creation; this is due to the strong relationship among family members. Steward (2003) offered the most comprehensive assessment of the role of family support in the entrepreneurial circle. This study has observed the benefits of the family network which include extensive tacit knowledge, commitment, access to information and ability to take risks in entrepreneurial efforts.

According to Granovetter (1973), the literature on entrepreneurship distinguishes between two elements of network ties which are required for a result oriented entrepreneurial circle. Those people who have close personal relationship and interact quite frequently with other are considered as strong ties network. On the other hand, those people who have a big gap emotionally and make interaction infrequently are considered as weak ties network. Strong relationship usually comes from friends or family, while weak links are mostly associated with business colleagues.

Peer Group Support: Mead (2001) explained peer support as an ecosystem of exchange of help based on principles of mutual respect and shared responsibility, and shared an understanding of resulting benefits. In this way, peer support is not just based on psychological models but it is more about expressing concerned understanding towards each other's issues. It is the feeling of affiliation that individuals in the network have with each other and feel connected with others in a supportive manner. The feeling of being connected or affiliated is founded on a mutually respectful relationship which makes the members learn from each other without being limited by the constraints of traditional relationship. It is therefore imperative that peer group is the point of social interaction between potential entrepreneurs and its advisors. Individual entrepreneurs tend to take decisions to create a new venture because of the influence of their peers. Peer groups consist of people who are already in business and they are supposed to provide technical advice and help to create a supportive environment for business start-up by potential entrepreneurs (Bönte, Falck & Heblich, 2009). The peer pressure in business results in positive influences by other social entities in the business eco-system, such as media and social networks. It therefore becomes easier for potential entrepreneurs to assume risk, experiment innovation and take business initiatives.

Manski (as cited in Falck et al., 2009) categorized effects of social interaction into two major forms. First is endogenous effects, which refer to the influence or prevalence of certain group behaviour on individual behaviour. It is explained as the situation where peer group's entrepreneurial intentions influence an individual's intention to become an entrepreneur. Second, an exogenous effect, also termed as the contextual effect, which is the influence of reference groups on youth's behavioural intentions to become an entrepreneur. The model developed by Manski (as cited in Falck et al., 2009) explains the effects of peer group's contextual characteristics, such has their family and social situation influences on an individual's entrepreneurial intentions. These exogenous or contextual effects tend to arise from students spending time in their peers' homes or business offices and thus becoming exposed to entrepreneurship. This influences them to consider entrepreneurship as a career option compared to those students who are not exposed to such influence.

Entrepreneurial Intention: Entrepreneurial intention refers to the initial step in the process for establishinga business that is generally long-term (Lee & Wong, 2004). Krueger (1993) said that entrepreneurial intention refers to one's commitment to start a new business and is a central issue that needs to be considered to understand the process of establishing a new business. Entrepreneurial intention has recently started to receive attention because it is believed that a behavioral intention is a reflection of the actual behavior. Therefore, entrepreneurial intention can be interpreted as the procedure for finding information that can be used to achieve the purpose of establishing a business (Katz & Gartner, 1988). An individual with the propensity start a business will have the willingness compared to one who does not have the desire to commence a new venture. Krueger, Reilly and Casrud (2000) poisted that intention is found to be a strong predictor of entrepreneurship behavior. Desirability can also be used as a fundamental approach to understand anyone who is in entrepreneurship (Choo & Wong, 2006). The study by Lee and Wong (2004) emphasizes that entrepreneurial desires or intentions are the initial steps in the long-term process of establishing and running a new venture. A person who has an interest in entrepreneurship will be more prepared and aggressive in efforts to set up a business than others who do not have the interest in entrepreneurship (Nastiti et al., 2010). Gurbuz and Aykol (2008) defined entrepreneurial intention as one's desire to engage in entrepreneurial activities, or in other words, to be self-employed.

Accordingly, based on the definitions of entrepreneurial intention above, it can be inferred that having an interest in entrepreneurship is a critical determinant in the formation of an individual's tendency to initiate and run a business. If a person does not have an interest in entrepreneurship, then everything that will be done related to the entrepreneurship process will be more severe than the one who has an interest in

entrepreneurship (Segal, Borgia & Schoenfeld, 2005; Shane, Locke & Collins, 2003). Essentially, entrepreneurship is the same thing as a job. If an individual likes the job, then of course, he or she will focus on running the processes as well as overcoming any hindrances and obstacles. Indarti and Rostiani(2008) examined the entrepreneurial intentions by looking at three things: (i) personality characteristics; (ii) demographic characteristics; and (iii) environmental characteristics. Personality characteristics include the need for achievement and self-efficacy, whereas demographic characteristics include age, gender, educational background and individual work experience to determine one's entrepreneurial intention. Environmental characteristics include social relationships, physical infrastructure and institutional as well as cultural factors.On the other hand, Mustikawati and Bachtiar(2008) adopted the theory of Meredith (2002). This study states that entrepreneurial intention refers to the entrepreneurial characteristics of a person. These features include confidence, task-orientation and the outcomes, risk taking, leadership and originality.

Linking Social Support to Entrepreneurial Intention: Social support is a concept which is widely deliberated and discussed and has been described in the available literature as one of the determinants of an individual's behaviour(Sahban, Kumar, & Ramalu, 2015). Greeve and Salaf (2003) suggested that a business takes more benefits from family members in the start-up phase. Other studies have described the strong positive impact of family members on entrepreneurial intention because they are the first source of sharing and discussing new business ideas and initial feedback (Aldrich, Reese & Dubini, 1990; Rosenblatt, de Mik, Anderson & Johnson, 1988). Fayolle et al. (2006) and Leon et al. (2007) found that students have better intention in dealing with entrepreneurship after having been exposed to entrepreneurship through their family.According to Rani (2012), family support has a strong influence on opportunity recognition, new venture creation, business decision-making and resource mobilization. As mentioned by Davidsson and Honig (as cited inBaughn, Cao, Le, Lim, & Neupert, 2006), social support by family and friends, as well as by parents owning a business, have been shown to be related to the occurrence of entrepreneurs. The role of close friends and family may be even more substantial than the general normative support in driving an individual's perceived desirability to commence a new venture. Greve and Salaff (2003) emphasized the prominence of the family in the entrepreneurial social circle. Habsah and Faudziah (as cited in Rani, 2012) did a study among alumni students in Universiti Utara Malaysia. The respondents admitted that their spouse, parents and relatives encouraged them to take up a business. Habsah and Faudziah also revealed that the students who are not interested in entrepreneurship can be influenced by people around them in making an entrepreneurial decision. Therefore, their kin play a substantial role in their entrepreneurial decision.

Mustikawati and Bachtiar (2008) conducted a study that aimed to demonstrate empirically whether there exists any association between social support (parents) and the entrepreneurial intention of vocational students. The results of their study indicated a significantly positive influence of social support (parents) on entrepreneurial intention among vocational students. The result of this study shows that the greater the social support provided by parents to their children, the greater the interest of vocational students to be involved in entrepreneurship. Further, Suharti and Sirine(2011) asserted that there is a strong potential role of contextual factors, such as academic support and social support, in entrepreneurial intention among the students. In many cases, an entrepreneur's primary group members, such as family or extended family members provide him/her with the required capital along with other kinds of business support i.e., source of supply of materials, access to new markets and new product ideas and access to technology (Dyer & Handler, 1994; Zafar et al., 2012). Another determinant of entrepreneurship attitude is prior exposure to business activity in the form of early exposure to the family business (Krueger, 1993). The study by Drennan, Kennedy and Renfrow (2005) identified that the perceptions about starting a new business are desirable for those who have expressed a positive posture of their family's business. Their study further described that early childhood experiences, such as adversity and frequent relocation, have significantly positive influence on an individual's attitude toward entrepreneurship. Other factors, such as prior exposure to business activities and prior attempt to start a new business have positive effects on the attitude towards entrepreneurship.

Researchers who have studied the influence of familial factors on entrepreneurial intention seem to have focused on the modelling influence and the family history of entrepreneurial activities. Carr and Sequeira (2007) revealed that experiences from family business tend to have a substantial intergenerational effect on entrepreneurial intentions. McElwee and Al-Riyami(2003) found that children having parents in businesses tend to display a higher propensity to engage in entrepreneurship. Mueller (2006) also concurred that when

putting all personal factors influencing a person's entrepreneurial intention together, parental role modelling seems to be the most significant. Another factor believed to have a direct bearing on entrepreneurial intention in the family is the financial resources in the family. This is due to the fact that family members in business have the potential of becoming a mentor and source of financial and non-financial help (Ahmed et al., 2010). On the other hand, Anderson et al. (2005) found that the support from families is not directly related to entrepreneurial intention. Their study found that more than a quarter of vital entrepreneurial support perceived by young entrepreneurs is outside the support from their family and colleagues. The above literature offers incisive insights into the influence of the social support factor on entrepreneurial intention. It is shown that family and peer group factors considerably affect the entrepreneurial intention of the youth. Direct experience is coming out with the power of social support system thus may or may not have an influence on young students who are undergoing entrepreneurial exposure. Therefore, this study proposes the second hypothesis of the research, which is mentioned below:
H1: Social support is positively related to entrepreneurial intention among business students in Indonesia.

Gender and Entrepreneurship: There are increasing numbers of research conducted on female entrepreneurs; however, the comparison between gender in entrepreneurship has been less looked into (Yordanova & Alexandrova-Boshnakova, 2011). Gender inequality exists in terms of economic development as well as the rates of entrepreneurial activity. There is a significant gender gap in the entrepreneurial activity rate worldwide (Allen as cited in Sarfaraz et al., 2014). The GEM Women's Report (as cited in Sarfaraz et al., 2014) states that the gender gap among entrepreneurs has gradually increased over time in some countries. Overall, as the economies move to a higher level of development, the rate of entrepreneurial activity decreases, regardless of gender. Sarfaraz et al. (2014) argued that gender equality may lead to an increasing number of female entrepreneurs. Consequently, one may conclude that in the economies where women are more likely to have equal opportunities with men, the equality of women entrepreneurial activity is higher compared to the economies where women face a greater rate of gender inequality. According to Malach-Pines et al. (2010) women's entrepreneurial intention in developed countries is likely to be lower compared to the ones in developing countries. Equal opportunities are of greater concern for women in developed countries than those in developing nations.

There is a consensus among researchers that women can play a substantial role in business activities (Sarfaraz et al., 2014). Olomi and Sinyamule(2009) conducted a research on the entrepreneurial intention of vocational students. They found that female students are more motivated to take up a business after the completion of their studies. They tend to choose different types of businesses offered by the company which is common for females. Another study by Zhao et al. (2005) also found that gender is directly associated with entrepreneurial intention. It is because women have reported having lower intentions to become entrepreneurs than men. In contrast, Keat et al. (2011)argued that male students have greater entrepreneurial intention compared to their female counterparts. Lucas & Cooper (2012) stated that gender is generally regarded as having a consequential effect on entrepreneurial pursuits, as men are generally found to have a higher entrepreneurial self-efficacy than women and more likely to start companies. Apart from that, Franco, Haase and Lautenschlager (2010) did a study to examine the factors contributing to entrepreneurial intention among students in Europe. They revealed that the entrepreneurial intention among female students is the same as male students. Further, MoharYusof, Sandhu and Jain (2008) conducted a research on entrepreneurial intention among business students at Tun Abdul Razak University (UNITAR). They utilized T-test analysis to find the differences of perception among male and female students related to entrepreneurial career. It was revealed that both genders do not show difference in dealing with entrepreneurship. There are inconsistencies from previous researchers regarding gender in dealing with entrepreneurship. Some researchers argued that male students have higher entrepreneurial intention; meanwhile the opponents argued that female students were more entrepreneurially inclined compare to their male counterparts. Accordingly, this study attempts to pose the hypothesis as follow:
H2: There is a difference between male and female business students in dealing with entrepreneurship.

3. Methodology

Business students from several universities in Indonesia are defined as the unit of analysis in this study; in other words, the unit of analysis is the individual. To be more specific, the unit of analysis of this study includes the students who are enrolled in the department of management, economics and accounting in the faculty of economics and business. In order to gather the data, this study utilized self-administered questionnaires and analyzed the data using SPSS version 22. This study conducted a cross-sectional survey targeting a sample of business students at the Indonesian higher education institutions both public and private. The items of both SSwere assessed on a ten-point Likert scale, while EI instruments were assessed on a five-point Likert scale. Using a convenience sampling method, 1,230 self-administered questionnaires were distributed to the business students at public and private universities across Indonesia. This data collection process yielded back with 381 usable responses that were used in the statistical analysis for assessing the relationship between SS and EI as well as the role of gender in dealing with entrepreneurship.

Table 1: Factor Analysis of Social Support

CODE	FACTORS	
	FS	PS
FS10	.887	
FS5	.832	
FS6	.826	
FS14	.819	
FS2	.806	
FS3	.794	
FS12	.793	
FS8	.763	
FS11	.761	
FS7	.708	
FS9	.692	
FS4	.685	
FS13	.672	
FS15	.647	
FS1	.628	
PS6		.837
PS9		.835
PS3		.832
PS7		.806
PS4		.802
PS1		.793
PS8		.787
PS10		.776
PS2		.752
PS5		.736
Eigenvalue	8.356	4.364
VE %	39.103	25.158

Reliability	0.802	0.843
KMO	0.937	
Overall VE%	64.241	
Chi-square	547.068	
Significance	0.000	

FS : Family Support
PS : Peers Support

Social Support Instrument: In order to measure the variable of social support, the instrument of social support was adopted from Sahban, Kumar and Ramalu (2015). The items related to the dimensions of social support, i.e., friends support and family support was used in this study. The social support was measured with 25 items using a 10-point Likert scale (1=strongly disagree to 10=strongly agree). To test the validity and reliability, this instrument was subjected to pilot testing.80 questionnaires were conveniently hand-distributed to students in Indonesia from both public and private universities, resulting in 65 valid responses. SS items were then coded as 1 and 2= strongly disagree, 3 and 4= disagree, 5 and 6= neutral, 7 and 8= agree, and 9 and 10= strongly agree and entered into SPSS for analysis. Having analysed through SPSS, the 25 items were retained since every item had factor loading more than 0.5 and consistently predicted the construct. In addition, these items explained 64.24% of variance cumulatively. Therefore, these items were not dropped. In addition, the Cronbach's alpha ranged from 0.802 to 0.843, fulfilling eligibility to consider the factors of social support. Hence, this instrument could be considered for the data collection and analysis to explain the social support construct. The factor analysis of social support construct is presented in Table 1.

Entrepreneurial Intention Instrument: All the entrepreneurial intention items were adopted without alteration from Liñán and Chen (2006, 2009). The questionnaire has been used by Liñán(2008); Guerrero et al. (2009); Chen et al. (1998); and Zhao et al. (2005). The construct of entrepreneurial intention was measured using a five-point Likert scale (1=strongly disagree to 5=strongly agree). The use of five-point Likert scale was also found in previous entrepreneurial intent studies done by Gupta, Turban, Wasti and Sikdar(2009); Schwarz, Wdowiak, Almer-Jarz and Breitenecker(2009); and Malebana and Swanepoel(2011). The Cronbach's alpha for the entrepreneurial intent scale was 0.903 which met Nunnally and Bernstein's (1994)standard for scale development studies of 0.7.

To test the validity and reliability, this instrument was subjected to pilot testing. Since the original instruments were written in English, an expert translator translated the questionnaire from English into Indonesian. Then the translation was, blindly, back-translated from Indonesian to English by another translator. After that, the authors matched the translated copies to reach the most accurate translation and eliminate statements that gave different meanings (e.g. Brislin, 1980; Mahmoud & D Reisel, 2014; Mahmoud, 2013). Hence, EI1, EI4 and EI9 were eliminated due to bad phrasing. The new copy was then reviewed by Professor from the Economics and Business Faculty, Indonesia University to guarantee face validity (Tharenou, Donohue, & Cooper, 2007).Thereafter, the 80 questionnaires were also conveniently hand-distributed to students in Indonesia from both public and private universities, resulting in 65 valid responses. EI items were then coded as 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree and entered into SPSS for analysis. As a result, the pilot test provided a reliable statistic, indicating the Cronbach's alpha of 0.925, fulfilling the eligibility to consider the factors of entrepreneurial intention. The study further revealed that the eigenvalues exceeded 1, explaining cumulatively 0.640 of the variance. Hence, this instrument could be considered for the data collection and analysis to explain the students' intention to deal with entrepreneurship. Table 2 below described the factor analysis of entrepreneurial intention:

Table 2: Factor Analysis of Entrepreneurial Intention

CODE	FACTOR
	EI
EI3	0.953
EI5	0.952
EI7	0.949
EI8	0.792
EI6	0.777
EI2	0.762
Eigenvalue	4.828
VE %	64.052
Reliability	0.925
KMO	0.901
Overall VE%	64.052
Chi-square	207.486
Significance	0.000

EI: Entrepreneurial Intention

4. Results

Validity and Reliability: Prior to examine the first hypothesis, this study attempted to test validity and reliability of the items through convergent validity and Cronbach alpha. Convergent validity is defined as the extent to which the items used to measure a construct share a high proportion of common variance (Hair, Black, Babin, & Anderson, 2010). According to Churchill (1979), it is the extent to which different means of data collection produce the same results. In other words, convergent validity indicates the degree to which multiple items measure the same construct.The convergent validity is presented in Table 3 below:

Table 3: Convergent Validity

			Convergent Validity		
Construct	**Items in Average**	**Internal Reliability Cronbach's Alpha**	**Loading**	**Composite Reliability**	**Average Variance Extracted**
Social Support	FS-av		0.649		
	PS-av	0.889	0.674	0.896	0.812
Entrepreneurial Intention	EI-av	0.891	0.798	0.948	0.755

Based on Table 3 above, the results showed high factor loadings of the two variables, indicating that the convergent validity of the measures was established.

Hypothesis Testing: For further analysis, this study put the dimensions of social support in average. Consequently, there was only single dimension to be examined. The regression analysis is presented in table 4 below:

Table 4: Examining Variables' predictive power

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.786	.148	-	18.847	.179
SS-av	.248	.121	.337	6.971	.016

* : p< 0.05; **: p< 0.01; ***:p<0.001

Based on the table above, the t-value is 6.971 which is more than the threshold value of 1.96 (Nunally, 1978) and the significance value in this table shows0.016 which is below than the threshold value of 0.05, indicating that the null hypothesis was rejected. In other words, hypothesis 1 is supported whereby social support was positively influence student's intention to engage in entrepreneurial career. In order to test the difference between male and female students in term of entrepreneurial intention, independent sample T-test was employed and the result revealed that the entrepreneurial intention between both groups was different. Table 5 and 6 below describe the comparison of entrepreneurial intention between male and female students:

Table 5: Gender Distribution

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
EIav	Male	211	3.8544	0.64374	0.04432
	Female	170	3.7175	0.62214	0.04772

Table 6: Independent Sample T-test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
EI-av	Equal variances assumed	1.448	.230	2.093	379	.037	.13683	.06536	.00831	.26535
	Equal variances not assumed			2.101	366.716	.036	.13683	.06512	.00877	.26489

As depicted in Table 5 above, the mean value of male students is slightly higher than female students. However, Table 6 depicts that there is a difference in both male and female students in terms of their intention to engage in entrepreneurial career. To interpret the output, the first row in Table 6 is used since the significance value in Levene's Test is more than 0.05. It is clearly seen that the significance (2-tailed) is

.037, showing that there is a difference between the two groups in terms of engaging in entrepreneurship activities. Therefore, H null was rejected.

5. Discussion and Implication

This study has achieved its research objectives in examining the relationship between SS and EI as well as the difference between male and female toward entrepreneurial intentionby utilizing SPSS version 22.Convergent validity and reliability test was also employed to ensure the combination of items to be able to measure the construct and to support the consistency of each item to measure the construct. It was hypothesized in this study that the social support is positively related to entrepreneurial intention. The result indicated that there is a positive relationship betweensocial supportand entrepreneurial intention among business students, meaning H1 is supported in this study. Past studies have supported this finding (Anderson et al., 2005; Baughn et al., 2006; Buang & Yusof, 2006; León et al., 2007; Mustikawati & Bachtiar, 2008; Procidano & Heller, 1983; Rani, 2012) who have reported showing strong positive correlation between family support system and entrepreneurial intention. The findings of this study reveals that the higher the social support, the higher the entrepreneurial intention of the students to start-up a business. According to Rani, family support has a strong correlation with the occurrence of a new venture, opportunity recognition, decision-making as well as resource mobilization. In addition, a few related aspects, like environmental support and parental support, play an important role in influencing a person's desire for entrepreneurship (Indarti & Rostiani, 2008; Lee, Wong, Foo, & Leung, 2011; Suharti & Sirine, 2011). Encouragement in the form of high motivation from the family to move forward is a core requirement to become a real entrepreneur. Thus, family support is of course the primary driving force to boost students' mentality and motivation (Kasmir, 2006). Parents with entrepreneurial professions are also role models for their children's career choice after graduating from the University.

The social support system has been shown to be paramount in developing entrepreneurial intention. The kinship relationships work as the strongest ties in entrepreneurial networks. Therefore, it is undeniable that parents play a significant role in providing support and motivation that will make their children become socially competent, confident and responsible in realizing their intention to become entrepreneurs. Based on these circumstances, people should develop a relationship and networking with other people to optimize their capacity, especially in conducting business. The network can also be a gateway that adds to competency ability and supplementary resources of an individual. In addition, the young graduates are supposed to get appropriate guidance and information from their peers and family members in order to get a better understanding about starting a business with appropriate resources. The students basically do not have too many ideas about how to run a business; they do not yet know how to look into aspects like finance management, pooling of resources, marketing the products, identifying right business opportunities, accessing better business networks and establishing business in right locations. These young students need to be given appropriate guidance from their family. According to this research, the higher the support the students get from their family, the higher the entrepreneurial intention will be. The result of the study thus indicates a strong correlation between students' SS and their intention to become entrepreneurs. Since this research employed non-probability sampling, further research need to be conducted by utilizing probability sampling as well as employing larger population in order to support the generalization of the outcomes.

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A Tobit Analysis of the Determinants and Potentials of Savings in the Case of Payatas Households

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Abstract: This case study aims to identify the factors affecting household savings in the Area B of Payatas, Quezon City. Particularly, the variables included in the analysis are economic expectations, homeownership, household consumption, household debt, household disposable income, and number of dependents in the household. This paper also aims to analyze the saving potentials of households in Payatas. A total of 422 conditionally and randomly selected households were interviewed through a guided survey questionnaire. The researchers utilized Tobit regression and computed for the conditional marginal effects for both the censored and truncated sample. The results of the study were divided into three: Tobit regression results, conditional marginal effects results on all respondents, and the conditional marginal effects results on household savers. Significant variables such as economic expectations and household disposable income were found to be positively related to household savings, and household consumption was negatively related to household savings. This case study shows that Payatas B households do have saving potentials irrespective of their low income showing high request for accessibility on formal saving institutions.

Keywords: *Tobit model, household savings, disposable income, consumption, economic expectations*

1. Introduction

Household savings rate in the Philippines is one of the lowest in East Asia. From 1994 to 2006, the average household saving rate in the Philippines declined by 5.2 percentage points to about a mere 5 per cent of disposable income (Hagiwara, 2012). This indicates that Filipinos are likely spending a larger portion of their income on immediate consumption rather than on savings for the future (Bersales & Mapa, 2006). According to Orbeta (2005), the saving rates in the country are low, even lower than those of Indonesia, which has lower per capita income. Bangko Sentralng Pilipinas reported that household saving rate had dropped to an all-time low of 0.50 percent in February of 2014. In the same year, it was reported that the number of households with outstanding savings decreased from 30.3 percent during the second quarter to 26.9 percent in the last quarter. Low savings rates have been identified as one of the main reasons why the Philippines has not grown as fast as her neighbors. Growth theories have shown that saving is important for economic growth. According to Misztal (2011), savings and economic development have a one-way relationship for both developed and developing countries. With this in mind, savings can be said to be instrumental in attaining a number of economic goals. Thus, a strong saving performance is an important precondition for achieving economic growth, macroeconomic balance and financial and price stability (Adewuyi, Bankole & Arawomo, 2007). While the impact of saving at the macro level is well documented, research on the micro level of the saving behavior of households especially in the Philippines are still quite a few and much is left to be deliberated.

Given the situation at hand, it is of utmost importance to study the different factors that may affect household savings and appraise Filipinos on the possible ways of how they can save more. In this research, the 2nd district of Quezon City particularly in Payatas is the main focus. It remains a poverty-stricken area though several foundations operate and help improve the living conditions of residents in the said place. In line with this, the researchers are proposing that saving is an important factor in improving the lives of Payatas households and will greatly influence their way of living. To shed more light on the saving behavior of Payatas households, this paper aims to analyze how homeownership, household consumption, household debt, household disposable income, economic expectations, and number of dependents in the household affect savings. This study also analyzes the saving potentials of Payatas B households. This study is structured as follows. Following the introduction section, section II discusses the related studies on household saving in the Philippines and in other countries, as well as the existing possible factors affecting household saving. Section III presents the data sources used for this paper, describes the method of data gathering, and the econometric

model used. Results are then presented and interpreted in section IV and finally, concluding remarks are given in section V.

2. Literature Review

Household Savings: Savings is measured as the excess of income over consumption expenditure. Transforming the given definition to the household perspective, household savings is the difference between household's disposable income and its consumption or expenditures on goods and services. In recent microeconomic studies, household savings is commonly measured in terms of interval data or the continuous data given by respondents in the respective currencies; however, some researchers have utilized household savings as a binary variable of 1 if the household possess savings in any form, or 0 otherwise. Such studies will be discussed at the later part of this paper.

Both theoretical and empirical work on savings, specifically private or household savings, have been explored by many economists; explaining the different determinants of savings that can be grouped loosely under the headings of income and growth, demographic structures, macroeconomic stability, government policy, uncertainty measures, and external variables in different approaches. Among the commonly studied variables in influencing household saving behavior were age (Hailu & Mirach, 2014; Kibet, Mutai, Ouma, Ouma & Owuor, 2009), family size (Orbeta Jr., 2005; Akpan, Udoh & Aya, 2011), educational attainment of the household head (Egwu & Nwibo, 2014; Ahmad & Asghar, 2005), gender (Mumin, Razak & Domanban, 2013) civil status (Rehman, Bashir & Faridi, 2011; Bashir, Hassan, Nasir, Baber & Shahid, 2013) and financial literacy (Mahdzan & Tabiana, 2013; Egwu & Nwibo, 2014). The studies differ from each other in terms of both the method of estimation and the set of data used. Researchers like Alberto & Bersales (2010) and Minh, Nhat, Anh, Duc and Son (2013) exploited the use of secondary data provided by government or private institutions obtained from household income and expenditure surveys in periods of time. On the other hand, some studies employed the use of primary data in gathering household level information by using survey questionnaires or conducting interviews (Bersales & Mapa, 2011; Shitu, 2012).

Economic Expectations: Economic expectations or specifically consumer economic expectations, is the level of optimism or pessimism an individual has on the future economic conditions of the country.In most previous studies, a rise in economic uncertainty, i.e. if households believe there is a larger risk of losing their job, a possibility of increase in the level of prices of goods in the future, or a tendency of receiving less income in the years to come, likely leads to an increase in the amount of precautionary saving that households choose to undertake (Guariglia & Kim, 2004; Chamon, Liu & Prasad, 2013). Researchers like Giavazzi and McMahon (2012) and Cho, Fang and Hanna (2007) utilized consumer surveys in which households answered a number of past and future expectations about the economy and were given an option to answer in better or worse. Using OLS method, Giavazzi and McMahon (2012) focused more on the forward-looking questions and showed a statistically significant coefficient of negative 5.2, indicating that German households save more during uncertainty on the future economic condition. On the other hand, Cho et al. (2007) utilized logistic regression and the results were in line with the hypothesis that U.S households having positive expectations about the economy are less likely to list emergency fund as a saving goal.

Possible proxy variables for economic expectations are consumer sentiment index and consumer confidence index, which Gough (2011) and Klopocka (2013) have utilized in analyzing household saving behavior in the U.S. and Poland, respectively. Generally, both studies used OLS method and have concluded that households save less, if they expect their financial situation to improve. More specifically, Gough (2011) found out that the CSI has a very minor effect in the annual saving rate of U.S. households. If the consumer sentiment index were to increase by 10 units, the model predicts a 0.70% decrease in the annual saving rate, holding other variables constant. Similarly, Klopocka (2013) observed that changes in the propensity to save of households in Poland showed a negative coefficient of 0.16. Though the relationship is negative, the impact is still quite small.

Some micro and macroeconomic studies about household saving have also suggested that positive relationship exists between future economic expectations and household saving (Chowa, Masa & Ansong, 2012; Alessie & Teppa, 2010). Chowa et al. (2012) proved this relationship in Uganda by examining

psychological factors and common human characteristics such as optimism or pessimism about future economic conditions, perceived locus of control, attitude towards saving, and self-control. Using hierarchical multiple regression, a 1 unit increase in future economic expectation increases saving by 61%. Likewise, Alessie & Teppa (2010) focused on the role of habit formation in individual preferences. The estimated coefficient of the predicted income change for the next 12 months is an expected negative 0.009, whereas the estimated coefficient for the future income change has the unexpected sign of 0.023. Utilizing logit model, Fisher (2010) explored the Black-White distinction in saving behaviour. The results showed that income uncertainty is statistically significant and positively related to the household saving for white people and the opposite transpired for black people. The coefficients were 0.265 and negative 0.293 respectively. Kostakis (2012) found that upon using OLS model, results were consistent with the precautionary saving hypothesis with the expected positive sign coefficient of 0.483.

Homeownership: For most families, homeownership is the primary form of wealth accumulation (Grinstein-Weiss, Chowa & Casalotti, 2010; Salotti, 2010). In trying to analyze the influence of wealth on household savings, homeownership was used as a proxy in most studies over the past decade. The reason for this is that the estimation of wealth is not easily measurable (Amhad & Asghar, 2005). Several researches have utilized a dummy variable for homeownership, indicating 1 if the respondent is a homeowner or 0 if the respondent is a renter (Chen, Kuan & Lin, 2007; Anong & Fisher, 2012; Rha, Montalto & Hanna, 2006; Mengesha, 2015; Gedela, 2012; Chhoedup, 2013; Chamon & Prasad, 2010). Chen et al. (2007) discovered wealth effect exists for homeowners across the conditional distribution of saving in Taiwanese households. Likewise, Anong and Fisher (2012) examined how saving motives are related to saving habits. Using multinomial logistic regression, results showed those homeowners neither save regularly nor irregularly with a coefficient of negative 0.002 and negative 0.150 respectively, indicating that homeowners do not save.

However, Rha et al. (2006), who also used logistic regression, showed that households who own a house increase their probability of saving with an estimated coefficient of 0.1906. Moreover, Mengesha (2015) investigated the saving behaviour of the households in Jimma zone of Oromia Region, Ethopia. From the total sampled households that have their own homes, 93.4% of them have saving habits whereas from those non-home owners, 78.6% of them have saving habits. The descriptive statistics indicated that household heads that have their own home are better in their saving status compared to those who don't have their own home. The Chi-square test further revealed that there is a statistically significant difference between household who have their own home and household who don't on their saving status.

Although several studies showed that individuals who own a house are saving less, there are some findings that households save more when individuals have their own dwelling. For instance, Fisher (2010) empirically explored Black-White differences in saving behavior by using data from the Survey of Consumer Finances in the U.S and Yao, Wang and Weagley (2011) used the 2008 Survey of China Consumer Finance in determining the saving behavior of Chinese households. Using logistic regression model in both works, either races with own homes have positive impact on household saving showing a coefficient of 0.195 and 0.218, respectively. On the other hand, results showed a significant positive coefficient of 0.223 on Chinese households. Wan (2015) focused on the Chinese urban and rural area, a positive coefficient of 0.063 and a negative coefficient of 0.090, homeowners in urban area are seen to have a higher saving rate than those in rural area. According to Fontes and Gutter (2006), the explanation behind the positive relationship is that those buying a home are more likely to be forward thinking and might be quicker to engage in other forms of savings despite the costs associated with home acquisition.

Household Consumption: Household consumption is defined as the annual sum of the total value of food, other goods, and services that were consumed by the household, the value of gifts and donations given away, and the imputed value of an owner-occupied or a rent-free dwelling unit (Alba & See, 2006). In the Family Income and Expenditure Survey (FIES) in the Philippines, household consumption consists of durable consumption and nondurable consumption. Most studies made use of either of the two categories or both as a measure of total household consumption.

Soharwardi, Khan and Sherani (2014) used children expenditures in determining its effects on household saving in Pakistan. Using the OLS method, a negative 0.782 estimate was found which implied that saving will

decrease if the total children expenditures increased. In the same country, Bashir et al. (2013) evaluated gender dissimilarities in saving behavior and its determinants among males and females. A total of 400 questionnaires were selected for study which includes 124 female respondents and 276 for males. In the study, the consumption variable was patterned into four dummy variables: household expenses, medical expenses, education expenses and miscellaneous expenses. Using also the OLS method, household expenses had positive impact for males and negative impact for females on saving behavior with coefficients of 0.257 and negative 0.467, respectively. More so, educational expenses have negative impact on saving behavior of males and vice versa to females garnering coefficients of negative 0.201 and 0.16 respectively. Finally, both medical and miscellaneous expenses have negative coefficient for males and females.

Summing up all of the expenses, Rashid, Nasir, Mustapha, and Kamil (2011) used total expenditures as a measurement of consumption to identify the relationship between household consumption and savings. Utilizing correlation and two stage least square regression, the results showed that an increase in total expenditures increases household savings by 0.04215 units. In the rural area, Teshome, Kassa, Emana and Haji (2013) assessed the saving behaviors of households in East Hararghe Zone, Oromia Regional State, Ethiopia using survey data generated from 700 sample households. From the Tobit model used for analysis, annual expenditure in Birr accumulated a negative coefficient of 0.0010067 but not significant. While studies have concluded that there is negative relationship between household consumption and household saving, there were also studies on rural households in different countries showing positive relationships (Tesfamariam, 2012; Obi-Egbedi, Soneye & Alawode, 2014).Tesfamariam (2012) randomly selected 120 rural household financial co-operators from six rural saving and credit cooperatives through a simple survey in Tigrai Region of Ethopia. Using OLS method, it was found that an increase in consumption leads to an increase in household saving by 0.0379 units. Utilizing the same method, Obi-Egbedi et al. (2014) studied the factors influencing rural household saving in Akinyele local government area of Oyo state, southwestern Nigeria. The result of the regression is consistent with the previous study with a 465.262 coefficient.

Household Debt: Household indebtedness has grown considerably in most developed countries over the past 25 years, sustaining consumption growth and contributing to the decline in the household savings rate (Barba & Pivetti, 2009). Most researchers have used a continuous variable for debt and at the same time exploited the use of OLS method for the analysis (Chhoedup, 2013; Kim, 2010; Nwankwo, Ewuim, & Asoya, 2013). These studies arrived with consistent findings that household debt is negatively associated with household saving. However, using the same econometric method but different approach in the study, Rehman et al. (2011) selected households from lower, middle and higher income group to examine the saving behavior of various income groups in Pakistan. It was concluded that household liabilities in medium and higher income households is a reducing factor of household saving while liabilities in lower income households have no significant effect on their level of saving. On the other hand, various researchers have measured household debt as dummy variable indicating 1 if a debt exists and 0 if otherwise. The same studies have utilized logistic regression model (Niculescu-Aron, 2012; Fisher, 2010). Niculescu-Aron (2012) highlighted some particularities of the Romanian households saving behavior from the perspective of the importance for economic recovery and financial stability of the economy. The model showed a negative coefficient of 0.33 which were in contrast to the hypothesis statement of the study. Fisher (2010) utilized 2007 Survey of Consumer Finances. For both Black and White races, results showed that there is a positive relationship between credit card existence and household savings with a 0.092 coefficient.

In South Africa, Mongale, Mukuddem-Petersen, Petersen, and Meniago (2013) utilized time series data from the South African Reserve Bank. The household savings model is estimated by using the co-integrating vector autoregressive (CVAR) framework. The results of the VECM estimation showed that household debt is negatively associated with household savings through a negative coefficient of 65.49179. Contrastingly, some economic studies proved that household debt can be positively related to household savings knowing that individuals who have liabilities to be paid tend to increase their savings in order to pay for it. According to Mengesha (2015), the proportion of households who have taken credit and not taken credit with savings was 96.2% and 86.2%, respectively. This indicates that households who have taken credit are relatively better in their saving status than households who have not taken credit. Using Johansen co-integration technique, Krishnan (2012) examined the impact of selected variables on the personal savings behavior from 1980 to

2008 in the United States. One of the selected variables was household debt. It had a 14.055 and was greater than the 5 percent critical value of 3.841.

Supporting the relationship stated above, Sebhatu (2012) using OLS model, investigated the determinants of saving behavior of cooperative members in Tigrai region of Ethiopia. The amount of money borrowed has a positive coefficient and significant at 10%, as expected by the researcher, indicating that a one *birr* increase in credit, raises the household savings by 0.9428 *birr*. From the same perspective but a different approach, Hailu and Mirach (2014) and Teshome et al. (2013) tackled about the household debt using access to credit services as a measure. Using Tobit model, both research have suggested that there is a positive relationship between these variables. Albeit the works of Hailu and Mirach (2014), the variable showed an insignificant result, in the study conducted by Teshome et al. (2013), the variable was significant with a 5685.91 coefficient.

Household Disposable Income: Income has been regarded as the chief determinant of the saving function (Teshome et al., 2013). According to OECD, household disposable income is the sum of wages and salaries, mixed income, net property income, net current transfers and social benefits other than social transfers in kind, less taxes on income and wealth and social security contributions paid by employees, the self-employed and the unemployed. Numerous studies, either using primary or secondary data, have suggested that income is positively related to saving which supports the saving function. Using probit and tobit regression respectively, Shitu (2012) and Hailu and Mirach (2014) analyzed income and saving pattern in South-Western Nigeria and Ethopia. Shitu (2012) found that there is positive and statistically significant effect of income to saving of a probability of saving of 0.044 as income increases 1 unit of *Naira*, while Hailu and Mirach (2014) found that saving increases 0.2258 *Birr* as income increases by 1 unit. Using OLS method, Odoemenem, Ezuhe and Akerele (2013) explored the saving and investment pattern of small scale farmers in Makurdi local government area of Benue State, Nigeria. Evidently shown in the results was that a unit increase in the income of small scale farmers will lead to about 0.573 *Naira* increase in saving. Kibet et al. (2009) investigated the factors that influence savings among households of teachers, entrepreneurs and farmers in rural parts of Nakuru District. It was found that the marginal propensity to save out of income ranges from 0.0605 in the case of teachers to 0.2558 in the case of businessmen, 0.1937 for farmers, and averages 0.1578 for all households. Athukorala and Sen (2004) examined the determinants of private saving in the process of economic development by utilizing estimation, in the light of the Indian experience. It is found that the private saving rate rises with both the level and the rate of growth of disposable income. The results showed that when there is a 1 percent increase in per capita income, there will be an increase of 0.09 percentage point in the private saving rate.

Ahmad, Atiq, Alam, and Butt (2006) employed the use of Johansen co-integration method and error correction model technique in order to examine the long run and the short run dynamics of household saving in Pakistan. It was revealed that both per capita income and its growth rate have significant positive impacts on household saving. The long run elasticity from the coefficients of growth rate and per capita income suggests that a 1 percent increase of both variables yield 0.29 and 0.39 percent increase in household saving, respectively. Khan, Gill and Haneef (2013) also used the same method as the previous researcher in determining the factors affecting private saving in Pakistan and arrived at a 1.18% increase in household saving as per capita income increases by 1 percentage point. Also, Abou and Seoud (2014) analyzed the same variables and utilized the same method. The study resulted to a 0.049 percentage point increase of saving when 1 percent of per capita income increases in Bahrain. Using OLS method, on the other hand, Ahmad and Asghar (2005) concluded that large and rapid increase in income tends to raise the rate of household saving in Pakistan because households' capacity to save increases with household income with a positive coefficient of 0.886. More specifically, their study analyzed that there is 0.794 coefficient exists between savings and income of urban households while a 0.940 coefficient for rural households.

Vast researchers have concluded that household disposable income is positively related to household savings. Asrat and Precious (2014) revealed that contrary to a theoretical expectation, the level of income and household savings are negatively related. Using Johansen co-integration and the error correction mechanism, the determinants of household savings in South Africa over the period 1990-2011 and were examined. The results were divided into two; short run and long run effects. In the short run, households choose to dissave

by a negative coefficient of 0.000178 as income increases by 1 percentage point while in the long run; households have greater chance of decreasing their savings by 180.79.

Number of dependents in the household: Based on provisions in the Philippine Labor Code of 1974, the official working ages in the Philippines is 15 to 64 years old. Basing on the legal delineation for working ages, the implied dependent individuals are age 14 years old and below and 65 years old and above; thus, dependents participate in household activities rather than in the workforce. In relating this variable to household savings, studies have utilized headcount of youth and old dependents, a continuous variable, as a measure (Issahaku, 2011; Odoemenem et al., 2013). Using OLS method in both studies, it showed that the number of dependents negatively relates to household saving. More specifically, increasing the number of dependents by 1 decrease the household saving by 50.8% (Issahaku, 2011). A number of studies analyzed through the OLS method and utilized dependency rate as a measure for this variable (Kibet et al., 2009; Chhoedup, 2013; Rehman et al., 2011). Kibet et al. (2009), focusing on a sample of 359 in the rural parts of the Nakuru District in Kenya, showed a significant result with a coefficient of negative 202.205, presenting a big decline in household saving when the dependency rate is larger. Chhoedup (2013) provided an analysis and documents the extent of saving in Bhutanese households. Results of the regression implied that the total dependency ratio in the household is negatively related to household saving presenting a coefficient of negative 2260.52. Likewise, Ahmad and Asghar (2005) analyzed the household saving behavior in Pakistan. The dependency ratio is found to have a negative influence on household savings for overall Pakistan with a negative coefficient of 0.036 that is statistically significant at the 5 percent level of significance. The results suggest that as the number of the dependent population increases, household saving tends to decline because the expenditure on them increases accordingly.

Using OLS method, Rehman et al. (2011) arrived at different conclusions in Pakistan. The results showed that total dependency rate and income are inducing factors for household saving of lower income groups showing a coefficient for the dependency rate of 2415.21, and saving of middle income group is positively related to total dependency rate of 4644.43. However, for high-income groups, total dependency rate showed a coefficient of negative 2004.56 but not statistically significant. Using the tobit model respectively, Teshome et al. (2013) tried to assess the saving behavior among rural household in Ethiopia. Dependency rate showed a positive coefficient of 77.91499 but was not statistically significant. Ndirangu, Burger, Moll, and Kuyvenhoven (2010) analyzed seasonal demographic factors affecting household savings. Using a sample of 196 households, the estimate for the dependency ratio had the expected negative sign of 6330.44, significant at 5 percent; thus, households with more elderly members save less.

Essentially, Ismail and Rashid (2013) analyzed the determinants of household saving rate in Pakistan using a time series data analysis. Young dependency ratio became statistically significant and followed the expected sign that the short run and long run relationship between household saving and old dependency ratio is also statistically significant with negative 0.550 and negative 0.38 respectively (Khan et al., 2013). However, Asrat and Precious (2014) examined the determinants of household savings in South Africa over the period 1990-2011. The results of the analysis showed that dependency ratio have a positive long run relationship with household savings rate. On the other hand, Alberto and Bersales (2012) identified significant determinants of Philippine agricultural household saving using aggregate regional household panel data from the Family Income and Expenditure Survey (FIES) for the period of 1991 to 2006. Using General Least Squares (GLS) method, the Philippine agricultural household saving with two-way error component fixed effects showed that every percentage point increase in the proportion of young dependents at agricultural households suggests around 1.17 percentage point decrease in estimated mean agricultural household saving rate, all other things being the same.

3. Methodology

To analyze the determinants of household savings, Tobit regression (Tobin, 1958) was used as specified in **Equation 1** and was derived from the works of Teshome et al. (2013) and Hailu and Mirach (2014). The explanatory variables were measured as follows: Economic expectations as an index derived from the Likert scale; homeownership as a binary variable; 1 if households own their homes and 0 otherwise, household

consumption, household debt, household disposable income, and number of dependents in the household as a discrete variable of the total headcount of young and old dependents.

Equation 1: Tobit regression equation

$$Y_i^* = X_i\beta + \mu_i \qquad i = 1,2 \ldots 422 \qquad Y_i = \begin{cases} Y_i^* \; If \; Y_i^* > 0 \\ 0 \; If \; Y_i^* \leq 0 \end{cases}$$

where, Y_i= the observed amount of household savings
Y_i^*= the latent variable which is not observed
β= vector of unknown parameters
X_i= vector of independent variable affecting household savings (HSAV)
μ_i= normally distributed error term with mean zero and variance σ^2

4. Results and Discussion

Only household disposable income (HDINC), economic expectations (ECOEXPEC), and consumption (HCONSUMP) are statistically significant and conform to the hypothesis of the researchers. The income and economic expectation variable show a positive relationship to savings. As income increases by one unit or in this case 1000 PHP, the desired savings increase by 359.17 PHP all things constant. Moreover, a one unit increase in economic expectations increases the desired propensity to save of households by 1,145.39 PHP. The consumption variable has the expected negative impact to savings which explains that as consumption increases by 1000 PHP, the desired savings decrease by 297.42 PHP.

Table 1: Tobit regression Results

Variables	Coef.	P>|t|
Home	541.3991	0.324
Numdep	8.695617	0.955
Hdinc	.3591741	0.000
Hconsump	-.2974215	0.000
Hdebt	.0188268	0.697
Ecoexpec	1145.391	0.011
_Cons	-4821.707	0.000

The researchers are also interested on the marginal impact of the explanatory variables on the mean value of the actual values observed in the sample to compare it to the desired values. Consistent with the previous results, income and economic expectations have positive relationship to savings, and negative relationship for consumption manifested in Table 2. As household disposable income (HDINC) increases by 1,000 PHP, the average actual amount of savings by individuals in Payatas, increases by 149.22 PHP. Moreover, an increase in economic expectations *i.e.* when individuals expect next year to be worse than the current year, their average actual amount of savings increases by 474.86 PHP. On the other hand, as consumption increases by 1,000 PHP, the average amount of savings decreases by 123.57 PHP.

Table 2: Conditional marginal effects results on all households

Variables	dy/dx	P>|z|
Home	224.9322	0.324
Numdep	3.612722	0.954
Hdinc	.1492242	0.000
Hconsump	-.1235681	0.000
Hdebt	.0078219	0.697
Ecoexpec	474.8695	0.011

On the other hand, to assess the effects of changes in the explanatory variables on the intensity of households who are savers, Table 3 shows the result of the conditional marginal effect on the truncated sample. To expound, as household disposable income increases by 1,000 PHP, the average actual amount of savings by households who save in Payatas, increases by 114.74 PHP. Moreover, when household savers expect next year to be worse than the current year, their average actual amount of savings increases by 365.89 PHP and as consumption increases by 1,000 PHP, statistics show that their average actual amount of savings decreases by 95.01 PHP.

Table 3: Conditional marginal effects results on Household Savers

Variables	dy/dx	P>|z|
Home	172.9461	0.324
Numdep	2.777704	0.954
Hdinc	.1147356	0.000
Hconsump	-.0950092	0.000
Hdebt	.0060141	0.697
Ecoexpec	365.8872	0.011

In the Tobit model, a unit change in the value of a regressor has two effects: (1) the effect on the mean value of the observed regressand, and (2) the effect on the probability that Y* is actually observed (Gujarati, 2012). In relation to this, Table 4 illustrates the second effect of the Tobit model. To interpret, for every increase in household disposable income and economic expectation, the change in probability of household to save increases by .003% and 9.6%, respectively. On the other hand, as consumption increases, the change in probability of households to save decreases by .00249%.

Table 4: Conditional marginal effects on the probability of being Household Savers

Variables	dy/dx	P>|z|
Home	.0452444	0.324
Numdep	.0007267	0.954
Hdinc	.00003	0.000
Hconsump	-.0000249	0.000
Hdebt	1.57e-06	0.697
Ecoexpec	.0957197	0.011

5. Conclusion and Recommendations

The researchers conclude that there is a propensity to save in Payatas B despite the low income earned by households. It was found that Payatas households desire to increase their savings further and there are significant differences on their desired and actual savings. It was concluded that both household disposable income and economic expectations (worsening prospects of the economy) have positive influence on saving, while consumption has negative influence on saving. On the other hand, the other remaining variables such as homeownership, household debt, and number of dependents were proven to be statistically insignificant and have failed to form a link with household savings. Given the significant findings of the income factor, Barangay Payatas should provide job opportunities, business investments, and medium and long run loans in order to boost households' income level through partnerships with financial and non-financial institutions. The government should reach out conditional cash transfers such as the 4Ps or the *Pantawid Pamilya Pilipino Program* to the barangay. In this manner, a significant portion of households in Payatas B will shift to a higher income bracket, giving way for more opportunities to save. Furthermore, household heads should be given adequate information about being mindful of the spending behavior of their families as the consumption variable was proven to be statistically significant.

This can be achieved through seminars and conferences initiated by banks and other financial intermediaries. Earlier in 2015, residents of Payatas have been given easier access to formal financial services with the launch of mobile banking. This savings movement should be monitored and vigorously pursued to provide opportunities for saving to households with low income earners. In order to self-insure against uncertainty, Barangay Payatas should provide financial and economic education to Payatas residents that will increase awareness and will enable them to forecast and perceive the economy more accurately. One way is to distribute a weekly publication of a simplified economic update and to encourage them to engage in talks and discussions about the current events in the country. These recommendations boil down to the pursuance of formal education where individuals can now practice specialization and move to a higher income bracket, leading to an increase in their household saving. Another way to increase the welfare of Payatas residents is to continue to empower them in engaging in Payatas Poverty Alleviation Foundation. It is a non-stock, non-profit organization that was set up to be an anti-poverty, non-government organization (NGO) primarily to benefit the residents of Barangay Payatas and also the other less advantaged people of Quezon City. Residents should take advantage of the livelihood activities and programs it offers such as skill training programs, values workshops, cooperative development, microcredit/microfinance, etc. The government should not hesitate in allocating budget to these kinds of communities since it will definitely enhance the lives of many in Payatas.

While this paper provides significant results, it is recommended that more in-depth studies on household savings be conducted in order to address other problems, enlighten the general public, and push national and local governments to set policies and programs related to it. If the main focus is whole of Payatas and all its residents, it would be better to include other areas of Payatas, such as Payatas A and LupangPangako. In this case, the sample size will be bigger and more respondents will be examined. Future researchers may also focus on other areas may be it rural or urban with low income earning households or on other possible determinants not considered in the study. Paper wise, this study also does not guarantee accurate results because of some possible errors respondents might have committed during the survey process. Bias and/or dishonest answers of the respondents are unknown from the researchers. As far as the researchers' knowledge, the pieces of information gathered during the survey are accurate.

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Social Media Perception Affecting the Business of PTT Public Company Limited

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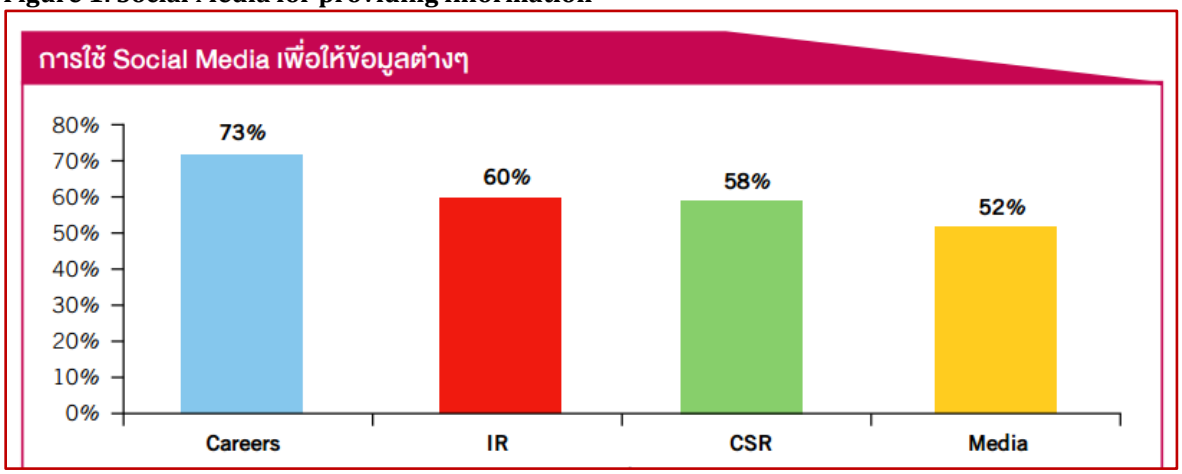
Abstract: The social media perception affecting the business of PTT Public Company Limited (PTT) aims for three purposes. Firstly, to study customers' behavior via social media's perception. Secondly, to study interaction between social media and customers. Finally, to study the impact of any information channels via social media that affects to user of products, related services, and company's images. Social media has been played a vital role rapidly in communication and transferring a huge of information in the manner of videos and contents widespread, which persuade many companies to promote their company via social media to acquire customers' attentions even related services including the public relation for the company's image. PTT has adjusted to a new era of social media comply with organizational communication plan. However, social media has affects both positive and negative impact at the same time. The company is rumored a negative issue in society and triggered by social media such as FB's page "Pay back PTT" is a web page for whom anti PTT. The company must handle these impact of negative information that can transfer to the customer of company in term of goods and service or any attitude that affect to company's image after receiving any information that derived from social media. Therefore, it is necessary to manage social media contents to create two ways of understanding about any issues and also prevent social media disaster from company's communication in term of attitude, image and decision making process to consume goods and service. This study is to provide recommended policy for PTT to improve their communication process and enhance trust for customer and investor in the future.

Keywords: *Social Media, Perception, Image, Brand, Reputation, Energy Market, Stakeholder, Influence, Product, Service, Communication, Facebook, Twitter, Line, Application, Interpretation, In-depth interview*

1. Introduction

Social media and social networking has become a new marketing tool for business where anyone can share opinions and attitudes for their services and any related information (Dincer and Dincer, 2012). Currently, social media has changed and updated over time in the various contexts of technology development, which influenced human behavior in these days whether communication via the internet or search engine to seek any useful information in daily life, including e-commerce and entertainment activities (Erdogmus, and Cicek, 2012). According to Chi (2011) defined that social media as marketing tools "to connect with brands and consumer, while offering a social interaction and social networking." The main strategic marketing in the current of many companies focuses on customer relation management and public relations to promote brands via TVs, and social media, which initiate brand awareness, and stimulate customers' demand step by step (Khuong and Tram, 2015). Any person who perceives information via TVs, and social media might be covered advertisement of products. To perceive information appropriately, it depends on factor influencing perception which is classified into two types that are external and internal factors. The external factors are such as intensively and size, repetition, contrast, movement. The internal factors are such as motive, expectancy, mood, attitude, and interest. Shiffman and Kanuk (2009, as cited in Camelia, 2012) claimed that these perceptions may cause positive and negative consequences transferring of information and presentation via social media which require carefulness of transferring information correctly and two ways communication that creates an understanding between sender and receiver. From the survey of data related to social media, it is found that the categories of data composed of four types that are popular for user in the nature of providing information which are information about jobs requirement, investor relations, corporate social responsibility, and organizational business communication (Phaisarn, 2016) as in figure 1.

Figure 1: Social Media for providing information



Ref: Phaisarn, J. (2016) "Social Media and Investor Relations"

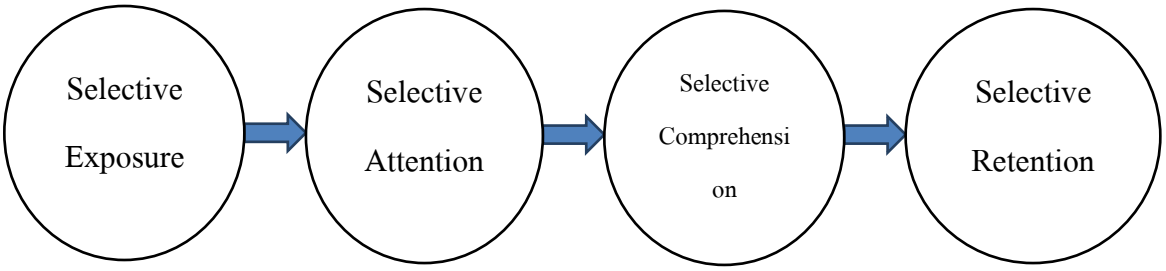
The company need develop and adapt to use information from social media in parallel with business growth (Tugrul, 2014). IT is the potential to build relationship between organization and customers which bring to profit, images, reputation, brand loyalty, and so on (Dincer & Dincer, 2012). It is the cooperation of the communication technology and the corporate communication to create social media of which the budget, efficiency, customer satisfaction are considered (Murat, Dugyu and Nil, 2015). PTT is a national energy company of Thailand and also registered in stock exchange of Thailand (SET). PTT has been developing marketing communication into the modern age as the same as the age of social media. The company has adjusted the social media in term of communications both internal and external and also had invested a portion of an organization's technology including communication, with a budget of 3% of net profit per year to developed public relations, advertisement, marketing or customer services and so on by having an affiliate called PTT ICT to response for company's communication technologies. As social media plays a vital role, PTT implements it in the manner of advertisement, public relations to promote products and services for example Green Service for environmental conservation and to deal with social media disaster, edit news correctly and spread the information widely and quickly to the world. Moreover, the development of data communication through social media and the study of customer perception channel on social media have an impact on the social structure of customer and company. It contributes to the development and gets in touch with the target group via the network that even more interesting (Dincer and Dincer, 2012).

2. Literature Review

Perception Process: Perception is a communication method that how to perceive information accidentally, or intentionally, or direct experience or indirect one to analyze and interpret information and evaluated information that receives from selective information. George & Michael (1993, as cited in Yun and Cho, 2014) claimed that perception procedure composed of four categories as following;

- Selective exposure is a method of customers wants to receive information or not .For example, customers may read or look at the advertisement before making decision process .Which advertisement is not their interest, they ignore it .Therefore, the customer just open only for their want to receive .
- Selective attention is a method of focus on information while ignoring others stimulator .
- Selective comprehension is consumer selective method any information and interprets base on their attitude, believe, motive, and self-experience .Sometimes, it may cause misunderstand and inconsistent accordance sender's means.
- Selective retention is a perception of advertisement or information that heard, seen, or read through the process of interpretation or comprehension .The consumer will remember only specific or outstanding base on only their interest .

Figure 2: Perception process by George & Michael



Ref. George & Michael (1993, as cited in Yun and Cho, 2014)

The Perception Image of Brand and Service: Brand perception is a perception of brand quality or products. Brand perception of the consumer can measure from consumers' attitude towards the brand. How consumer perceive marketing via brand, which it thoughts related to (CRM: Customer Relationship Management) towards consumers' perception. It found that brand equity measurement as an important method for brands to measure how brands believe and influence in the market share. Therefore, there are attempts to research and develop in brand measurement in many ways. In this study mention about marketing measure or consumer relation measure by dividing into two methods measurements; consumer perception measurement and consumer behavior measurement. Customer perception measurement is when customers satisfied with a business or products, which perceive an overall good perception of that business or products. When consumers' perceptions are good, they will continue purchasing goods from this company. These customers also will avoid spreading disappointing experiences to others. Consumer perceptions are based on feelings. A customer perception measurement is an important tool used by companies that express how well the companies are satisfying customers.

Customer behavior is an essential key to any business. Knowing what the customer wants and how the customer interacts with product designs and marketing. There are many ways, which can measure consumer behavior base on what area you are interested. Normally, conducting market research will allow business to get to know the customers, which mean that business takes customer into account before making business decisions. Resulted in profits on the firm and businesses. Hence, the company necessarily set out goals in conducting marketing activities to create value and improve knowledge and skill to maintain customer and attract new customer. The method to maintain customers is known as Functional method – maintain perception and expectation of brand quality and related services. Perceived sacrifices – is a sacrifice of goods and services to occur short-term or long-term perception such as readers don't receive information in communication channel**.**

Social Media of PTT Public Company Limited: Social media has influenced in daily life whether Facebook or Twitter. Meanwhile, PTT has researched and developed customer service via social media channel, which can inform as these follows;

1. Website:

- www.pttplc.co.th: The center of communication via the internet, the company PTT of informational proposal the overall mission, background of products and services, investor relations, news and also communication with other agencies within the PTT .
- Pttlubricants.pttplc.com :is a website of lubricant product of PTT.

2. Facebook: has fan page and public group manner

- We Love PTT: is responsible to present positive news, both related to the way the PTT and the other offering story content.

- PTT News: is responsible for the presentation of information and data regards to oil prices and news in the energy sector of PTT.
- PTT Blue Society: is responsible to contact with Blue card customer via phone and website and also update information and PTT Blue card privileges.
- PTT Rayong Academy: is responsible update PTT Rayong football team, their activities with the youth and any information related in football game.
- Tevin at PTT: is a web page of Tevin Vongvanich, CEO of PTT on Facebook to tell the story of work and his visions and perspectives on issues in society and create a closer exchange of information with that web page admin.
- Fellowship of PTT: is a group of public social network in Facebook aims to exchange information and views on energy.
- Jiffy Thailand: is a webpage on Facebook by Jiffy who provides retailing stores as chain stores in PTT, and offer discounts of the shop.
- Café Amazon by PTT is a webpage on Facebook of Café Amazon who provides coffee and beverage; promote activities and discounts of shop for whom follows the webpage.

3. Twitter:

- PTTNews proposed channels to inform the headlines and news daily oil price and energy.
- PTT Blue Society is channel of communication with the customer PTT Blue Card and Re-Tweet to receive information on the benefits of the PTT Blue Card .

4. Line:

- PTT Group :as a channel of communication with the update application Line connection with the official account will be updated information, news, and information in the field of energy associated with the PTT and who is followed by the official account will receive Godji sticker for free.

5. YouTube

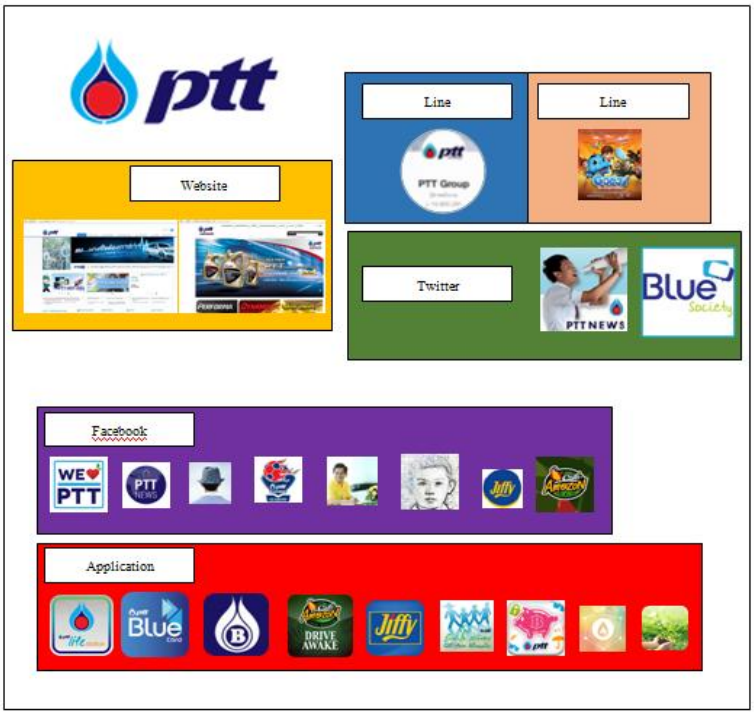
- Godji the Adventure :is a cartoon animation of the PTT in the presentation with Godji, which is the company's mascot's stories via you, tube channel.

6. Application

- PTT Life Station is an app to search for the nearest gas station or chain stores including updated oil price e.g .LPG and NGV.
- PTT Blue Card is an app as membership card for accumulating points to acquire premium benefits .
- Jiffy shop is an app for presenting promotion products Jiffy or chain stores of PTT .
- PTT 84 Tambon is an app for updated any projects that related to PTT's project 'Environmental Conservation and Improve Human Being in 84 Tambon) sub-district(by sufficiency economy'
- PTT Reforest is apps to update the reforestation project of the PTT .
- PTT –iPocket HD is an app for accounting book contains revenue and expense designed by PTT .
- Amazon Drive Awake is an app searching for the nearest Café Amazon's location.
- PTT Insight is an app that proposes any related of PTT situation comply with understanding analysis .

All of above can be aggregated to Figure 3.

Figure 3: List of online social networks of PTT Public Company Limited



PTT has a lot of social media comparing with other energy companies. Variety channels of social media are used to control, prevent and solve negative result as well as to increase corporate image from investor and public. Likewise, other energy companies also have websites and social media on their own.

Table 1: Comparison of PTT's social media and other energy companies

Company Lists	Website	Social Network	Application
PTT	2 Websites	1 YouTube Channel 2 Twitters Acc. 8 Facebook pages	1 Line 9 Applications
Bangchak	1 Website	2 Facebook pages 1 YouTube Channel 1 Twitter Acc.	1 Application
Chevron	1 Website	1 YouTube 1 Facebook page	
Shell	3 Websites	1 YouTube 1 Likedln 1 Instagram 1 Facebook	8 Applications

3. Methodology

This study adopted mix method by using both quantitative and qualitative method as these follows;

Quantitative research: The Quantitative research made by collecting sample of who has been using social media of PTT and age above 18 years old for 400 persons by using convenience sampling from customers' surveying who grateful and willing to cooperate to answer the survey from anyplace. The survey method contains of four sections as below;

- **Sect 1** Ethnography Survey
- **Sect 2** Survey of usage and access to PTT via social media.

- **Sect 3** Survey of marketing communication to perceive PTT information .
- **Sect 4**laicoS media affects to communication.

Monitoring query tool with a study and review of documents related research on the impact of Social media, which affected to PTT's customer as a guideline to create survey and valid content. Researcher was verified by supervisor and three experts in order to make content validity, appropriate wording, reliability and reliability to consider statistics of research in this study that using reliability at the rate of 95 percent as criterion to be accepted in this hypothesis by using statistics to analysis data in each segment as follows;

- General data analysis by analyzing the gender, age, status, education, occupation and income average per month .The services that customer used to access to the social media that analyses into number, percentage, general enquiries with frequency and percentage.
- Comparison average score of social media marketing and information perception of PTT within the sample group.
- Mean and Standard Deviation to compare level of awareness of the PTT.
- Inferential statistic including data analysis to examine the relationship between variables and the dependent variable data to test data to test hypotheses and each independent by controlling of other variables and statistical analyses that using binary regression analysis to find the forecasting the impact that derived from social media.

Qualitative Research: Qualitative research collected into 2 groups. One is interviewed by using purposive sampling of customer who has been using service of PTT's social media above the age 18 years old and number of interviewer more than 400 persons. The purpose of study consistent with research question by having open-ended question for 10 sections. The quality of data analysis done from the interview. During the interview researcher has interviewed open–ended and non–directive method. The other is in-depth interview from 5 selective customers by directive method. The researcher has determined the section to analyze and find elements of "Social Media's Perception Affects towards PTT's Customer Services" and divided into periodically accordance with topic or appropriate time. The research will conclude the interview, recorded on a form to be interviewed and listened to suggestions to improve an interview or so-called cumulative summarization technique. The scope of interview analysis as a key component of social media impact towards customer's perception of PTT. Then, it will be analyzed the data analysis.

4. Conclusion and Recommendations

The result from Quantitative Research: The positive side, the sampling group commented on positive issues when social media crisis occurred, they always encouraged PTT or informed accurate information and edited information as a fact that happens in the contexts, which some of contents related with PTT were arranged and could response to negative attitude of social media that was advantaged for company's image and creditability as in table 1

Table 1: Social media impact to attitude for PTT product and service

Impact side	Mean	Result
Positive side overall	3.1792	Medium
Negative side overall	2.5948	Medium

From table 1, both of Positive and Negative sides were impacted at medium level but in-depth from number of mean. The negative side is nearly small impact. It proved that PTT social media cause negative impact lower than positive, however positive impact could not reach high impact level. This meant PTT should develop their communication to make higher impact. The neutral side, the sampling group in this side has neutral opinion on PTT social media which neither accompany with PTT nor show pessimistic information. It showed that the perception PTT social media did not affect positively or negatively but it could be changed to any side one day. The company should be proactive to manage this group of customer. The negative side, the sampling group in this side was affected by negative message via social media. The contents might be the old issue from previous day by repetition technique. PTT required preventing information and managing social media in various situations to pursuit the negative flow of information and providing the truth for via social

media. Although PTT has prepared as much social media for their communication as they can e.g. in website, apps, and social network, people selected to perceive only when they would like to know. Although PTT monitored all news content in social media, not much effective strategy came out. Therefore, it is important to find the measurement tools to analyze social media content at the root cause and increase the positive perception, decrease the negative percept and change the neutral side to be positive side. There should be integrated work of legal, public relations, marketing, ICT and event third person to developed appropriate use of social media that contributed to business and image.

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