

DOI: <http://dx.doi.org/10.21632/irjbs.10.2>

The Effect of Conditional Conservatism and Agency Cost on Investment-Cashflow Sensitivity

Bima Abdi Wibawa, Ratna Wardhani,
PDF. PP. 69-88

HRM Challenges in the Age of Globalisation

Sugandha Agarwal, Khalid Mohammed Saif Al Qouyatahi
PDF. PP.89-98

Antecedents of Employee Loyalty in Educational Setting: An Empirical Study

Sabrina O Sihombing, Margaretha P Berlianto,
PDF. PP. 99-109

Consumer Preference Towards Fruit Leather Attributes of Madurese Exotic Tropical Fruits

Elys Fauziyah,
PDF. PP. 111-122

Competitiveness of Small and Medium Firms (SMEs) in Facing ASEAN Economic Community

Leonardus Ricky Rengkung, Lyndon Reinhardt J Pangemanan, Lorraine W Sondak
PDF. PP.123-133

The Effect of Conditional Conservatism and Agency Cost on Investment-Cashflow Sensitivity

Bima Abdi Wibawa, Ratna Wardhani

Faculty of Economics and Business, Universitas Indonesia, Kampus Widjojo Nitisastro,
 Jl. Prof. Dr. Sumitro Djojohadikusumo, Kukusan, Beji, Kukusan, Beji, Kota Depok, Jawa Barat 16420

| ARTICLE INFO | ABSTRACT |
|--|---|
| <p><i>Keywords:</i> Conditional conservatism, investment-cashflow sensitivity, agency cost, dividend payout ratio, purposive judgement sampling</p> <p>Corresponding author: ratnawardhani@yahoo.com</p> | <p>This research aims to give empirical evidence of the effect of conditional conservatism on company's investment-cashflow sensitivity, and whether the impact is stronger in high agency cost firms compare to in low agency cost firms. This research uses dividend payout ratio to measure the agency cost, because this study uses Indonesia as a research context where companies in Indonesia majority have concentrated ownership and funding through debt so that agency conflict that appears more dominant is the conflict of agency type two and three. This study uses sample from manufacturing companies listed in Indonesia Stock Exchange during the period 2008-2012. The total observation in this research is 474 firm years, which 152 of the samples is classified as high agency cost firms and 322 sample as low agency cost firms. The result shows that as the recognition of economic losses becomes more timely, the sensitivity of firm investment to cashflow decreases. Conditional conservatism decreases investment-cashflow sensitivity in low agency cost firms but increases the sensitivity in high agency cost firms. In fact, before implementation of conditional conservatism, high agency cost firms have smaller investment-cashflow sensitivity compared to the low agency cost one.</p> <p>SARI PATI</p> <p><i>Penelitian ini bertujuan untuk memberikan bukti empiris tentang pengaruh konservatisme kondisional (conditional conservatism) terhadap sensitivitas investasi terhadap arus kas (investment-cash flow sensitivity) perusahaan, dan apakah dampaknya lebih kuat pada perusahaan dengan biaya agensi tinggi dibandingkan dengan perusahaan dengan biaya agensi rendah. Penelitian ini menggunakan rasio pembagian dividend (dividend payout ratio) untuk mengukur biaya agensi, karena penelitian ini menggunakan Indonesia sebagai konteks penelitian dimana perusahaan-perusahaan di Indonesia mayoritas memiliki kepemilikan terkonsentrasi dan pendanaan melalui hutang sehingga konflik keagenan yang muncul lebih</i></p> |

dominan adalah konflik keagenan tipe dua dan tiga. Penelitian ini menggunakan sampel dari perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia selama periode 2008-2012. Total observasi dalam penelitian ini adalah 474 tahun perusahaan, dimana 152 sampel diklasifikasikan sebagai perusahaan dengan biaya agensi tinggi dan 322 sampel sebagai perusahaan dengan biaya agensi rendah. Hasilnya menunjukkan bahwa karena pengakuan kerugian ekonomi menjadi lebih tepat waktu (konservatisme yang lebih tinggi), sensitivitas investasi terhadap arus kas perusahaan menurun. Konservatisme kondisional menurunkan sensitivitas arus investasi-arus kas di perusahaan dengan biaya agensi rendah namun meningkatkan sensitivitas pada perusahaan dengan biaya agensi tinggi. Bahkan, sebelum penerapan konservatisme kondisional, perusahaan dengan biaya agensi tinggi memiliki sensitivitas investasi terhadap arus kas yang lebih rendah dibandingkan dengan perusahaan yang memiliki biaya agensi rendah.

© 2017 IRJBS, All rights reserved.

INTRODUCTION

Prior studies in the field of accounting have proven that the quality of accounting information influences company's value (Healy and Palepu, 2001; Bushman and Smith, 2001; Easley and O'Hara, 2004; Lambert et al., 2007; Lara et al., 2009). This statement stimulates our logic to questioning about what kind of quality that could increase company's value. The quality of accounting information, which is reflected in the financial statements, is shown through many ways of reporting. There are many differences in the way of how accounting is done. One is the principle underlying the procedures for making it. One accounting principle that is considered to have a big influence in book keeping methodology is conservatism. Conservatism in accounting is a concept where the increase in the value of assets or income are not easily recognized. According to Basu (1997), conservatism can also be defined as a tendency which is owned by an accountant who requires a higher level of verification to recognize profit (good news in earnings) compared to admit losses (bad news in earnings).

Guay and Verrecchia (2007) and Suijs (2008) state that conditional conservatism could increase company's value, by increasing the ability to get cheaper cost of external capital. In

addition, conditional conservatism also facilitates company's monitoring function that makes a company with conditional conservatism has the advantage in its governance (Lafond and Watts, 2008). Jensen (1986) then state that conservatism is a mechanism that in ex-ante controls management investment decisions and in ex-post facilitates monitoring function of those decisions. Before investing, manager will tend to avoid having a negative NPV project, knowing that conservatism can easily record a loss on that investment. After running investment projects, the results of conservative accounting will make the assessment of management performance becomes more effective.

In determining the amount of investment activity, company will see the availability of internal funds (usually proxied by the amount of cash flow from operations) in advance. If it is not sufficient, company then will consider seeking additional funding from external parties (Stiglitz and Weiss, 1981; Myers and Majluf, 1984). An "ease" in obtaining external funding makes the determination of company's investment activities is less dependent to its internal fund, so they could make investment activities more efficient. In the realm of corporate finance literatures, investment activity level of dependence on the

existence of internal fund is called the sensitivity of investment to internal funds (investment-cash flow sensitivity). This sensitivity shows company's ability to obtain external funding (Kaplan and Zingales, 1997; Hubbard, 1998; Imhof, 2014). The lower the sensitivity shows that corporate investment activities could be funded not only from internal funds, but also from external funds (Fazzari, Hubbard, and Peterson, 1988).

There are factors that correlated with the magnitude of sensitivity, one of which is company's agency cost. Sensitivity will be greater (smaller) when asymmetry information is high (low) between managers and investors, indicated by higher (smaller) agency cost (Jensen, 1986 in Imhof, 2014). Imhof (2014) also state that when the agency cost is relatively high, company will be more difficult to obtain external financing because of the high cost of external capital set by the investors / creditors, thus, the amount of internal funds available will be very influential to predict company's investment activities (high investment-cash flow sensitivity).

Conditional conservatism could reduce the level of company's cost of external capital (Guay and Verrecchia, 2007; Suijs, 2008). Lower cost of external capital will enable company to obtain external funding much easier, so that investment activity is not overly dependent on the availability of internal funds. Referring to this idea, this research argues that the conditional conservatism can reduce the level of investment-cash flow sensitivity. Furthermore, the risk assessment by capital providers is influenced by the amount of agency cost (Arugasian, deMello, and Saini, 2014). This study uses agency cost arising from the agency relationships between fund holders (investors / shareholders vs. creditor) because the focus of this study is on investment-cash flow sensitivity which is closely related to funding decision for investment need. Therefore, to measure the agency cost, this study employs dividend payout ratio because this ratio reflects

the agency conflict between shareholders and creditors. The amount of agency cost indicates the level of information asymmetry that is trying to be mitigated by the company. The greater (the smaller) agency cost, the greater (the smaller) the risk and return expected by capital providers. The greater (the smaller) the risk and expected return, the greater (the smaller) the cost of external capital to be paid by the company. Cost of external capital which is quite expensive (cheap) difficulties (facilitates) the company to obtain additional funding from external sources when investing. As a result, the amount of investment made by the company is very dependent (not dependent) on the amount of internal funds, as indicated by higher (lower) investment-cash flow sensitivity (Imhof, 2014). This research also argues that the level of investment-cashflow sensitivity for companies with higher agency cost is greater than companies with lower agency cost. Finally, in addition to its ability to reduce the cost of external capital, higher conditional conservatism is also able to improve the quality of corporate governance (Lafond and Watts, 2008; Imhof, 2014). Based on the explanation, it can be said that the effect of conditional conservatism in lowering the investment-cash flow sensitivity is stronger in companies that also have problems in governance (high agency cost firm) and weaker in companies that already have a good governance mechanism (low agency cost firm).

This study replicates Imhof's (2014) research entitled "conditional conservatism, agency cost, and the cash flow sensitivity of investment firm", where the study was conducted with samples of firms in the United States which has more diffused ownership structure, thus, the context of the agency problem is more directed to the conflict between shareholders and management. While in Indonesia, most companies have concentrated ownership structure and use debt as their main sources of fund so that the agency problem is more directed to the conflict between the minority shareholders and majority shareholders (who are

usually relatives) plus management and conflict between shareholders and creditor. This research implement this difference by using different proxy compared to the one that Imhof (2014) used when measuring agency cost.

The aim of this study are: (i) to determine whether conditional conservatism could decrease the sensitivity of corporate investment activities to the availability of internal funds; (ii) to determine whether the sensitivity of company's investment activities to its internal fund is higher for companies with relatively high agency cost and lower for firms with relatively low agency cost; (iii) to determine whether the effect of conditional conservatism to reduce investment-cashflow sensitivity is greater for firms with relatively high agency cost and smaller for firms with relatively low agency cost.

This study is expected to provide benefits for the development of science, regulatory, and financial practitioners. For the development of science, this study is expected to show whether the impact of conditional conservatism to investment-cashflow sensitivity in Indonesian companies, which is more bank based, will be different from the impact on US companies, which is more market-based. In addition, this study may add to the list of studies on the impact of agency cost in Indonesia to company's value that is reflected in the flexibility of funding sources in investing. For regulators, the study is expected to demonstrate the benefits of the application of conditional conservatism to increase the company's value so that it can be a useful input related to the development of the quality of accounting standards in Indonesia. For financial practitioners, this study is expected to provide a comprehensive understanding on conditional conservatism and its impact on the company's flexibility in determining the source of funding when investing.

This study is divided into five sections. The first part contains an introduction that will discuss the background of writing, research objectives, and

scope. The second part contains the basic theory and hypothesis development. While the third section will discuss the research methodology that addresses the selection of samples, empirical models used, the operationalization of variables, as well as testing the model. Then in the fourth section the discussion is presented on the results of this study. Finally, in section five this research discuss the conclusions, limitations, and potential for future research.

Theoretical Framework & Hypotheses Development

1. Conditional conservatism with Cost of Capital & Governance's Monitoring Function

Guay and Verrecchia (2007) and Suijs (2008) state that conditional conservatism could increase company's value, by increasing the ability to get cheaper cost of external capital. Commitment to recognize losses in a timely manner (conditional conservatism) causes management to disclose information more thoroughly. It reduces the uncertainty in financial reporting, lowering the risk of the company in the eyes of investors and creditors, and facilitate access to external financing at relatively low cost. In addition, conditional conservatism also facilitates monitoring function that can mitigate information asymmetry. This makes the company with conditional conservatism has advantages in its governance (Lafond and Watts, 2008). As the impact of good governance on the application of conditional conservatism, the manager will tend to avoid having a negative NPV project knowing that conservatism can be easily record a loss on that investment. After running investment projects, the results of conservative accounting will make an assessment of the management performance becomes more effective (Jensen, 1986).

2. Investment-Cashflow Sensitivity

Investment-cash flow sensitivity is an indicator to see the level of dependence (sensitivity) of investment activities on the availability of internal funds. One interpretation of the magnitude of this sensitivity could demonstrate the company's

ability to obtain external funds when investing. The smaller (larger) sensitivity, the more capable (not capable) companies to get external funding for investment activities (Myers and Majluf, 1984; Fazzari, Hubbard, and Peterson, 1988; Hubbard, 1998; Moyen, 2004; Bushman, Smith, and Zhang 2011; Imhof, 2014). Fazzari, Hubbard, and Peterson (1988) in Moyen (2004) conducted a study related to the sensitivity of investment-cash flow from operations and categorizes companies based on their financial constraints. The amount of financial constraint is determined by the magnitude of the cost of external capital. The greater cost of external capital, the greater the resistance. The results showed that companies with the category of most constrained (relatively higher financing obstacles) has a higher sensitivity of investment-cashflow from operations than the company in least constrained (relatively lower funding constraints) category.

3. Agency Cost

Agency conflict is divided into three types (Godfrey et al., 2010). Type one explains the conflict between shareholders and management. Type two explains the conflict between majority shareholder plus management versus minority, and type three explains the conflict between shareholders and creditors. Companies in Indonesia have different characteristic compare to companies such in US or UK. Companies in Indonesia are mostly companies that have concentrated ownership and use debt financing. Because of so, mostly, conflict occurs between the majority shareholder (plus management) and minority shareholders (type two conflict) and conflict between shareholders and creditors (type three conflict). In this condition, dividend is regarded as a more efficient mechanism for measuring agency problems (Rozeff, 1982; Gugler and Yurtoglu, 2001). For the fear of minority shareholders will sell shares in a lower price as a result of the expropriation that happened, the majority shareholder and management tend to give higher dividends as a form of anticipation (Rozeff, 1982; Gugler and Yurtoglu, 2001). On the

other hand, the management and the majority shareholder in the company with a relatively low agency problem is not alarming minority shareholders to do so, so that, dividends tend to be smaller (Rozeff, 1982; Gugler and Yurtoglu, 2001). From the perspective of type three of agency conflict, dividend also a mechanism to control the agency cost between shareholders and creditors. In the debt arrangement, creditors usually limit the dividend payment in the debt covenant. The policy is often done because the creditor wants the company to avoid excessive dividend payment so that the company no longer has internal funding that can be used to support future growth

4. Hypotheses Development

4.1. Conditional conservatism & Investment-Cashflow Sensitivity

Conditional conservatism, is an accountant tendency to be more careful in recording revenue and more timely in recognizing expense. This tendency caused management to disclose information more thoroughly and reliably, so that the accounting information is more qualified. It reduces the uncertainty in financial reporting, lowering the risk of the company in the eyes of investors and creditors, and facilitate access to external financing at relatively low cost. In line with the statement, Guay and Verrecchia (2007) and Suijs (2008) state that conditional conservatism reduce the cost of external capital. Relatively low cost of external capital will enable the company to take external funds as a source of funding for investment activities. This ease makes the company less dependent on the availability of internal funds to invest (Imhof, 2014). This situation is illustrated by the relatively small investment-cash flow sensitivity after implementation of conditional conservatism. Referring to the the above argument, the hypothesis statement is as follow:

H1: *The conditional conservatism has a negative impact on investment-cashflow sensitivity*

4.2 *Investment-Cashflow Sensitivity and Agency Cost*

There are other variables that may be related to the amount of sensitivity. The variables in question is the amount of agency cost (Imhof, 2014). Risk assessment by the capital provider is influenced by the amount of agency cost (Arugasian, deMello, and Saini, 2014). Imhof (2014) state that the amount of agency cost indicates the level of information asymmetry that is tried to be mitigated by the company. The greater (smaller) the agency cost, the greater (smaller) its risk assessed and return expected by capital providers. The greater (smaller) the risk and expected return, the greater (smaller) the cost of external capital to be paid by the company. Cost of external capital which is quite expensive (cheap), difficult (facilitates) the company to obtain additional funding from external sources when investing. As a result, the amount of investment made by the company is more dependent (not dependent) on the amount of internal funds, as indicated by the investment-cash flow sensitivity that relatively large (small). Based on these explanations, the hypothesis:

H2: *Investment-cash flow sensitivity of companies that have high agency cost is greater than the companies that have lower agency cost*

4.3. *The Agency Cost Moderating Effect on Conditional Conservatism Impact to Investment-Cashflow Sensitivity*

Companies with relatively high agency problems have problems in its governance. Lack of good governance made the asymmetry of information tends to be high, so that the company more vulnerable to adverse selection and moral hazard. This situation forced the principal to issue a greater cost as a form of mitigation to the asymmetry of information, which is reflected in the amount of agency cost. Conditional conservatism in this case is considered to become a solution to this situation because it can accommodate an effective oversight function in corporate governance (Lafond and Watts, 2008). Imhof (2014) state that

in firms with poor governance problem, which is characterized by the magnitude of agency cost, the impact of conditional conservatism will be stronger in reducing sensitivity. The reason is, when the adoption of conditional conservatism on high agency cost firm in addition could lower the cost of capital, it also improves the function of corporate governance. This makes the owners of capital provide a higher return when firms with poor governance (high agency cost firm) implement conditional conservatism compared to the application of the same thing in company that already has a good governance (low agency cost firm). Form of appreciation is the ease of being able to get external funds when companies want to invest, or in other words, a lower investment-cash flow sensitivity. From these arguments, the hypothesis is built:

H3: *Negative influence of conditional conservatism to investment-cashflow sensitivity will be greater for firms with higher agency cost rather than firms with lower agency cost.*

METHODS

Data Sources & Sample Selection

The data used in this research is secondary data obtained through thomson reuters and datastream. Sampling is done by purposive sampling method. Criteria used in selecting samples are as follows: (i) the Company listed on the Indonesia Stock Exchange during 2008 to 2012 (This study uses the period 2008 and 2012 because the concept of conservatism is no longer adopted in International Financial Reporting Standard (IFRS) and replaced with the concept of prudence. The concept of prudence has a very different understanding from conservatism. Given that Indonesia has adopted IFRS adoption in the Indonesian Accounting Standards since 2012, this study uses the period up to 2012); (ii) The Company is engaged in the manufacturing industry; (iii) the company has positive equity value (iv) there is completeness of the data required in a row from 2008 to 2012.

Research Model

This study aimed to examine the effect of conditional conservatism in reducing the investment-cash flow sensitivity in Indonesia. It also aimed to test whether the effect will be stronger for firms with relatively large agency cost and weaker in companies with relatively small agency cost. To test these predictions this research uses ordinary least squares regression which is based on Imhof (2014). The dependent variable of this study is the investment-cash flow sensitivity. In measuring the sensitivity, this research regresses the amount of investment companies (INV) on cash flow from operations (CFO) and Tobin's Q (a proxy for measuring the level of investment opportunities) as well as the size, the prior annual stock return and the previous year's investment value as a control variables. It is based on Imhof (2014). The magnitude of the coefficient attached to the CFO (β_1) shows the magnitude of the investment-cash flow sensitivity. To better understand the relationship between investment and cash flow, the model controls the amount of the firm's growth opportunity by using Tobin's Q (1969) according to Imhof (2014). The greater the value of Tobin's Q, the more promising outlook for investment companies so that managers tend to be more likely to invest in new projects (Imhof, 2014).

Independent variable in this study is the conditional conservatism, or in other words the application of conditional conservatism. This research uses Givoly and Hayn (2000) model in measuring conditional conservatism. Givoly and Hayn (2000) measures conservatism with the average amount of the company's accrual, which is derived from net income minus the cash flow from operations, for three years with a median value in period t , multiplied by negative one to ensure that the positive value indicates higher conservatism (the result of this formula is denoted by CONS). To test whether the conditional conservatism affect the investment-cash flow sensitivity, the model interacts operating cash flow (CFO) with conditional conservatism (CONS) into the regression model of

investment-cash flow sensitivity previously described. Because conditional conservatism is believed to have a negative effect on investment-cash flow sensitivity, the hypothesis predicts the magnitude of this interaction (CFO*CONS) will be negative and statistically significant (Imhof, 2014).

Moderating variable in this study is agency cost. This research uses the amount of dividends to measure the agency cost. From the magnitude of the results of these measurements, the companies will be divided into two classifications. Classification is divided by the level of agency cost (expressed in notation AGENCY) as measured by the dividend payout ratio. Variable agency cost is treated as a dummy. Company with AGENCY below the mean value of industry-year classified as a company with lower agency cost and coded 0, while companies with AGENCY above the-year mean value of the industry classified as a company with high agency cost (coded 1). To test the moderation effect of agency cost on the relationship between conditional conservatism and the investment-cash flow sensitivity, the variable of interaction between agency cost and conditional conservatism will be added into the model.

To get a more specific description on the amount of conditional conservatism's negative influences on the investment-cash flow sensitivity, this study uses firm size (SIZE), prior annual stock return (RET_{it-1}), as well as the previous year investment value of (Inv_{it-1}) as control variables. Size (SIZE) may affect the magnitude of the company access to sources of external funding, thus affecting the sensitivity of its investment-cash flow (Gurgler et al., 2000, in Imhof, 2014). In the regression model of investment that has been described previously, a positive relationship between firm size and investment activities is expected. As a further control variable, this study use the prior annual stock return (RET_{it-1}). The argument is based on the argument of Lamont (2000) and Richardson (2006) in Imhof (2014) that the stock return has the information related to the company's growth

prospects which is not caught in the measurement of Tobin's Q.

Based on the explanation above, the following equation will be applied to test the research hypothesis.

Model 1: Investment-cash flow sensitivity, the basic model

$$INV_{it} = \alpha_{it} + \beta 1CFO_{it} + \beta 2Q_{it} + \beta 3SIZE_{it} + \beta 4RET_{it-1} + \beta 5INV_{it-1} + \epsilon_{it} \quad (1)$$

Where :

- INV_{it} : The value of firm *i* investment in period *t*
- CFO_{it} : *Operating cash flows* of firm *i* in period *t*
- Q_{it} : The value of firm *i* investment opportunity (Tobin's Q) in period *t*
- SIZE_{it} : The size of firm *i* in period *t*
- RET_{it-1} : *Annual stock return* of firm *i* in period *t-1*
- INV_{it-1} : The value of firm *i* investment in period *t-1*

Model 2: The testing on the negative influence of conditional conservatism on investment-cash flow sensitivity (Hypothesis 1)

$$INV_{it} = \alpha_{it} + \beta 1CFO_{it} + \beta 2CONS_{it} + \beta 3CFO_{it} * CONS_{it} + \beta 4Q_{it} + \beta 5SIZE_{it} + \beta 6RET_{it-1} + \beta 7INV_{it-1} + \epsilon_{it} \quad (2)$$

Where :

- INV_{it} : The value of firm *i* investment in period *t*
- CFO_{it} : *Operating cash flows* of firm *i* in period *t*
- CONS_{it} : The amount of conditional conservatism firm *i* in period *t*
- Q_{it} : The value of firm *i* investment opportunity (Tobin's Q) in period *t*
- SIZE_{it} : The size of firm *i* in period *t*
- RET_{it-1} : *Annual stock return* of firm *i* in period *t-1*
- INV_{it-1} : The value of firm *i* investment in period *t-1*

Model 3: The Correlation testing of agency cost and investment-cash flow sensitivity (Hypothesis 2)

$$INV_{it} = \alpha_{it} + \beta 1CFO_{it} + \beta 2AGENCY_{it} + \beta 3AGENCY_{it} * CFO_{it} + \beta 4Q_{it} + \beta 5SIZE_{it} + \beta 6RET_{it-1} + \beta 7INV_{it-1} + \epsilon_{it} \quad (3)$$

Where :

- INV_{it} : The value of firm *i* investment in period *t*
- CFO_{it} : *Operating cash flows* of firm *i* in period *t*
- AGENCY_{it} : The value of firm *i* agency cost in period *t*
- Q_{it} : The value of firm *i* investment opportunity (Tobin's Q) in period *t*
- SIZE_{it} : The size of firm *i* in period *t*
- RET_{it-1} : *Annual stock return* of firm *i* in period *t-1*
- INV_{it-1} : The value of firm *i* investment in period *t-1*

Model 4: The Correlation testing of agency cost and investment-cash flow sensitivity (Hypothesis 2)

$$INV_{it} = \alpha_{it} + \beta 1CFO_{it} + \beta 2CONS_{it} + \beta 3CFO_{it} * CONS_{it} + \beta 4AGENCY_{it} + \beta 5CFO_{it} * AGENCY_{it} + \beta 6CFO_{it} * CONS_{it} * AGENCY_{it} + \beta 7Q_{it} + \beta 8SIZE_{it} + \beta 9RET_{it-1} + \beta 10INV_{it-1} + \epsilon_{it} \quad (4)$$

Where :

- INV_{it} : The value of firm *i* investment in period *t*
- CFO_{it} : *Operating cash flows* of firm *i* in period *t*
- CONS_{it} : The amount of conditional conservatism firm *i* in period *t*
- AGENCY_{it} : The value of firm *i* agency cost in period *t*
- Q_{it} : The value of firm *i* investment opportunity (Tobin's Q) in period *t*
- SIZE_{it} : The size of firm *i* in period *t*
- RET_{it-1} : *Annual stock return* of firm *i* in period *t-1*

INVit-1 : The value of firm *i* investment in period *t -1*

Operationalization of the variables used can be seen in Table 1.

Model Testing

The models above will be estimated using OLS regression with pooled data. In this test, *i* also test the fulfillment of BLUE (Best Linear Unbiased Estimate) assumptions where the model must meet the assumption of normally distributed, no heteroscedasticity, and no multicollinearity. Tests carried out using STATA statistical software 12 to obtain estimation of the value of models parameter.

RESULTS AND DISCUSSION

Descriptive Statistic

This study uses sample of manufacturing companies listed in Indonesia Stock Exchange during the period 2008-2012. The number of companies that are used as sample totaling 113 companies with 474 firm years, which 152 of the samples is classified as high agency cost firms and 322 sample as low agency cost firms. Characteristics of the sample can be seen from Table 2, and the results of the descriptive statistics in Table 3. From Table 3 it can be seen that the average value of the variable conditional conservatism (CONS)

is 0.0048 with an average CONS for groups firms with high agency cost is lower when compared with low enterprise agency cost (0.0019 and 0.0061). It shows that the average low agency cost company in Indonesia manufacturing industry is more conservative than the average high agency cost company. In addition, the variable investment (INV) has an average value of 0.0587 with an average INV to a group of companies with high agency cost is higher than the company its low agency cost (0.0706 and 0.0531). This shows that the Indonesian manufacturing industry, the average company of high agency cost invest more in capital expenditure (CAPEX) compared to the average low agency cost company.

The Analysis of Impact of Conditional Conservatism to Investment-Cashflow Sensitivity

To investigate the investment-cash flow sensitivity, Model 1 is tested. To investigate and analyze the influence of conditional conservatism on investment-cash flow sensitivity, the hypotheses is tested using regression equations described in Model 2. The Model 1 and 2 test results can be seen in Table 4 and 5.

Based on Table 4 it can be seen that the adjusted R Square for research model 1 is 0.2968. These result indicates that 29.68% of the variation amount of the investment company can be explained by

Tabel 1. Operationalization of Variable

| Variable | Operationalization of Variable |
|---|---|
| Firm Investment (INVit) | Capital expenditures scaled by beginning period total assets |
| Operating Cashflow (CFOit) | Cashflows from operations scaled by beginning period total asset |
| Conditional conservatism (CONSit) | Firm's three year average accruals, calculated as net income before extraordinary items minus cash flows from operations multiplied by -1 |
| Firm's Investment Opportunity (Tobin's Q) (Qit) | Total of market value of ordinary shares outstanding, book value of long term debt, and current liability divided by total assets |
| Firm Size (SIZEit) | The log of the average total assets |
| Annual Stock Return (RETit-1) | Company's prior annual stock return |
| Agency Cost (AGENCYit) | Company's dividend payout ratio. Dividend payout ratio measured by dividing dividend to net income. |

Tabel 2. Sample Selection

| Criteria | Year | | | | | Total |
|------------------------------------|-----------|-----------|------------|-----------|-----------|------------|
| | 2008 | 2009 | 2010 | 2011 | 2012 | |
| Population of Manufacture Industry | 134 | 134 | 134 | 134 | 134 | 670 |
| Firms with incomplete data | 43 | 38 | 33 | 36 | 46 | 196 |
| Final Sample | 91 | 96 | 101 | 98 | 88 | 474 |
| Low Agency Cost | 68 | 70 | 68 | 61 | 55 | 322 |
| High Agency Cost | 23 | 26 | 33 | 37 | 33 | 152 |
| Total | 91 | 96 | 101 | 98 | 88 | 474 |

| Percentage (%) | Average during five years | | | | | |
|------------------|---------------------------|-------------|-------------|-------------|-------------|-------------|
| Low Agency Cost | 75% | 73% | 67% | 62% | 63% | 68% |
| High Agency Cost | 25% | 27% | 33% | 38% | 37% | 32% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% |

Tabel 3. Statistic Descriptive

| Panel A. Statistic Descriptive for all sample | | | | | | |
|---|-----|---------|---------|--------|---------|---------|
| Variable | N | Mean | Median | S.D | Min | Max |
| CONS | 474 | 0.0048 | 0.0080 | 0.0908 | -0.5348 | 0.5348 |
| INV | 474 | 0.0587 | 0.0375 | 0.0590 | 0.0000 | 0.3106 |
| CFO | 474 | -0.0295 | -0.0483 | 0.1933 | -0.8228 | 2.3019 |
| Q | 474 | 1.5773 | 1.0626 | 1.2850 | 0.3288 | 6.8926 |
| SIZE | 474 | 14.1746 | 13.9639 | 1.4677 | 11.0413 | 18.5879 |
| RETURN _{t-1} | 474 | 0.4201 | 0.1782 | 0.8936 | -0.9500 | 3.8794 |
| INV _{t-1} | 474 | 0.0557 | 0.0331 | 0.0606 | 0.0000 | 0.3096 |
| AGENCY | 474 | 0.1020 | 0.0000 | 0.1749 | 0.0000 | 1.3374 |

| Panel B. Statistic Descriptive Low vs. High AGENCY COST Subsample | | | | | | |
|---|---------|---------|--------|--------|---------|---------|
| | Mean | | S.D | | Median | |
| | Low | High | Low | High | Low | High |
| CONS | 0.0061 | 0.0019 | 0.1029 | 0.0573 | 0.0109 | 0.0077 |
| INV | 0.0531 | 0.0706 | 0.0589 | 0.0574 | 0.0318 | 0.0546 |
| CFO | -0.0586 | 0.0321 | 0.1991 | 0.1649 | -0.0773 | 0.0166 |
| Q | 1.2214 | 2.3311 | 0.7721 | 1.7501 | 0.9695 | 1.7405 |
| SIZE | 13.9549 | 14.6399 | 1.3695 | 1.5619 | 13.7941 | 14.2862 |
| RETURN _{t-1} | 0.3497 | 0.5693 | 0.8891 | 0.8876 | 0.0714 | 0.3499 |
| INV _{t-1} | 0.0525 | 0.0627 | 0.0620 | 0.0569 | 0.0300 | 0.0416 |

CONS is a proxy for timely loss recognition, measure by average of the difference from net income with operating cash deflated by the average total asset over three years. INV is capital expenditure divided by total asset in period t. CFO is the amount of cash flow from operating activities of company i in period t divided by the beginning period of total assets. Q is the proxy for measuring the investment opportunity of the company, which is the total sum of market value of the outstanding ordinary shares, book value of long term debt, and current liability which is then divided by total assets (Kroes, 2013). SIZE is natural logarithm of the average total assets. Average total assets are total assets of period t and t-1 divided by 2. RETURN_{t-1} is annual stock return of firm i in period t-1. INV_{t-1} is investment (INV) of company i in period t-1. AGENCY is measured by dividing the dividend by the amount of EBIT DA of the firm on the periode t.

Tabel 4. Regression Result for Basic Model (Model 1)

| Model 1 | | | | | |
|---|-----------------|---------------|---------------|------------|-------------|
| $INVit = \alpha it + \beta 1CFOit + \beta 2Qit + \beta 3SIZEit + \beta 4RETit-1 + \beta 5INVit-1 + \epsilon it$ | | | | | |
| Variables | Prediction Sign | Coefficient | Prob | Sig. | VIF |
| C | | -0.0041 | 0.4270 | | |
| CFO | (+) | 0.0422 | 0.0010 | *** | 1.34 |
| Q | (+) | 0.0020 | 0.1745 | | 1.43 |
| SIZE | (+) | 0.0023 | 0.0750 | * | 1.09 |
| RETt-1 | (+) | 0.0082 | 0.0010 | *** | 1.00 |
| INVt-1 | (+) | 0.4443 | 0.0000 | *** | 1.06 |
| N | | | 474 | | |
| F Test Sign | | | 0.0000 | | |
| Adj R Square | | | 0.2968 | | |
| ***Significant at level 1% (one-tailed), ** Significant at level 5% (one-tailed), * Significant at level 10% (one-tailed) | | | | | |
| INV is capital expenditure divided by total asset in period t. CFO is the amount of cash flow from operating activities of company i in period t divided by the beginning period of total assets. Q is the proxy for measuring the investment opportunity of the company, which is the total sum of market value of the outstanding ordinary shares, book value of long term debt, and current liability which is then divided by total assets (Kroes, 2013). SIZE is natural logarithm of the average total assets. Average total assets are total assets of period t and t-1 divided by 2. RETURNt-1 is annual stock return of firm i in period t-1. INVt-1 is investment (INV) of company i in period t-1. | | | | | |

Tabel 5. Regression Result for Model 2

| Model 2 | | | | | |
|---|-----------------|----------------|---------------|------------|-------------|
| $INVit = \alpha it + \beta 1CFOit + \beta 2CONSit + \beta 3CFOit*CONSit + \beta 4Qit + \beta 5SIZEit + \beta 6RETit-1 + \beta 7INVit-1 + \epsilon it$ | | | | | |
| Variables | Prediction Sign | Coefficient | Prob | Sig. | VIF |
| C | | -0.0187 | 0.2000 | | |
| CFO | (+) | 0.0338 | 0.0140 | ** | 1.79 |
| CONS | (+ /-) | -0.0403 | 0.0875 | * | 1.47 |
| CFO*CONS | (-) | -0.1064 | 0.0030 | *** | 1.47 |
| Q | (+) | 0.0018 | 0.1975 | | 1.50 |
| SIZE | (+) | 0.0034 | 0.0185 | ** | 1.14 |
| RETt-1 | (+) | 0.0080 | 0.0010 | *** | 1.08 |
| INVt-1 | (+) | 0.4485 | 0.0000 | *** | 1.06 |
| N | | | 474 | | |
| F Test Sign | | | 0.0000 | | |
| Adj R Square | | | 0.3177 | | |
| ***Significant at level 1% (one-tailed), ** Significant at level 5% (one-tailed), * Significant at level 10% (one-tailed) | | | | | |
| INV is capital expenditure divided by total asset in period t. CFO is the amount of cash flow from operating activities of company i in period t divided by the beginning period of total assets. CONS is a proxy for timely loss recognition, measure by average of the difference from net income with operating cash deflated by the average total asset over three years. Q is the proxy for measuring the investment opportunity of the company, which is the total sum of market value of the outstanding ordinary shares, book value of long term debt, and current liability which is then divided by total assets (Kroes, 2013). SIZE is natural logarithm of the average total assets. Average total assets are total assets of period t and t-1 divided by 2. RETURNt-1 is annual stock return of firm i in period t-1. INVt-1 is investment (INV) of company i in period t-1. | | | | | |

the independent variables in the model, and the rest is explained by other variables. While the F test shows that overall independent variables in the model significantly influence the dependent variable.

Based on t test model 1, the independent variables CFO has a probability value of t-statistic of 0.0010 with a coefficient of 0.0422 or $\beta_1 > 0$. That is, the variable CFO has a significant positive effect on the level of confidence of 99% on the dependent variable INV. CFO positive correlation coefficient indicates a dependence (sensitivity) of investment activity on the availability of internal funds. While significant control variable is SIZE (with a significance level of 10%), return_{t-1} (with a significance level of 1%), and INVT-1 (with significance level 1%).

CFO variable has a probability of significant t-statistic with a positive correlation. This is consistent with the prediction that there is a positive relationship between the CFO with INV. Interpretation of the results shows that investment activity does have a positive dependency (sensitivity) for the presence of internal funds. The test results are consistent with research models Stiglitz and Weiss (1981), Myers and Majluf (1984), Kaplan and Zingales (1997), Hubbard (1998), and Imhof (2014).

Q insignificant effect on the level of investment the company shows that the company's investment activities in Indonesia's manufacturing industry is influenced by factors other than the company's opportunity to invest (as measured by Tobin's Q). These factors such characteristics of the company (one of them the size of the company), its performance in the capital markets, as well as investing activities in the previous year. Size as one of the characteristics of the company has a significant positive effect on the size of the investment company. These results are in line with the statement Gurgler et al. (2000) that the size of the company affect its access to external funding, and then affects the investment-cash flow

sensitivity (Imhof, 2014). Prior annual stock return has a significant positive effect on the size of the investment company. This is similar to Lamont (2000) and Richardson (2006) which states that the value of the prior stock return affect the future value of an investment company for storing information related to the company's growth prospects are not explained in Q. The projection of the amount of investment company that will do in the future is not will be far away from his past investment value. This makes the variable INVT-1 has a large positive effect (0.4485) and significant at the 1% level to variable INV.

The results of model 1 indicates the existence of investment activities dependence (sensitivity) on the existence of internal funds. To test hypothesis 1 Model 2 was regressed which already included the effect of CONS. The test results of Model 2 can be seen in Table 5 in Appendix 2. Based on Table 5 it can be seen that the adjusted R Square for model 2 is 0.3177. These result indicates that after being combined with CONS variables, 31.77% of the variation amount of the investment company can be explained by the independent variables in the model and the rest is explained by other variables. While the F test shows that the overall independent variables in the model significantly influence the dependent variable. Based on this Model 2 t test, it can be seen that the CFO * NEG variable has a probability value of t-statistic of 0.0030 (significant at 1%) with a coefficient of -0.1064 or $\beta_3 < 0$. This implies that the the sensitivity of investment-cashflow is lower when companies have higher conditional conservatism. In other words, CFO coefficient which shows the sensitivity of investment-cashflow will be lower after being interacted with CONS. Control variables used in the model 2 is still having similar direct result of t test on the coefficients and their significance to the results of the test model 1.

The test results of model 2 in Table 5 shows that the variable CFO * NEG has a t-statistic probability of a significant negative correlation coefficient.

This correlation coefficients is consistent with the hypothesis. This indicates that the first hypothesis which states “conditional conservatism will decrease the sensitivity of investment-cash flow” cannot be rejected. Interpretation of the results of the testing of this model indicates that companies that implement higher conditional conservatism will have a lower dependence on internal funds when investing. These result is consistent with Imhof (2014).

Explanation for this situation can be expressed as follows: conditional conservatism is considered as an accountant tendency to be more careful in recording revenue and more timely in recognizing loss. This tendency is causing management to disclose information more thoroughly and reliably, so that the accounting information to be more qualified. It reduces the uncertainty in financial

reporting, lowering the risk of the company in the eyes of investors and creditors, and facilitates access to the external cost of capital with relatively low cost (Guay and Verrecchia, 2007; Suijs, 2008). Relatively low cost of external capital will enable the company to obtain external funding as a source of funding for investment activities, so, the company becomes less dependent on internal funds when investing (Imhof, 2014). This situation is illustrated by the relatively low level of investment cash flow sensitivity.

The Analysis of Impact of Agency Cost to Investment-Cashflow Sensitivity

Furthermore, to investigate and analyze the correlation of agency cost with investment-cash flow sensitivity level, this study test Model 3 and the results can be seen in Table 6. Based on Table 6 it can be seen that the adjusted R Square for Model 3

Tabel 6. Regression Result for Model 3

| Model 3 | | | | | |
|---|-----------------|----------------|---------------|------|------|
| $INV_{it} = \alpha_{it} + \beta_1 CFO_{it} + \beta_2 AGENCY_{it} + \beta_3 AGENCY_{it} * CFO_{it} + \beta_4 Q_{it} + \beta_5 SIZE_{it} + \beta_6 RET_{t-1} + \beta_8 INV_{t-1} + \epsilon_{it}$ | | | | | |
| Variables | Prediction Sign | Coefficient | Prob | Sig. | VIF |
| C | | -0.0045 | 0.4200 | | |
| CFO | (+) | 0.0485 | 0.0005 | *** | 1.51 |
| AGENCY | (+ /-) | 0.0038 | 0.2405 | | 1.23 |
| AGENCY*CFO | (+) | -0.0418 | 0.0830 | * | 1.59 |
| Q | (+) | 0.0026 | 0.1350 | | 1.84 |
| SIZE | (+) | 0.0022 | 0.0845 | * | 1.11 |
| RETt-1 | (+) | 0.0079 | 0.0015 | *** | 1.07 |
| INVt-1 | (+) | 0.4472 | 0.0000 | *** | 1.06 |
| N | | | 474 | | |
| F Test Sign | | | 0.0000 | | |
| Adj R Square | | | 0.2976 | | |

***Significant at level 1% (one-tailed), ** Significant at level 5% (one-tailed), * Significant at level 10% (one-tailed)

INV is capital expenditure divided by total asset in period t. CFO is the amount of cash flow from operating activities of company i in period t divided by the beginning period of total assets. CONS is a proxy for timely loss recognition, measure by average of the difference from net income with operating cash deflated by the average total asset over three years. Q is the proxy for measuring the investment opportunity of the company, which is the total sum of market value of the outstanding ordinary shares, book value of long term debt, and current liability which is then divided by total assets (Kroes, 2013). SIZE is natural logarithm of the average total assets. Average total assets are total assets of period t and t-1 divided by 2. RETURNt-1 is annual stock return of firm i in period t-1. INVt-1 is investment (INV) of company i in period t-1. AGENCY is measured by dividing the dividend by the amount of EBIT DA of the firm on the period t.

is 0.2976. These result indicates that 29.76% of the variation amount of the investment company can be explained by the independent variables in the model, and the rest is explained by other variables. While the F test shows that overall independent variables in the model significantly influence the dependent variable.

From the results of the t test in this Model 3, CFO has a probability value of t-statistic of 0.0005 with a coefficient of 0.0485 or $\beta_1 > 0$. This means CFO variables have a significant positive effect on the dependent variable INV. AGENCY variable has a magnitude coefficient of 0.0038 but not significantly. This is indicating that the positive effect of AGENCY does not have a significant impact on the amount of investment companies in this study. To test the hypothesis 2, this study will test whether the coefficient AGENCY * CFO (β_3) is significant. The results in Table 6 shows that the variable coefficient AGENCY*CFO is -0.0418 and is at 10% significance level. These results indicate that this variable is significant but the coefficient is negative. Negative coefficient indicates that the lower agency cost firms have a higher investment-cash flow sensitivity compare to higher agency cost firms. The result indicates that hypothesis 2 is rejected.

The results of Model 3 in Table 6 shows that the company which has larger agency cost, their investment activity is more dependent from their internal funds. In other words, the investment-cash flow sensitivity in high agency cost companies tend to be lower. Any increase (decrease) of CFOs in companies with a large agency cost will lower (raise) the amount of their investment activities. The interpretation is not consistent with Imhof (2014), but consistent with Moyen (2004) and Kaplan and Zingales (1997).

The reason for this result can be explain by Moyen (2004) that state that low agency cost firms tend to be more flexible in choosing where to allocates their funds both on investment, dividend payments, or both. While high agency cost firm must choose

one of them. Moyen (2004) state that in addition to cash flow from the issuance of debt, low agency cost firm is more flexible than high agency cost to increase the size of the investment firm along with the amount of dividends paid. This is because there is no requirement to provide a fairly high dividend, thus, low agency cost firm does not have to sacrifice an increase in investment when deciding to pay dividends. Finally, the addition of cash flow from operations (which is infiltrated with additional funding from debt) will be followed by an increase in the value of investment in the same direction and almost as large, so the sensitivity of the company in this category seemed to be high. This trend adds an explanation of why the investment-cash flow sensitivity on low agency cost firms seemed to be higher.

Moyen (2004) also explains why on the high agency cost firm, the sensitivity is relatively low. When getting additional cash flow from operations, high agency cost firm must choose whether to allocate these funds to increase investment or to pay dividends. Why they must choose? because companies in this category tend to give large amounts of dividends. So that when choosing to allocate funds to the payment of dividends, there is no remaining funds to increase its investment. This makes the investment-cash flow sensitivity at high agency cost firms seems to be lower (Kaplan and Zingales, 1997; Moyen, 2004) and even tend to be negative.

For the control variables, in general there is no material change in results. All of variables correlation coefficient direction and significancy, in general, is still the same. This suggests that these control variables in the model have consistent function, without prejudice to the presence of moderating / new variable.

The Analysis Moderating Effect of Agency Cost's on the Relationship between Conditional Conservatism and Investment-Cashflow Sensitivity Furthermore, to examine the moderating effects

of agency cost on the effect of conditional conservatism negative influences on investment-cash flow sensitivity, Model 4 is tested. The results can be seen in Table 7.

Based on Table 7 it can be seen that the adjusted R Square for model 4 is 0.3211. These result indicates that 32.11% of the variation amount of the company investment can be explained by the independent variables in the model, and the rest is explained by other variables. While the F test shows that overall independent variables in the model significantly influence the dependent variable.

From the results of the t test this model 4, the variable CFO*CONS shows the coefficient is

-0.1208 with significance at the 1% level. AGENCY variables showed a positive coefficient of 0.0027 but not significantly. This indicates that the presence of agency cost dummy variables in the model does not affect the size of the company's investment activity. CFO*AGENCY which shows sensitivity of the large agency cost company has a coefficient value of -0.0106 but not significant (t-stat 0.3640). As for the CFO*AGENCY*CONS, it has a coefficient of 0.4140 and significant at the 5% level. This suggests that in high agency cost firm, the relationship between conditional conservatism and investment-cash flow sensitivity is higher compare to lower agency cost firms. In other words, the investment-cash flow sensitivity in high agency cost firms increases after the implementa-

Table 7. Regression Result for Model 4

| Model 4 | | | | | |
|---|-----------------|-------------|--------|------|------|
| $INV_{it} = \alpha_{it} + \beta_1 CFO_{it} + \beta_2 CONS_{it} + \beta_3 CFO_{it} * CONS_{it} + \beta_4 AGENCY_{it} + \beta_5 CFO * AGENCY_{it} + \beta_6 CFO_{it} * CONS_{it} * AGENCY_{it} + \beta_7 Q_{it} + \beta_8 SIZE_{it} + \beta_9 RET_{it-1} + \beta_{10} INV_{it-1} + \epsilon_{it}$ | | | | | |
| Variables | Prediction Sign | Coefficient | Prob | Sig. | VIF |
| C | | -0.0204 | 0.1815 | | |
| CFO | (+) | 0.0352 | 0.0150 | ** | 2.01 |
| CONS | (+ /-) | -0.0350 | 0.1195 | | 1.49 |
| CFO*CONS | (-) | -0.1208 | 0.0010 | *** | 1.56 |
| AGENCY | (+ /-) | 0.0027 | 0.3090 | | 1.28 |
| CFO*AGENCY | (+) | -0.0106 | 0.3640 | | 1.69 |
| CFO*AGENCY*CONS | (-) | 0.4141 | 0.0210 | ** | 1.14 |
| Q | (+) | 0.0012 | 0.3140 | | 1.93 |
| SIZE | (+) | 0.0035 | 0.0165 | ** | 1.18 |
| RETt-1 | (+) | 0.0084 | 0.0005 | *** | 1.09 |
| INVt-1 | (+) | 0.4424 | 0.0000 | *** | 1.07 |
| N | | | 474 | | |
| F Test Sign | | | 0.0000 | | |
| Adj R Square | | | 0.3211 | | |

***Significant at level 1% (one-tailed), ** Significant at level 5% (one-tailed), * Significant at level 10% (one-tailed)

INV is capital expenditure divided by total asset in period t. CFO is the amount of cash flow from operating activities of company i in period t divided by the beginning period of total assets. CONS is a proxy for timely loss recognition, measure by average of the difference from net income with operating cash deflated by the average total asset over three years. Q is the proxy for measuring the investment opportunity of the company, which is the total sum of market value of the outstanding ordinary shares, book value of long term debt, and current liability which is then divided by total assets (Kroes, 2013). SIZE is natural logarithm of the average total assets. Average total assets are total assets of period t and t-1 divided by 2. RETURNt-1 is annual stock return of firm i in period t-1. INVt-1 is investment (INV) of company i in period t-1. AGENCY is measured by dividing the dividend by the amount of EBIT DA of the firm on the period t.

tion of conditional conservatism. This shows that the hypothesis 3 is rejected. This situation is not consistent with the Imhof (2014) who found that the negative effect of conditional conservatism on the investment-cash flow sensitivity is strongest in high agency cost firms relative to the low agency cost one. Control variables used in the model 4 is still having a similar direct test results on the coefficients and significance, as the results in hypothesis 1, 2, and 3.

There is an explanation for this situation. Imhof's (2014) research is conducted in the United States where people there having a different characteristics with Indonesian people. This characteristic differences include differences in decision-making, including decisions related to risk assessment and the return expected by the owners of capital. Changes in risk assessment fund owners as a result of an increase in conditional conservatism on the high agency cost firm is greater than the change in the risk assessment firm low agency cost, but reversed. While the risk assessment on the low agency cost firms improved (indicated by a decrease of sensitivity), the risk assessment of high agency cost firm worsen (indicated by an increase in investment-cashflow sensitivity). The main cause can be understood from the characteristics of conditional conservatism itself.

Conditional conservatism drives company to not rush (be careful) when recording revenues / profits, but tend to be more timely in the recording of expense / loss. This principle tends to lowering income, although it improves the quality of earnings. If done by a firm with high agency cost in the United States, owners of capital considered it as a good tendency to be more careful in recording profit. As a result, the cost of external capital required becomes relatively cheaper. In addition, the implementation of higher conditional conservatism on high agency cost firms repair its insight over the governance function. Two things make the company become a lot more easier to obtain external funds when

investing, and that makes the investment-cash flow sensitivity becomes smaller (Guay and Verrecchia, 2007; Suijs, 2008; Lafond and Watts, 2008; Imhof, 2014). However, when performed by Indonesian high agency firms, capital owners consider it bad because basically high agency cost firms had much to allocate funds for the dividend (Kaplan and Zingales, 1997; Moyen, 2004). When companies apply higher conditional conservatism, capital providers are not focusing on the shape of prudence applied by the company. Capital givers is focus more on the assumption that there is no more profit left for them. In effect, the cost of external capital required becomes relatively more expensive. In addition, an increase in expense / loss also makes the company seem to have more bad governance because it can not make a profitable managerial decisions. Two things that make Indonesian high agency cost firms (which implement higher conditional conservatism) becomes more difficult to obtain external funds when investing, thus, the dependence (sensitivity) on its internal fund becomes higher.

MANAGERIAL IMPLICATIONS

The implications of this research for (1) the development of science: research indicates that the relationship between agent and principal in Indonesia is more efficient, not opportunistic. Thus, future studies in Indonesia is expected to be more focused on the exploration of efficient agency relationship; (2) regulators: the IFRS convergence in fact the principle of conservatism has been removed and replaced by prudence (prudence). However, the results of this study may be a standard board might consider to include elements of conditional conservatism in characteristic prudence (prudence) in the conceptual framework. In addition, the empirical evidence that the application of conditional conservatism can improve the company's flexibility in managing its financial resources when investing may be considered by the Securities and Exchange Commission to require the application of conditional conservatism on the companies listed on the exchange. This is

important because later on competition between companies in the ASEAN region will be intense, and the flexibility of determining the source of funds when investing plays an important role in supporting the sustainability of growth companies; (3) financial practitioners: results of this study are expected to broaden the horizon of financial practitioners, investors, creditors, financial analysts, auditors and accountants that conditional conservatism is an accounting principle that is able to increase the company's flexibility in arranging funding sources when investing. It is also expected that future financial practitioners may consider the application of conditional conservatism as an indication with a positive impact to company's value.

CONCLUSION

This study aims to provide empirical evidence that conditional conservatism has a negative effect on investment-cash flow sensitivity, and it will be even greater influence on companies with high agency cost as compared with low agency cost. In addition, this study also wants to prove that before the application of conditional conservatism, companies with high agency cost of investment-cash flow sensitivity is higher than the low enterprise agency cost. Different from previous studies, this study uses the dividend payout ratio to measure the amount of agency cost.

The results show that in terms of reducing investment activity dependence on the availability of internal funds, conditional conservatism has a significant negative effect. This indicates that the application of conditional conservatism is able to reduce the company's dependence on the availability of internal funds when investing. Control variables were shown to affect the amount of investment is the size of the company, prior annual stock return, and the amount of investment in the previous period. These results are consistent with research Imhof (2014) who conducted a similar study with a sample of companies in the United States.

Furthermore, this study shows that high agency cost firms has less investment-cashflow sensitivity than the low agency cost one. Low agency cost firms tend to be more flexible in choosing where to allocates their funds both on investment, dividend payments, or both. While high agency cost firm must choose one of them. High agency cost firm is not focused on investment because they have to prioritize allocation of funds to the provision of a relatively large dividends. This makes the sensitivity is lower for high agency cost firms. (Kaplan and Zingales, 1997; Moyen, 2004). These results are not consistent with the Imhof (2014), but consistent with Moyen (2004) and Kaplan and Zingales (1997).

This study also finds that that in high agency cost firm, the relationship between conditional conservatism and investment-cash flow sensitivity is higher compare to lower agency cost firms. In other words, the investment-cash flow sensitivity in high agency cost firms increases after the implementation of conditional conservatism. These results are not consistent with Imhof (2014).

This study has several limitations to be noted, namely: (1) Referring previous studies, this study used dividend payout ratio to measure agency cost as a proxy of agency cost of type two and type three. One of the potential problem in using this ratio is that dividend is not the only indicator of agency cost, a company which distributes more payouts may not have higher magnitude of agency cost. Further research should also consider other forms of agency costs and use other proxies of agency cost; (2) The number of companies that being sampled only 113 samples with 474 firms-year of five years of research. The number is still relatively small when compared with Imhof's (2014) research which uses 51.897 samples of 10 years of research. Future studies can fix this by adding a period of study in order to get more number of samples. Greater amount of sample will make the research more representative; (3) In calculating the value of conditional conservatism

company, this research only use one measurement. In contrast to Imhof (2014) which uses a model Givoly and Hayn (2000) and Basu (1997) to measure the conditional conservatism. Future studies can use several measurements of conditional conservatism that can be used as a comparison; (4) The study divided firms as high and low agency cost based on the mean value. As a result, my research has the potential for bias in representing the true state of the phenomenon of

investment-cash flow sensitivity in the two groups of companies. Future studies could develop this research to determine the proportion of the amount of high and low sample enterprise agency cost with a specific mechanism adapted to the purpose of research. This minimizes the bias so that research can represent the real situation on the phenomenon of investment-cash flow sensitivity in the two groups of companies. ■

REFERENCES

- Ahmed, A. & S. Duellman., 2011. Evidence on the role of accounting conservatism in monitoring managers' investment decisions. *Accounting and Finance* 51(3), 609–633.
- Ball, R., 2001. Infrastructure requirements for an economically efficient system of public financial reporting and disclosure. *Brookings-Wharton Papers on Financial Services*, pp. 127-181.
- Ball, R. & L. Shivakumar., 2006. The role of accruals in asymmetrically timely gain and loss recognition. *Journal of Accounting Research* 44, 207-242.
- Basu, S., 1997. The conservatism principle and the asymmetric timeliness of earnings. *Journal of Accounting and Economics* 24, 3-37.
- Bauwhede, H.V., 2007. The Impact of Conservatism on the Cost of Debt: Conditional versus Unconditional Conservatism. *Working Paper, Katholieke Universiteit Leuven*.
- Beaver, W.H. and S.G. Ryan., 2005. Conditional and Unconditional Conservatism: Concepts and Modeling. *Review of Accounting Studies* 10 (2-3), 269-309.
- Biddle, G.C., and G. Hilary., 2006. Accounting quality and firm-level capital investment. *The Accounting Review* 81 (5), 963-982.
- Biddle, G.C., G. Hilary, and R.S. Verdi., 2008. How does financial reporting quality improve investment efficiency? *Working paper, University of Hong Kong*.
- Bushman, R.M. and A.J. Smith., 2001. Financial accounting information and corporate governance. *Journal of Accounting and Economics* 32, 237-333.
- Bushman, R., A. Smith & X. Zhang., 2011. Investment-cash flow sensitivities are really investment-investment sensitivities. *Working Paper, University of North Carolina*.
- Bushman, R., J. Piotroski & A. Smith., 2011. Capital allocation and timely accounting recognition of economic losses: international evidence. *Journal of Business Finance and Accounting* 38(12), 1-33.
- Cowan, Arnold R. and Anne M.A. Sergeant., 2001. Interacting biases, non-normal return distributions and the performance of test for long-horizon event studies. *Journal of Banking and Finance* 25(4), 741-765.
- Dwiwana, Benyamin. Pengaruh kualitas laporan keuangan dan tata kelola perusahaan terhadap efisiensi investasi. 2012. *Skripsi Fakultas Ekonomi Universitas Indonesia*.

- Easley, D. and M. O'Hara., 2004. Information and the cost of capital. *Journal of Finance* 59(4), 1553-1583.
- Fazzari, Steven M., R. Glenn Hubbard., and Bruce C. Petersen., 1988. Financing constraints and corporate investment. *Brookings Paper on Economic Activity* 1, 141—195.
- Fazzari, Steven M., R. Glenn Hubbard, and Bruce C. Petersen., 2000. Investment-cash flow sensitivities are useful: A comment on Kaplan and Zingales, *Quarterly Journal of Economics* 115, 695—705.
- Financial Accounting Standards Board (FASB), 1980. Statement of Financial Accounting Concepts No. 2: Qualitative Characteristics of Accounting Information.
- Financial Accounting Standard Board (FASB), 2005. Joint Conceptual Framework Project Attachment F: Neutrality and Other Faithful Representation.
- Financial Accounting Standard Board (FASB), 2010. Statement of Financial Accounting Concepts No. 8: Conceptual Framework for Financial Reporting.
- Francis, J., R. LaFond, P. Olsson, and K. Schipper., 2004. Cost of equity and earnings attributes. *The Accounting Review* 79 (4), 967-1010.
- Francis, R. & X. Martin., 2010. Conditional conservatism and acquisition profitability. *Journal of Accounting and Economics* 49(1-2), 161-178.
- Givoly, D. and Hayn, C., 2000. The changing time-series properties of earnings, cash flows and accruals: Has financial accounting become more conservative?. *Journal of Accounting and Economics* 29, 287-320.
- Guay, W. and R. Verrecchia., 2007. Conservative disclosure. *Working paper, University of Pennsylvania*.
- Gugler, K. and Yortuglu, B., 2001. Corporate governance and dividend pay-out policy in Germany. *European Economic Review* 47, 731-758.
- Healy, P.M. and K.G. Palepu., 2001. Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics* 31, 405-440.
- Hendro. Analisis pengaruh *agency cost of free cash flow* terhadap tingkatan konservatisme dan pengujian efek moderasi dari kebijakan hutang, pendistribusian kas, persistensi kas, dan tata kelola perusahaan. 2013. *Skripsi Fakultas Ekonomi Universitas Indonesia*.
- Hubbard, R., 1998. Capital-market imperfections and investment. *Journal of Economic Literature* 36, 193-225.
- Imhof, M.J., 2014. Conditional conservatism, agency cost, and the cash flow sensitivity of firm investment. *Journal of Accounting and Financial Studies* 18(3), 45-61.
- Ishida, S., 2014. The effect of accounting conservatism on corporate financing activity : evidence from Japan. *Working Paper, Hitotsubashi University*.
- Jensen, M.J., 1986. Agency costs of free cash flow, corporate finance and takeovers. *American Economic Review* 76(2), 323-329.
- Jensen, M.J. and W. Meckling., 1976. Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics* 28, 51-82.
- Julio, B., 2007. Overcoming overhang: agency costs, investment and the option to repurchase debt. *Working paper, London Business School*.
- Kahneman, D., and Tversky, A., 1979. Prospect Theory: An Analysis of Decision under Risk. *Econometrica* 47(2) , 263-291.
- Kanamori, E., 2009. Two Concepts and The Persistence of Accounting Conservatism: In Commemoration of Prof. Kunio Chiyoda and Prof. Takashi Watanabe. *The Ritsumeikan Business Review* 47 (5), 177-192.
- Kaplan, Steven N., and Luigi Zingales., 1997. Do investment-cash flow sensitivities provide useful measures of financing constraints? *Quarterly Journal of Economics* 112, 169—215.
- Lafond, R. and R. Watts., 2008. The Information Role of Conservatism. *The Accounting Review* 83(2), 447-478.
- Lafond, R. and S. Roychowdhury., 2008. Managerial Ownership and Accounting Conservatism. *Journal of Accounting Research* 46(1), 101-135.
- Lambert, R.A., C. Leuz, and R. E. Verrecchia., 2007. Accounting information, disclosure and the cost of capital. *Journal of Accounting Research* 45(2), 385-420.
- Lara, J., B. Osmá & F. Penalva., 2010. Conditional conservatism and firm investment efficiency. *Working Paper, Universidad Carlos III de Madrid, Universidad Autónoma de Madrid and University of Navarra*.
- Li, X., 2009. Accounting conservatism and cost of capital: International analysis. *Working paper, London Business School*.
- McNichols, M.F. and S. R. Stubben., 2008. Does earnings management affect firms' investment decisions? *The Accounting Review* 83(6), 1571-1603.
- Moyen, Nathalie., 2004. Investment-Cash Flow Sensitivities: Constrained Versus Unconstrained Firms. *Journal of Finance* 59, 2061-2092.
- Myers S. & N. Majluf., 1984. Corporate financing decisions when firms have investment information that investors do not. *Journal of Financial Economics* 13, 187-221.

- Nikolaev, V.V., 2010. Debt Covenants and Accounting Conservatism. *Journal of Accounting Research* 48 (1), 51-89.
- Qiang, X., 2007. The Effects of Contracting, Litigation, Regulation, and Tax Costs on Conditional and Unconditional Conservatism: Cross-Sectional Evidence at the Firm Level. *The Accounting Review* 82 (3), 759-796.
- Rozeff, M.S., 1982. Growth, beta, agency cost as determinants of dividend payout ratio. *Journal of Financial Research* 3, 249-259.
- Richardson, S., 2006. Over-investment of free cashflow. *Review of Accounting Studies* 11, 159-189.
- Stein, J.C., 1989. Efficient capital markets, inefficient firms: A model of myopic corporate behavior. *Quarterly Journal of Economics* 104(4), 655-669.
- Suijs, J., 2008. On the value relevance of asymmetric financial reporting policies. *Journal of Accounting Research* 46 (5), 1297-1321.
- Watts, R.L., 2003. Conservatism in Accounting Part I: Explanations and Implications. *Accounting Horizons* 17 (3), 207-221.
- Watts, R.L. and L. Zuo., 2011. Accounting conservatism and firm value : evidence from the global financial crisis. *Working Paper, MIT Sloan School of Management*.
- Widyasari, Frieda. Pengaruh konservatisme terhadap keputusan investasi di Indonesia. 2010. *Skripsi Fakultas Ekonomi Universitas Indonesia*.
- Wysocki, P., 2011. New institutional accounting and IFRS. *Accounting and Business Research* 41(3), 309-328.

HRM Challenges in the Age of Globalisation

Sugandha Agarwal, Khalid Mohammed Saif Al Qouyatahi

European International College, Abu Dhabi, United Arab Emirates

ARTICLE INFO

Keywords:

Globalized environment,
globalization,
diverse workforce,
effective leadership,
role of technology,
global mindset

ABSTRACT

Globalization has caused blurred international boundaries. On one hand, there is an open market for companies to seek talent on the other hand for employees a wide array of choices to work with, all because of globalization. But such types of open and globalized market exposes the firms to the challenges occurring in the prominent field of human resource. This paper is an attempt in understanding and analyzing the challenges existing and affecting the functioning of HRM while a company operates on global platform. The major encounters and worries of HR team, and the responses that HR managers need to make to such challenges with their increasing responsibilities in the globalized environment, have also been discussed in this paper. This is a communication and cross sectional study based on descriptive arguments and analytical logic developed through the responses received from HR teams of companies belonging to different sectors. Effective leadership, managing diverse workforce, role of technology in HR functions like recruitment and selection, legal and political aspects, skill management, global mindset are some of the jostling issues encountered by human resource function in the retro of globalization.

SARI PATI

Globalisasi telah menyebabkan kaburnya batas-batas internasional. Di satu sisi, ada pasar terbuka bagi perusahaan untuk mencari talenta, di sisi lain, bagi karyawan ada berbagai pilihan perusahaan untuk bekerja karena globalisasi. Namun, jenis pasar terbuka dan global seperti itu menghadapkan perusahaan pada tantangan, yang terjadi di bidang sumber daya manusia unggul. Makalah ini merupakan upaya untuk memahami dan menganalisis tantangan yang ada dan mempengaruhi fungsi HRM sementara perusahaan beroperasi pada platform global. Tantangan-tantangan utama dan kekhawatiran tim HR, dan tanggapan yang perlu dilakukan oleh manajer SDM untuk menghadapi tantangan tersebut dengan meningkatnya tanggung jawab mereka di lingkungan global, juga dibahas dalam makalah ini. Ini adalah penelitian

Corresponding author:
drsugandhaagarwaal@gmail.com

komunikasi dan cross sectional berdasarkan argumen deskriptif dan logika analitis yang dikembangkan melalui tanggapan yang diterima dari tim SDM perusahaan dalam berbagai sektor. Kepemimpinan yang efektif, mengelola beragam tenaga kerja, peran teknologi dalam fungsi SDM seperti rekrutmen dan seleksi, aspek-aspek hukum dan politik, manajemen kecakapan, dan pola pikir global, adalah beberapa masalah yang dihadapi oleh fungsi sumber daya manusia dalam retro globalisasi.

© 2017 IRJBS, All rights reserved.

INTRODUCTION

The roles & obligations of HR departments are changing in the modern business due to globalization. The social economic and political scenario is changing, and the role of human resource is becoming the most essential in the globalized organization. With the globalization of the world economy, even small firms are discovering that success depends on marketing and managing abroad. But operating globally or expanding abroad requires putting in place management systems to control overseas activities. These systems include managerial controls, planning systems, and of course human resource systems for recruiting, selecting, training, appraising and compensation diverse pool of employees. Managing human resources under the shade of globalization or in other words in international scenario creates challenge. It is an obvious practice these days that the companies are hiring foreign employees to have a cost advantage; on the same line, thus ignoring the local national employees. Companies are now trying to adopt the technically advanced and innovative ways to grow. Companies with the ability to foresee their business needs and high skilled employees are facing challenges to maintain such international employees in their boundaries with existing work practices (Kapoor, 2011).

The following theoretical framework (refer to figure:1) gives a quick over view of the recent forces that have increased expansion of firms into international markets, and the need for organizations to effectively manage human resources in order to

gain a competitive advantage in a global economy. It then turns to the role of HRM in different cultural contexts and the dimensions along which cultures may differ. As per this framework the other influential factors affecting HRM in global markets are education and human capital, the political legal system and the economic system.

As per the framework cultures differ strongly on things such as how subordinates expect leaders to lead, how decisions are handled within the hierarchy, and what motivates individuals. Cultural diversity programs focuses on understanding the cultures of others in order to better communicate with them. Countries differ in their levels of human capital – productive capabilities of individuals (knowledge, skills and experience). A country's human capital is determined by a number of variables, primarily, educational opportunity. It can be easily noticed that countries with low human capital attract facilities that require low skills and low-wage levels whereas countries with high human capital are attractive sites for direct foreign investment that creates high-skill jobs. The political-legal system often dictates the requirements of certain HRM practices, such as training, compensation, hiring, firing, and layoffs. The legal system is an outgrowth of the culture, reflecting societal norms. Along with this, a country's culture is integrally tied to its economic system, which provides many of the incentives for developing its human capital. The health of the economic system affects HRM. HRM get affected directly through taxes on compensation packages.

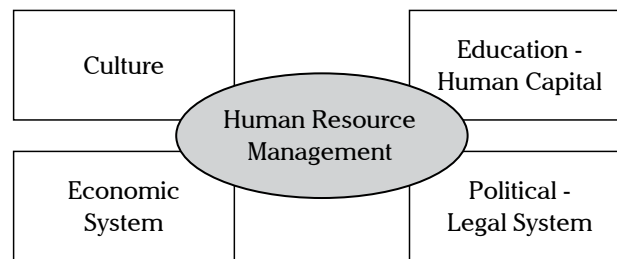


Figure 1. Factors effecting HRM in international Markets
 (Source: Noe, R., Gerhart, B., Wright, P., & Eligh, L. (2016). *Strategic human resource management: gaining a competitive Advantage*. (2nd Canadian ed.). McGraw-Hill Ryerson Limited)

HR strategies can play more influential roles in global organizations than they have in the past. Due to globalization, many organizations are moving towards HR strategies and practices that are global in nature. Global companies face a lot of differences in management style due to the differences in cultures across the globe. Global HRM is not a simple bundle of conventional functions like recruitment, promotion dovetailing work force responsibilities or ensuring satisfactory levels of wages and compensation. It calls for astute, psychological gambits and maneuvers. Managers with cross cultural skills are essential for the effective management of global organizations. Learning to manage cultural differences will help managers have a global outlook, which is the key factor for survival and growth of organizations in the global village (Kanna, 2013).

Research problem:

With an advent of globalization, it is observed that organizations are becoming increasingly global and innovative. There are chances where HR managers would face few challenges while trying to build productive, cohesive workforces at the workplace. Now gathering diversified workforce at the single place would arise a question of culture, religions, traditions, norms and values. As a result, it is essential to address such challenges to sustain one's position in the industry and to remain competitive. It's the effective HR strategy that entails screening, training, pay and other

human resource policies and practices, by using technology and other resources to encounter the challenges ascend due to globalization and its increasing pace.

Review of literature:

The full force of globalization has hit today's organizations, and it is clear that there are many cultural and human problems. International human resource management (IHRM) is being asked to better understand and develop multinational organizational leaders to meet the challenges. A prominent solution that is receiving increased attention is the construct of global mindset (Story, Barbuto Jr., Luthans & Bovaird, 2014).

Let us now define the globalization term, "if a firm or an organization expands its sales or production beyond the national boundaries, then its globalization," but it does not cover the real meaning of the term. It is much more than just crossing the boundaries of two regions. It is crossing the borders and accepting the local religion, tradition, values along with retaining own. Today we live in a global village, and this means that our activities have crossed the national boundaries to become the globalized country (Kapoor, 2011).

With an advent of globalization, HR teams are now equipped with many online portals and media for recruiting the talent across the globe (Challenges

for human resource management and global business strategy, 2015). The globalization is now minimizing the single skills and experienced industry working opportunities, rather encouraging to have multitasking and multi skilled employees at the workplace. The company appreciates if you are master of none but the jack of all.

It was observed that many of the teams are using social media and LinkedIn tool for screening the profile of an individual. Based on the research, it was found out that most of the companies are facing challenges in designing the different compensation packages and benefits for different country employees. Different individual needs different advantages and rewards. Hence, the company is now preparing the benefit bucket where there are lists of benefits which can be provided by the companies, and employees need to selected particular number of benefits as per their wish (Kapoor, 2011).

Human Resource Management is undoubtedly the most crucial aspect of a business. A proper understanding of human resources practices is a vital prerequisite for the success of a business organization. In the ultimate any technology adopted by an organization will yield positive results only if and when human resources are efficiently and effectively utilized. Clearly, the prime challenge before HR managers lies in enhancing the skills and competency of the people in an organization so that they are equipped to ensure the efficient and productive utilization of the technology available to them (Harshwardhan, 2008).

The company is facing issues to balance between the employments laws of the home country and host country. Moreover, the culture and traditions must be maintained and followed in such a way which would respect different country laws. Moreover, the corporate social responsibility is one of the tools for influencing the national public towards the brand. With adopting globalization and

new technology, it was found out that company faces major issues in managing the change at the workplace (Employer strategies for responding to an aging workforce, 2012).

“Globalization is a process that is drawing people together from all nations of the world into a single community linked by the vast network of communication technologies.” Now, HR managers are having the worldwide market to find their required talent and there are number of employees in the queue. The social media and professional networking online have made the recruitment take easier than earlier. The company must ensure that the proper mix of personnel is recruited and maintained in the private space (Bradley, 2017).

In the face of intense globalization, firms have a need to carve out sustainable competitive advantage for themselves, and SHRM is one of the ways. Globalization and Strategic Human Resource Management (SHRM) are worldwide phenomena that have shaped the faces of the corporate world predominantly. The global environment is indeed changing at an unprecedented pace and companies, headed by competent CEOs, must embark and embrace relevant strategies to achieve stalwart success (Soo, Halim & Keng-Howe, 2010).

In the light of competition and the search for sources of competitive advantage, developing and managing human resources has increasingly become the focus of attention in some countries. The importance of human assets for success has been recognized and stressed in developed, as well as developing, countries (Quang, Heijden & Rowley, 2010).

Globalization influences organizations that compete for customers with high expectations for performance, quality, and cost. Globalization also exerts pressure on the Human Resource Management (HRM) function to adapt to changing

organizational needs and add greater value. As organizations globalize, cultural sensitivity and understanding is vital for HR managers to add value. Globalization increases the mix of cultures, languages, perspectives, as well as the number of expatriates. Effective HR managers must also develop business knowledge, HR content expertise, influence skills, and personal credibility (Brockbank and Ulrich 2003; Meisinger 2003; Ulrich et al. 1995). These skill and knowledge requirements become more salient in global organizations (Friedman, 2007).

Objectives of the Study:

This article aims at developing the understanding of HRM challenges taking place in the present globalized business world. The primary objective of the research is to assess the several challenges existed in the field of HR due to globalization. With the help of primary and secondary data, different concerns of the HR team of five different companies could be analyzed. The secondary objective of the research is to recommend few actions as a part of conclusion which would help the company to face the challenges. The present study attempts to throw light on how different challenges are interlinked and contribute to operational efficiency of human resource function of companies belonging to different segments. This fact cannot be ignored that HRM faces more challenges due to increased responsibilities in the globalized environment to cater to international parameters of concerns like cultural differences, political and legal aspects etc. Therefore, the present study intends to analyze various such factors affecting the functioning of HRM while a company seeks to operate in the globalized environment.

METHODS

The research methodology is based on descriptive arguments, statistical data, and analytical logic developed through the understandings constructed on the responses received through questionnaire based survey and various research papers, reports,

books, journals, newspapers, business magazines and online data bases.

For this study a mix of qualitative and quantitative research methodology is used. To achieve the objective of the study the descriptive research design is adopted as it provides the sketch of the current situation and emphasis is on reporting what has been perceived. As far as method of data collection is considered it is an interrogation/communication study where an attempt is made to collect the responses of the subjects through survey-questionnaire. A structured questionnaire was used to gather the primary data. The question set includes the list of predefined areas where most of the companies face difficulty to deal with. These pre-defined areas are taken into account built on the experience of researchers and pilot discussions with the HR teams of some companies. Along with primary data collection, secondary data driven information is also widely used. It is a cross-sectional study as it is carried out once and represents a snapshot of one point in time. The study occurred under actual environmental conditions i.e. the field settings which confirm that the responses of the respondents were gathered in their usual environment.

The sample size of the study constitutes HR teams of five companies belonging to different segments like Banking, Oil and Gas, FMCG & Hotel industry in order to get opinion of diverse industries existing in the corporate world. The sample was chosen based on the convenience of the researcher to get access to HR teams of different companies and convince them to contribute to the undertaken study. The domain of the research was UAE as both the researchers currently belong to the same region of the world. To analyze the collected data, statistical tools like graphs, tables and frequency distribution are used.

Analysis and Interpretation:

Based on the primary data collection, the summarized result of all the responses is given

below. The question includes the list of predefined areas where most of the companies face difficult to deal with. The feedbacks are taken from five HR teams on the given questionnaire and data are represented in form of tables and charts. It was observed that more than 70% of the teams find it difficult to deal with diversified cultural values and norms of the employees. It is more than impossible to consider each countries norm and design the policy. Hence, they have to study the core values and tradition in order to give maximum justice to the individuals. Then it comes to the political influence, where each and every country is having different political background and laws related to the international recruitment and visa processes. HR team has to go through the detail of each process before going for final recruitment or selection, which is again a daunting task.

Furthermore, recruiting the number of employees from diversified culture bring changes in the management practices. The HR needs to entitle the new practices to equalize the interest of each employee in the company. It may bring a change in the existing operation, to manage that change is also a difficult task. It takes time in the initial stage to convince the existing employees.

Moreover, it can be seen that the Human Resource team needs to provide extensive training to accept the change and implementing the new practices. It takes extra time other than actual productive work of an organization. The team needs to prepare an ideal retention strategy which would work with all employees. Because every individual would not concern only with the money, many of them would like to be with the organization for the profile, working environment and respect & recognition they get from their colleagues.

Based on the given graph, it was found out that most of the companies find it difficult to manage the diverse work force with the existing leadership and policies. The HR team needs to show extra ordinary expertise to showcase the collaboration skills and manage the diversified talents. Effective leadership must be cultivated in order to manage the pool of employees effectively.

RESULTS AND DISCUSSIONS

The overall analysis exhibits that the companies face skill management and managing diversity as two of the major challenges due to globalization where 25 to 30% are agreed with the fact, and 5 to 10% does not agree with it completely.

Table 1. Areas where HR faces challenges in the Age of Globalisation

| Area where HR faces challenges in the age of Globalization | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Total |
|--|----------------|-------|---------|----------|-------------------|-------|
| Culture and norms | 32% | 40% | 20% | 3% | 5% | 100% |
| Political influence | 30% | 35% | 25% | 10% | 0% | 100% |
| Different country laws | 25% | 30% | 35% | 10% | 0% | 100% |
| Priority of money and job in different countries | 7% | 18% | 35% | 20% | 20% | 100% |
| Recruitment through social media | 18% | 30% | 35% | 17% | 0% | 100% |
| Change management | 26% | 30% | 35% | 9% | 0% | 100% |
| Compensation | 25% | 26% | 35% | 7% | 7% | 100% |
| Retention technique | 30% | 20% | 30% | 10% | 10% | 100% |

Source: author's own compilation from primary data

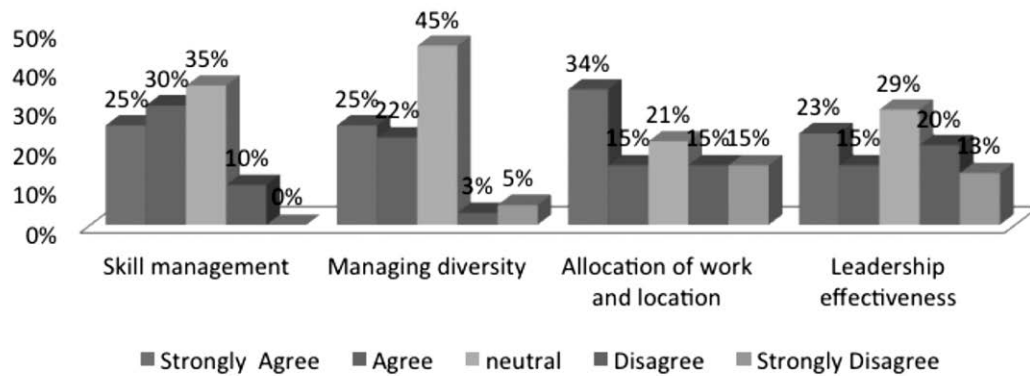


Figure 2. Areas where HR faces challenges due to Globalisation

Furthermore, the team finds it difficult to allocate the diversified resources at the right place. There are on an average 25% of the team members who agrees with the fact and rest 15% do not agree with it. They feel that if the companies have appropriate processes since the beginning, it won't affect them to the extent.

Furthermore, the teams confirm that they need to cultivate new kind of leadership to imbibe the multicultural at the workplace without any regional clashes. There are more than 50% of the respondents who feel that traditional leadership won't work in the age of globalization. One of the major challenges for the HR is to prepare policies which abide by the culture and norms of all the nations. However, we can't completely change the policies, but we can be a little bit flexible about its implementation and execution. Whenever the HR team goes to the different nation for recruitment or selects any foreigner, it needs to check on the visa procedures at the macro level and also the overall scenario of the international relationship between the nations must be studied and keep in mind before taking any decision.

When asked whether the different country laws affect the organizational HR processes, they replied in positive agreement. In the international human resource recruitment and selection, the HR team needs to consider the respective country laws. However, the introduction of strategic

human resource management would consider all the aspects and analyze the picture at the macro level. As a result, HR would take an appropriate action which would serve the interest of overall organizational goals. Other than that, as per the findings "Priority of money and job in different countries, Recruitment via different portal and social media, Change Management, Compensation and Retention technique" also creates trouble for the HR processes of companies.

MANAGERIAL IMPLICATIONS

This study is conducted using qualitative and quantitative approaches as the researcher found it essential to use both approaches to achieve research objectives successfully. This study was conducted in the context of HR and globalization. Globalization touches on many of the key assumptions about the term, the importance of the international flow of ideas and knowledge, the closer economic integration of countries through the increased flow of goods, services, capital and labour, and the cross-border movement of people (Tierney & Findlay, 2010). By taking into account the people this aspect of globalization paves a way to interlink the two terms HRM and Globalization or to assess the interdependence of both the terms. The study intended to contribute to the existing research done on the topic or related topics and fill the academic gap that prevails towards recognizing the significant contribution of human

resource to sustain in the phase of globalization and at the same time driving the competitive advantage despite facing many challenges in the era of globalization. By following certain remedial measures like effective leadership, introduction of strategic human resource management practices, adopting global mindset, sharing of knowledge, HR can encounter challenges existing due to globalization. This information is useful for academicians, professionals and everyone who has been either directly or indirectly associated with the field of human resource. In the present time Companies that enter global markets must recognize that these markets are not simply the mirror images of their home country. That is why the followed theoretical framework brings into notice the differences including culture, education, political-legal and economic system which may have strong impact on the HRM function of present time companies.

Global Teamwork through sharing cross border and cross cultural experiences and continuous learning through ongoing training and development for both leaders and participants can contribute to overcome the impact of challenges coming on the way to human resource practices due to globalization. Globalization provides the organizations with an opportunity of expansion of business. As part of the company's expansion process the company's president expects HR department to prepare a strategic plan that will integrate the goals, objectives and the strategies of the HR department with those of the company. When the company's strategic aims include reducing costs, maximizing financial returns, becoming more customer centric and energizing employees, companies do not turn to only sales and marketing department rather turned to its Human resource managers to draft new HR strategy entailing new screening, training, pay and other human resource policies and practices, and using more technology to reduce its HR activities' costs and to boost customer service by hiring and motivating customer focused applicants. The

easy availability of new technological tools has drastically changed the way the work is being done. It has become a virtually boundary-less world or a global village largely due to technology. Technological developments have improved the ways in which we expand our capabilities. In view of these advances, focusing specifically on the human resource department, it has to function with a global mindset and be adept with the most advanced technology (Gupta & Rao, 2016)

Globalization, the unavoidable process which the world entered, is affecting every one of us in different ways. Globalization means growing permeability of all the boundaries such as time and space, national and state borders, borders of economy, branches and organizations and less tangible boundaries such as cultural standards and their assumptions (STUPARU & VASILE, 2009). HR should use cross-border, cross-cultural experiences as prerequisites for career advancement in order to ensure that all employees feel they're part of a strong, unifying corporate identity. When a company contends the wealth of nationalities, cultures, languages then the outlooks represented by its employees is one of its most valuable assets. Therefore, HR needs to engage in numerous exercises aimed at building openness, transparency and fairness, and supporting diversity considering that a climate of mutual respect is the basis of all relationships within the company and with society.

CONCLUSION

Globalization brings in enormous adjustments now not most effective in running limitations however additionally in the company HR features and strategies and thus poses certain challenges. Based on the primary and secondary data, it was observed that it is essential that the company manages their practices and workforce in such a way which enables the firm to gain the competitive advantage in the global market place. The major areas of challenges occurring in the face of globalization are managing diverse

cultures, adapting and adopting different countries legal proceedings, recruitment and selection via tech savvy methods, retention of employees in the globalized environment, competitive compensation that matches or goes with prevalent global practices, effective allocation of work and location to the employees coming from diverse places, and effective leadership that can lead the company in the direction of achieving high performance in line with organizational mission and vision.

Here it would be sensible enough to quote that HRM in the globalized generation has to move across barriers of culture, geography and language. Learning and practicing to manage and control cross-cultural differences will assist managers to possess a global outlook, which is the key issue for survival and escalation of organizations in the global landscape. In fact, an understanding of sharing knowledge mechanism is an essential characteristic that desires to be nourished and nurtured in various international teams of workers. Another aspect could be the leadership that must be developed to face international challenges acceptably and HR expert have to create a work lifestyle this is able to inspiring and fulfilling all sections of employees within the globalized environment.

Organizations can develop competency models to identify critical success HRM being the most vital

corporate initiative dealing with the 'live brand' of the organization its people. Hence, HRM function can no longer be treated as a mere support function. In most of the leading organizations worldwide, the HRM function is now being treated as a strategic partner of the organization through strategic HRM interventions (Kanna, 2013). Thus, in the face of penetrating globalization, firms can ascertain sustainable competitive advantage for themselves by introducing and adopting the practices and processes of Strategic Human Resource management (Soo, Halim & Keng-Howe, 2010) which would be in line with organization's overall mission and vision.

As per the observation, it can be recommended that with having excellent communication skills and leadership skills, the HR team can face the challenges and solve the same in the most effective manner. The HR teams must think of the strategic manager, and leader of the team should be visionary in order to bring the change in the organization. The individual must take initiatives to implement the strategies in the most effective manner which would be in favor of uplifting the organizational performance. The Human Resource team must have technological updates and global networking abilities to cope up with the change. The new practices must be innovative which would override the challenges prevailing in the field of HR. ■

REFERENCES

- Bawa, M.A. (1999, October). *The challenges of globalization and the role of human resources*. ICCB Bangkok.
- Blumberg, B., Cooper, D., & Schildler, P. (2014). *Business Research Methods (4th ed.)*. McGraw Hill education
- Bradley, J. (2017). *Effects of Globalization on Human Resources Management*. Retrieved on May 12, 2017 from <http://smallbusiness.chron.com>: <http://smallbusiness.chron.com/effects-globalization-human-resources-management-61611.html>.
- Česnyienė, R. (2008). *Globalization and Human Resource Management*. *Ekonomika / Economics*, 8241-56.
- Challenges for human resource management and global business strategy*. (2015, June). Economist Intelligence Unit Limited.
- Cooper, D. & Schindler, P. (2014). *Business Research Methods*. New York: McGraw-Hill Education.
- Dessler, G. (2013). *Human resource management*. (13th ed.). Pearson Education Limited.
- Dowling, P., Festing, M. & Engle, A. (2008). *International Human Resource Management*. United Kingdom: South-Western Cengage Learning.
- Friedman, B. (2007). Globalization Implications for Human Resource Management Roles. *Employee Responsibilities & Rights Journal*, 19(3), 157-171. doi:10.1007/s10672-007-9043-1
- Gupta, V., & Rao, E. (2016). Impact of Globalisation and Technology on Human Capital: A Review of Literature. *Vishwakarma Business Review*, 6(1), 52-59.
- Harshwardhan. (2008). Challenges & Opportunities in HRM. *Journal of Marketing & Communication*, 4(2), 89-93.0041
- Harry, W., & Nakajima, C. (2007). Ethnocentric HRM Policies in the Asia Pacific Region: An Explanation of Host Country Resistance. *Management Review*, 18(4), 454-471.
- Hurn, B. J. (2014). The challenges facing international HRM in an increasingly globalised environment. *Industrial & Commercial Training*, 46(7), 371-378. doi:10.1108/ICT-06-2014.
- Kanna, V. V. (2013). Global HR Practices and Strategies - The Challenges Ahead. *Journal Of Commerce & Management Thought*, 4(1), 168-178.
- Kapoor, B. (n.d.). (February 2011) The Impact of globalization on human resource management. *Journal of International Management Studies*, 6(1), 1-8.
- Kaur, S. (2014, February). Key challenges and trends faced by human resource managers. *International Journal of Management*. 5(2), 36-41.
- Mathis, R. & Jackson, J. (2011). *Human resource management*. (13th ed.). South-Western Cengage Learning.
- Noe, R., Gerhart, B., Wright, P., & Eligh, L. (2016). *Strategic human resource management: gaining a competitive Advantage*. (2nd Canadian Ed.). McGraw-Hill Ryerson Limited
- Quang, T., van der Heijden, B. M., & Rowley, C. (2010). Globalisation, competitiveness and human resource management in a transitional economy: the case of Vietnam. *International Journal of Business Studies*, 18(1), 75-100.
- Saunders, Lewis, & Thornhill. (2016). *Research Design*. Retrieved from <http://research-methodology.net>:<http://research-methodology.net/research-methodology/research-design/>
- Singh, B., & Dhawan, S. (2013). Challenges Faced by H R Managers in the Contemporary Business Atmosphere. *International Journal of Management & Business Studies*, 3(2), 90-92.
- Sn, U. (2013, November). Global HR Issues and Challenges for Managers. *International Journal of Science and Research*, 2 (11), 109-110.
- Soo Siew, C., Halim, H., & Keng-Howe, I. C. (2010). The impact of globalisation on strategic human resources management: the mediating role of CEO in HR. *International Journal of Business Studies*, 18(1), 101-124.
- Story, J. P., Barbuto JR., J. E., Luthans, F., & Bovaird, J. A. (2014). *Meeting the challenges of effective International HRM: analysis of the antecedents of global mindset*. *Human Resource Management*, 53(1), 131-155. doi:10.1002/hrm.21568
- Stuparu, D., & Vasile, T. (2009). *The Electronic Commerce in the Globalisation*. *Annals of the University of Petrosani Economics*, 9(2), 301-306.
- Tierney, W. G., & Findlay, C. C. (2010). *Globalisation And Tertiary Education In The Asia-pacific: The Changing Nature Of A Dynamic Market*. Singapore: World Scientific.
- Wilkie, D. (2015, June 30). *Globalization Presents Complex Challenges for HR Managers*. Society for Human Resource Management (SHRM).

Antecedents of Employee Loyalty in Educational Setting: An Empirical Study

Sabrina O. Sihombing, Margaretha P. Berlianto

Universitas Pelita Harapan, Jl. M. H. Thamrin Boulevard 1100 Lippo Village, Tangerang, Banten 15811, Indonesia

| ARTICLE INFO | ABSTRACT |
|---|---|
| <p><i>Keywords:</i> quality of life, work-family conflict, job satisfaction, perceived organization support, labor union support</p> <hr/> <p>Corresponding author: sabrina.sihombing@uph.edu</p> | <p>No studies have been conducted to link three variables of work values, internal marketing, and job satisfaction in predicting employee loyalty. Therefore, this research aims to fulfill the gap by developing a model that include work values, internal marketing, and job satisfaction in assessing employee loyalty in educational context. This research apply a judgmental sampling with the sample size of 200 lecturers from a private universities in Tangerang. Structural equation modeling was applied in testing the research hypotheses. The results showed that there is one out of three hypotheses that was not supported. That hypothesis is the relationship between internal marketing and job satisfaction.</p> <hr/> <p>SARI PATI</p> <p><i>Belum ada penelitian yang dilakukan untuk menghubungkan ketiga variabel nilai kerja, pemasaran internal, dan kepuasan kerja dalam memprediksi loyalitas karyawan. Oleh karena itu, penelitian ini bertujuan untuk memenuhi kesenjangan tersebut dengan mengembangkan model yang meliputi nilai pekerja, pemasaran internal, dan kepuasan kerja dalam menilai loyalitas karyawan dalam konteks pendidikan. Studi ini menggunakan judgmental sampling dengan ukuran sampel yang meliputi 200 dosen dari sebuah universitas swasta di Tangerang. Pemodelan persamaan struktural digunakan dalam pengujian hipotesis penelitian. Hasilnya menunjukkan bahwa ada satu dari tiga hipotesis yang tidak didukung. Hipotesis tersebut adalah hubungan antara pemasaran internal dan kepuasan kerja.</i></p> <p>© 2017 IRJBS, All rights reserved.</p> |

INTRODUCTION

Employee loyalty has been attracted to many scholars since its influence to companies' growth, productivity of the business, and performance. Employee plays a central role in attracting, building and maintaining relationships with customers. Salary factor was affect employee loyalty, based on the survey held by JobStreet to employees in Asia countries (Herlinda, 2017). But according to Forbes, 79 percent of employee left their employee due to lack of appreciation (Herlinda, 2017). According to study held by Delloitte stated that employee is not an employee only, they are company's customer and patners, organizations should create an organization culture that inspired the employee to stay or become loyalty (Herlinda, 2017). Based on description above, there are many factors that could make an employee become loyal. So, it is important for an organization to develop some system or policies to make and keep the employee become loyal. Top management of the organizations develops work system, benefit packages, training programmes, performance appraisals to developing loyal employee (Abdullah et al., 2009). But most of the company are still unsuccessful to satisfy their employees and attain their loyalty because they do not know about what factors that help in getting employee loyalty (Hussain, 2012). This study will help these organizations to identify the factors those help them in gaining the loyalty of their employees and also the association of employees satisfaction and employees loyalty.

There are many previous research that investigated the link between job satisfaction and employee loyalty (Hwang & Wang, 2013; Khuong & Tien, 2013; Shah et al., 2012). Some factors that influence the job satisfaction, such as internal marketing (Bailey, Albassami, & Al-Meshal, 2016; Dahl & Peltier, 2014), supervisor support (Charoensukmongkol, Moqbel, & Wirsching, 2016), rewards (Mustapha, 2013; Seijaaka & Kaawaase, 2014; Westover & Taylor, 2010), work values (Ravari, Hejazi, Ebadi, Mirzaei, & Oshvandi, 2012; Yahyagil, 2015) and others. This

research emphasis on internal marketing and work values, which represent internal and external side of employee in explaining job satisfaction.

Table 1 show previous studies on the relationship between internal marketing, work value, job satisfaction and employee loyalty. From the table 1, we could see that there is no previous research that investigated the correlation between internal marketing, work values, job satisfaction and employe loyalty. Therefore, this study aims to fill that gap by developing a model that consists of those four variables. These four variables are chosen to describe a phenomenon by limited variable to fulfill parsimony criteria scientific research (McBurney & White, 2009; Sekaran, Bougie, & Ivonne, 2013).

Three research questions are considered in this study:

1. Does internal marketing positively impact on lecturers' job satisfaction?
2. Does work values positively impact on lecturers' job satisfaction?
3. Does lecturers' job satisfaction positively impact on employee loyalty?

Literature Review

Job Satisfaction

The concept of job satisfaction was introduced by Landsberger with the Hawthorne effect (Khuong & Tien, 2013). Job satisfaction is one crucial element that influences positive employee behavior (Arnett, Laverie, & McLane, 2002). Job satisfaction is related with employee's behavior, which is the higher the job satisfaction is the better the employee's behavior is (Robbins, 1996). For organization to have satisfied customer, the firm must also have satisfied employees (Rafiq & Ahmed, 2000). Togia et al. (2004) has defined job satisfaction as the extent to which employee's need are satisfied in a job. According to Coomber & Louise Barriball (2007), work environment, co-workers, supervisors, salary and organization factors can affect job satisfaction. But according

Table 1. Research on work values, internal marketing, job satisfaction, and employee loyalty

| Researcher(s) (year) | Internal Marketing | Work Values | Employee Satisfaction | Employee Loyalty |
|---------------------------------|--------------------|-------------|-----------------------|------------------|
| Kanyurhi & Akonkwa (2016) | X | | X | |
| Bailey et al. (2016) | X | | X | |
| Kim & Cho (2016) | | | X | X |
| Edo et al. (2015) | X | | X | |
| Dahl & Peltier (2014) | X | | X | X |
| Gounaris (2008) | X | | X | |
| Iliopoulos & Priporas, (2011) | X | | X | |
| Hegney et al. (2006) | X | | X | |
| Ahmad & Al-Borie (2012) | X | | X | |
| Al-Hawary et al. (2013) | X | | | |
| Hwang & Chi (2005) | X | | X | |
| Kameswari & Rajyalakshmi (2012) | X | | X | |
| Peltier et al. (2008) | X | | X | |
| Rajyalakshmi & Kameswari (2009) | X | | X | |
| Salem (2013) | X | | X | |
| Ravari et al. (2012) | | X | X | |
| Yahyagil (2015) | | X | X | |
| Mills & Blaesing (2000) | | X | X | |
| Khuong & Tien (2013) | | | X | X |
| Hwang & Wang (2013) | | | X | X |
| Hussain (2012) | | | X | X |
| Turkyilmaz. et al (2011) | | | X | X |

Source: summarized from researchers cited above

to Bednarska & Szczyt (2015), occupation, employment contract, pay and education level were the most important individual factors which contributed to the variations in job satisfaction.

Work Values

Values is a beliefs about desirable end behavior that transcend specific situations, guide selection or evaluation of behavior and events and ordered by relative importance (Schwartz & Bilsky, 1987:551). According to Blackwell, Miniard, & Engel (2006), personal value is defined as the “normal” behavior for an individual. For an organization to understanding work values is crucial because these values will guides employee behavior in

their daily works. Work values shaped through the process of socialization. Individuals internalize certain values and beliefs. This process formed their moral judgment and become the launching pad of their thoughts, choices, decisions, attitude, behaviors and actions (Ravari et al., 2012:449).

According to Berings et al. (2004), job satisfaction is influenced by employee’s work-related values and its also reflect to individual’s attitudes toward overcoming obstacles for obtaining satisfaction from a profession. Tietjen & Myers (1998) stated that one way for organization to keep their employees satisfied at work is respect and recognize their values and beliefs.

H1: Work values will be positively impact to job satisfaction.

H2: Internal marketing will be positively impact to job satisfaction.

Internal Marketing

Internal Marketing comes from the concept of services marketing. Berry, Hensel, & Burke (1976) introduced the concept of internal marketing. They were viewing employees as internal customers and treat jobs as internal products. Berry (1981) has defined internal marketing is attracting, developing, motivating, and retaining qualified employees through job- products that satisfy their needs. Internal marketing should be a priority before external marketing (Kotler, 2000). Internal marketing view that employee is an organization’s primary target for marketing efforts with a fact that employees having an interaction with organization’s external publics (Bailey et al., 2016). External customer satisfaction can not be attained without the contribution of the customer - contact employees who provide the service (Rajyalakshmi & Kameswari, 2009). External relationship between employee and customer cannot be effective if there is no internal relationship and it’s contributes to the success in external market (Hesket, Jones, Loveman, Sasser, & Schlesinger, 1994). Internal marketing enhance the productivity of the employees and improves customer’s satisfaction which in the end will increase company earnings (Rafiq & Ahmed, 2000).

Employee loyalty

Loyal employee can be very valuable assets to the organizations because loyal employee will take care of customers in the right way and understand what customer want and deliver it (Michlitsch, 2000). According to Wan (2012), employee loyalty is a psychological attachment or commitment to the organizations and as a result of increase satisfaction. Loyalty plays a positive role in retention of members or employee in the organization which characterized by the strong wish to continue membership of an organization (Turkyilmaz et al., 2011). A loyal employee also act as advocates to customer of the organization’s product, service and image (Preko & Adjetey, 2013).

H3: Job satisfaction will be positively related to employee loyalty.

METHODS

Sampling design and sample size. This research applied judgmental sampling with the main criteria that is respondent should at least had been a lecturer in that university for one year. The survey method was applied to collect the data. The sample size is 200 lecturers in one big private university in Tangerang.

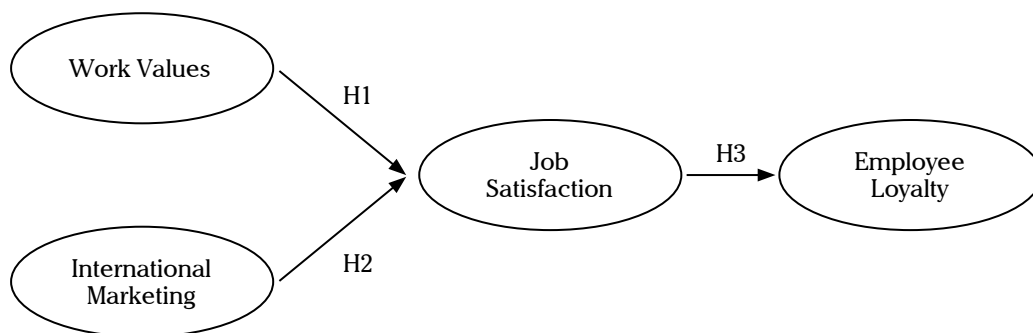


Figure 1. The Research Model
 Source: Developed for this research (2017)

Measures. All indicators to measure research variables were based on previous research (see Appendix 1). Each item was rated on a 5-point Likert scale (from 1 = strongly disagree to 5 = strongly agree).

The goodness of the data. The goodness of measures was assessed by applying reliability and validity analysis. Specifically, reliability analysis applied the Cronbach Alpha and validity analysis involved discriminant and convergent validity by assessing Pearson correlation and exploratory and confirmatory analysis.

Analysis data. Structural equation modeling (SEM) analysis was applied to construct validation and hypothesis testing. After construct validity was evidenced, hypotheses were subjected to SEM analysis by using the maximum likelihood estimation. The maximum likelihood (ML) estimation was chosen for this research because of the robustness of ML estimation against the violation of assumption of normality (Tabachnick & Fidell, 1996). Furthermore, the ML estimation applied in this research used χ^2 adjusted which termed as CMIN/DF (Steenkamp & van Trijp, 1991). There is no clear guideline about what value of CMIN/DF is minimally acceptable. Two suggestion is that the ratio is as low as 1.0 (Hair et al., 1995) and as high as 5.0 (Kelloway, 1998). The cut-off value from 1 to 5 was adopted in this research.

Another measure of absolute fit is GFI. The GFI indicates the overall degree of fit, that is, the squared residuals from prediction compared with the actual data (Hair et al., 1995). According to Hair et al. (1995), no absolute threshold acceptability levels have been established. Two recommendations are a value close to 0.90 is marginal acceptance level (Hair et al., 1995) or above 0.90 indicate satisfactory model fit (Kelloway, 1998). That is, values close to 0.90 and above were deemed acceptable in this research.

AFGI is an extension of the GFI. This index is similar

to the GFI in that the value of the measures ranges from zero to one with higher value indicating that the model fits the sample data well. Values close to 0.90 are marginal acceptance level (Hair et al., 1995) or above 0.90 indicate satisfactory model fit (Kelloway, 1998), and were applied in this research.

Another measure is the RMSEA. It expresses model fit per degree of freedom (Hair et al., 1995) In this research, RMSEA values ranging from .05 to .08 are deemed acceptable (Hair et al., 1995).

RESULTS AND DISCUSSION

Response rate. A total of 200 questionnaires were distributed to respondents. The questionnaire was a personally administered. Of those respondents, the number of valid questionnaires was 182, representing the response rate of 91 per cent.

Reliability and validity analysis. This research used the Cronbach α test to examine the reliability of the instrument. The Cronbach α results were in the range from 0.838 to 0.903, proving evidence of internal consistency of the measures (Table 1).

Having done the reliability tests, a factor analysis was run using Varimax rotation. Each scale was subjected to exploratory factor analysis loading on the dominant factor (at least 0.50) with a sum of the items in the factor explaining more than 50 per cent of the factor's variance (Table 2). Table 2 also shows that all items significantly load on their corresponding constructs, demonstrating adequate convergent validity. Furthermore, based on Anderson & Gerbing (1988), confirmatory factor analysis (CFA) using maximum likelihood estimation procedures was performed for measure validation. Table 4 shows that the results indicate acceptable model fits.

In order to provide support for discriminant validity, Pearson product-moment correlations among the study variables were computed. For this purpose, composite scores for each dimension

Table 2. Reliability results

| Variable | Cronbach Alpha | Corrected Item-Total Correlation |
|--------------------|----------------|----------------------------------|
| Work Values | 0.838 | |
| - WV3 | | 0.817 |
| - WV4 | | 0.821 |
| - WV5 | | 0.812 |
| - WV6 | | 0.822 |
| - WV7 | | 0.831 |
| - WV8 | | 0.819 |
| - WV9 | | 0.817 |
| - WV12 | | 0.809 |
| Internal Marketing | 0.874 | |
| - IM1 | | 0.724 |
| - IM2 | | 0.794 |
| - IM3 | | 0.784 |
| - IM4 | | 0.626 |
| - IM5 | | 0.607 |
| - IM6 | | 0.522 |
| Job Satisfaction | 0.903 | |
| - JS1 | | 0.863 |
| - JS2 | | 0.891 |
| - JS3 | | 0.829 |
| Employee Loyalty | 0.843 | |
| - EL1 | | 0.730 |
| - EL2 | | 0.854 |
| - EL3 | | 0.745 |

Table 3. Exploratory factor analysis

| | Component | | | |
|-----|-----------|-------|-------|-------|
| | 1 | 2 | 3 | 4 |
| IM1 | 0.755 | | | |
| IM2 | 0.888 | | | |
| IM3 | 0.887 | | | |
| IM4 | 0.702 | | | |
| IM5 | 0.533 | | | |
| WV4 | | | | 0.508 |
| WV5 | | | | 0.695 |
| WV6 | | | | 0.799 |
| WV8 | | | | 0.569 |
| WV9 | | | | 0.510 |
| JS1 | | 0.831 | | |
| JS2 | | 0.720 | | |
| JS3 | | 0.852 | | |
| EL1 | | | 0.767 | |
| EL2 | | | 0.795 | |
| EL3 | | | 0.760 | |

Table 4. Statistics descriptive and correlations

| Variable | Mean | Std. Deviation | Correlations | | | |
|--------------------|--------|----------------|--------------|---------|---------|---|
| | | | 1 | 2 | 3 | 4 |
| Internal Marketing | 3.0659 | 0.85504 | 1 | | | |
| Work Values | 3.0297 | 0.79874 | 0.537** | 1 | | |
| Job Satisfaction | 3.6905 | 0.74167 | 0.523** | 0.590** | 1 | |
| Employee Loyalty | 3.5421 | 0.74023 | 0.496** | 0.527** | 0.633** | 1 |

** Correlation is significant at the 0.01 level

were calculated by averaging scores representing that dimension. Table 3 provides the full set of correlations among the constructs of interest in this research. The highest correlation occurred between job satisfaction and employee loyalty (0.633) and reversely, the lowest correlation was found between internal marketing and employee loyalty (0.496). The results provide support for the discriminant validity of the scale (Anderson & Gerbing, 1988).

There are stages in applying structural equation modeling analysis. The first step is the measurement model and the second step is the structural model. Specifically, the objective of measurement model testing is to measure the convergence & discriminant validity of the measure. Confirmatory factor analysis (CFA) was applied to validate the instrument. All items' loadings on their corresponding construct were significant at $p < 0.05$, that is, all CR values were above 1.96. These statistically significant of factors loading indicated that convergent validity was achieved. Table 4 shown the result from CFA that implies the good fit between the covariances from the data and the CFA model (CMIN/DF = 2.548, GFI = 0.855, AGFI = 0.798, RMSEA = 0.092). The

table also indicates that all standardized regression weights are significant.

Having done with the measurement model, the structural model was examined to assess research hypotheses. Table 5 shows the path between variables (CMIN/DF = 2.555, GFI = 0.850, AGFI = 0.796, RMSEA = 0.093).

Based on the hypotheses testing analysis, there is one out of three hypotheses that was rejected. Hypothesis 1 proposed that there is a positive relationship between work values and job satisfaction. The result of this hypothesis (CR= 5.556) is supported. The second hypothesis proposed that there is a positive relationship between internal marketing and job satisfaction. This hypothesis (CR = 1.911) is not supported. Hypothesis 3 proposed that there is a positive relationship between job satisfaction and employee loyalty. The result of this hypothesis (CR = 9.808) is supported.

Discussion

This research aims to examine the relationship between work values, internal marketing job satisfaction and employee loyalty. The results

Table 5. Confirmatory factor analysis

| | Standardized Regression Weight | C.R. |
|----------|--------------------------------|--------|
| IM1 ← IM | 0.737 | |
| IM2 ← IM | 0.937 | 12.906 |
| IM3 ← IM | 0.924 | 12.771 |
| IM4 ← IM | 0.640 | 8.602 |
| IM5 ← IM | 0.573 | 7.661 |
| WV4 ← WV | 0.607 | |
| WV5 ← WV | 0.679 | 6.959 |
| WV6 ← WV | 0.636 | 6.647 |
| WV8 ← WV | 0.623 | 6.551 |
| WV9 ← WV | 0.654 | 6.778 |
| JS1 ← JS | 0.858 | |
| JS2 ← JS | 0.862 | 14.724 |
| JS3 ← JS | 0.895 | 15.540 |
| EL1 ← EL | 0.868 | |
| EL2 ← EL | 0.673 | 9.838 |
| EL3 ← EL | 0.864 | 13.377 |

Table 6. Hypotheses testing

| Hypothesis | Standardized Regression Weight | Critical Ratio | P value | Conclusion |
|------------|--------------------------------|----------------|---------|---------------|
| JS ← WV | 0.638 | 5.556 | *** | supported |
| JS ← IM | 0.159 | 1.911 | 0.056 | Not Supported |
| EL ← JS | 0.748 | 9.808 | *** | Supported |

show that one hypothesis that predicts the relationship between internal marketing and job satisfaction was not supported. This unsupported hypothesis can be explained as follow. Internal marketing treats employee as internal customer. However, the results show that the mean of internal marketing indicators was 3.0659 which can be described as lecturers feel neutral toward internal marketing indicators such as the university foundation that treat lecturers as its customers. In other words it can be also stated that lecturers feel the foundation does not treat them as customers but employees.

MANAGERIAL IMPLICATIONS

The results of this study indicate that Internal marketing is not the most important variables in increasing employee satisfaction. But it does not make internal marketing a bad thing to do. It could be at this time employees assume that internal marketing is not a dominant thing. However, the development and needs of employees are always dynamic, so the companies should keep and pay attention to implement of internal marketing within the company.

Work value is the most important variable in increasing satisfaction. Therefore the decision makers must establish the right work value in the company in order to increase employee satisfaction. The decision makers in this University should enhance work value especially in terms of giving employees the opportunity to make their

own decisions and allow the employees to have enough time for leisure activities. Besides that, the employer also should give a life balance between working time and family time to the lecturers and also the company should review its employee salary scheme to fit the cost of living.

Job satisfaction is the important variable in influencing employee’s loyalty. Companies must maintain and improve employee’s satisfaction so they remain loyal and retain in the company, and by employee’s loyalty, it also can contribute to the company to compete with other competitors.

CONCLUSION

The aim of this research is to test the relationship among internal marketing, work values, job satisfaction, and employee loyalty. The results showed there is significant relationship between lecturers’ work values and job satisfaction. The relationship between job satisfaction and employee loyalty is also significant. However, internal marketing was found not significantly related with job satisfaction.

There are two main limitations of this study. First, this research tests the fit of the model within a single university. Thus, the results of this study were limited to this sample. Furthermore, generalization cannot be made to Indonesian lecturers. In relating with this, further research should attempt to replicate this research to a wide array of settings and populations.

Second, this research applied cross-sectional survey data to test the hypotheses. On the other hand, cross-sectional survey data reflects that respondents are recorded only one time.

Therefore, the results only infer the temporal relationship between variables and not the causality among variables. Thus, it is recommended that future studies utilize a longitudinal study. ■

REFERENCES

- Abdullah, R. Bin, Karim, N. B. A., Patah, M. O. R. B. A., Zahari, H., Nair, G. K. S., & Jusoff, K. (2009). The Linkage of Employee Satisfaction and Loyalty in Hotel Industry in Klang Valley , Malaysia. *International Business Management*, 4(10), 152–160. <http://doi.org/10.5539/ijbm.v4n10p152>
- Ahmad, A. M. K., & Al-Borie, H. M. (2012). Impact of Internal Marketing on Job Satisfaction and Organizational Commitment: A Study of Teaching Hospitals in Saudi Arabia. *Business and Management Research*, 1(3), 82–94. <http://doi.org/10.5430/bmr.v1n3p82>
- Al-Hawary, S. I. ., Al-qudah, K. A. M., Abutayeh, P. M., Abutayeh, Sherrihan, M., & Yahya, A.-Z. D. (2013). the Impact of Internal Marketing on Employee'S Job Satisfaction of Commercial Banks in Jordan. *Interdisciplinary Journal of Contemporary Research in Business*, 4(9), 811–826.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423. <http://doi.org/10.1037/0033-2909.103.3.411>
- Arnett, D. B., Laverie, D. A., & McLane, C. (2002). Using job satisfaction and pride as internal-marketing tools. *The Cornell Hotel and Restaurant Administration Quarterly*, 43(2), 87–96.
- Bailey, A. A., Albassami, F., & Al-Meshal, S. (2016). The roles of employee job satisfaction and organizational commitment in the internal marketing-employee bank. *International Journal of Bank Marketing*, 34(6), 821–840. <http://doi.org/10.1108/IJBM-06-2015-0097>
- Bednarska, M. A., & Szczyt, M. (2015). Variations in Job Satisfaction in Service Industries: Comparative International Analysis. *Foresight*, 17(6), 599–615. <http://doi.org/10.1108/FS-08-2013-0037>
- Berings, D., De Fruyt, F., & Bouwen, R. (2004). Work values and personality traits as predictors of enterprising and social vocational interests. *Personality and Individual Differences*, 36(2), 349–364. [http://doi.org/10.1016/S0191-8869\(03\)00101-6](http://doi.org/10.1016/S0191-8869(03)00101-6)
- Berry, L. L. (1981). The employee as customer. *Journal of Retail Banking*, 3(1), 33–40.
- Berry, L. L., Hensel, J. S., & Burke, M. C. (1976). Improving retailer capability for effective consumerism response. *Journal of Retailing*, 52(3), 3–14.
- Blackwell, R. ., Miniard, P. ., & Engel, J. . (2006). *Consumer Behavior*. China: Thomson South Western.
- Charoensukmongkol, P., Moqbel, M., & Wirsching, S. G. (2016). The role of co-worker and supervisor support on job burnout and job satisfaction. *Journal of Advances in Management Research*, 13(1), 4–22. <http://doi.org/10.1108/JAMR-06-2014-0037>
- Coomber, B., & Louise Barriball, K. (2007). Impact of job satisfaction components on intent to leave and turnover for hospital-based nurses: A review of the research literature. *International Journal of Nursing Studies*, 44(2), 297–314. <http://doi.org/10.1016/j.ijnurstu.2006.02.004>
- Dahl, A. J., & Peltier, J. W. (2014). Internal Marketing and Employee Satisfaction and Loyalty: Cross-Cultural Scale Validation in Context of U.S. and German Nurses. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 27, 43–53.
- Edo, V. T., Llorens-Monzonis, J., Moliner-Tena, M. Á., & Sánchez-García, J. (2015). The influence of internal market orientation on external outcomes: the mediating role of employees' attitudes. *Journal of Service Theory and Practice*, 25(4), 486–523. <http://doi.org/10.1108/JSTP-11-2013-0259>
- Gounaris, S. (2008). Antecedents of internal marketing practice : some preliminary empirical evidence. *International Journal of Service Industry Management*, 19(3), 400–434. <http://doi.org/10.1108/09564230810875039>
- Hair, J. ., Anderson, R. ., Tatham, R. ., & Black, W. . (1995). *Multivariate Data Analysis*. New Jersey: Prentice Hall International, Inc.

- Hegney, D., Plank, A., & Parker, V. (2006). Extrinsic and Intrinsic Work Values : Their Impact on Job Satisfaction in Nursing. *Journal of Nursing Management*, 14(4), 271–281. <http://doi.org/10.1111/j.1365-2934.2006.00618.x>
- Herlinda, W. D. (2017). Gaji dan Bonus, Faktor Utama Penentu Loyalitas Karyawan di Asia. Retrieved May 15, 2017, from <http://manajemen.bisnis.com/read/20170418/56/646013/gaji-dan-bonus-faktor-utama-penentu-loyalitas-karyawan-di-asia>
- Hesket, J. ., Jones, T. ., Loveman, G. ., Sasser, W. ., & Schlesinger, L. . (1994). Putting the service-profit chain to work. *Harvard Business Review*, 72(2), 164–174.
- Hussain, R. I. (2012). The Linkage of Employee Satisfaction and Loyalty in Hotel Industries of Pakistan. *Asian Economic and Financial Review*, 2(8), 1098–1105.
- Hwang, I., & Chi, D. (2005). Relationships among Internal Marketing , Employee Job Satisfaction and Internal Hotel Performance: An Empirical Study. *International Journal of Management*, 22(2), 285–293.
- Hwang, K. P., & Wang, M.-K. (2013). The impact of ethical issues on privatization: Employee perceptions of HRM systems, job satisfaction and organizational loyalty in the Taiwan telecommunications industry. *African Journal of Business Management*, 7(6), 381–400. <http://doi.org/10.5897/AJBM10.1254>
- Iliopoulos, E., & Priporas, C. (2011). The effect of internal marketing on job satisfaction in health services : a pilot study in public hospitals in Northern Greece. *BMC Health Services Research*, 11(261), 1–8.
- Kameswari, A. V., & Rajyalakshmi, N. (2012). Role of Internal Marketing in Job Satisfaction of Employees in State Bank of India. In Ninth AIMS International Conference on Management (pp. 47–56).
- Kanyurhi, E. B., & Akonkwa, D. B. . (2016). Internal marketing , employee job satisfaction , and perceived organizational performance in microfinance institutions. *International Journal of Bank Marketing*, 34(5), 773–796. <http://doi.org/10.1108/IJBM-06-2015-0083>
- Kelloway, E. K. (1998). *Using LISREL for Structural Equation Modeling*. London: Sage.
- Khuong, M. N., & Tien, B. D. (2013). Factors influencing employee loyalty directly and indirectly through job satisfaction - A study of banking sector in Ho Chi Minh City. *International Journal of Current Research and Academic Review*, 1(4), 81–95.
- Kim, Y., & Cho, Y. C. (2016). Impact of retirement system on job satisfaction and loyalty: a case of the salary peak system. *International Business and Economics Research Journal*, 15(1), 27–40.
- Kotler, P. (2000). *Marketing Management*. NJ: Prentice Hall.
- McBurney, D. ., & White, T. . (2009). *Research Method* (8th ed.). Belmont, CA: Cengage Learning.
- Michlitsch, J. F. (2000). High-performing, loyal employees: The real way to implement strategy. *Strategy & Leadership*, 28(6), 28–33.
- Mills, A., & Blaesing, S. (2000). A Lesson from the Last Nursing Shortage: The Influence of Work Values on Career Satisfaction with Nursing. *Journal of Nursing Administration*, 30(6), 309–315.
- Mustapha, N. (2013). The Influence of Financial Reward on Job Satisfaction among Academic Staffs at Public Universities in Kelantan , Malaysia. *International Journal of Business and Social Science*, 4(3), 244–248.
- Peltier, J. W., Pointer, L., & Schibrowsky, J. A. (2008). Internal marketing and the antecedents of nurse satisfaction and loyalty. *Health Marketing Quarterly*, 23(4), 75–108.
- Preko, A., & Adjetey, J. (2013). A Study on the Concept of Employee Loyalty and Engagement on the Performance of Sales Executives of Commercial Banks in GHANA. *International Journal of Business Research and Management (IJBRM)*, 4(2), 51–62.
- Rafiq, M., & Ahmed, P. K. (2000). Advances in the internal marketing concept: definition, synthesis and extensionnull. *Journal of Services Marketing*, 14(6), 449–462. <http://doi.org/10.1108/08876040010347589>
- Rajyalakshmi, N., & Kameswari, A. V. (2009). Internal marketing for customer satisfaction in retail sector. *AIMS International Journal of Management*, 3(3), 207–220.
- Ravari, A., Hejazi, S. ., Ebadi, A., Mirzaei, T., & Oshvandi, K. (2012). Work values and job satisfaction : A qualitative study of Iranian nurses. *Nursing Ethics*, 20(4), 448–458.
- Robbins, S. . (1996). *Organization behavior: Concept, controversies, and applications*. NJ: Prentice Hall.
- Salem, K. M. . (2013). The Relationship Between Internal Marketing Orientation and Employee Job Satisfaction In Public Sector. *International Journal of Learning and Development*, 3(5), 111–120. <http://doi.org/10.5296/ijld.v3i5.4485>
- Schwartz, S. H., & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, 53(3), 550–562. <http://doi.org/10.1037/0022-3514.53.3.550>

- Sejjaaka, S. ., & Kaawaase, T. . (2014). Professionalism, rewards, job satisfaction and organizational commitment amongst accounting professionals in Uganda. *Journal of Accounting in Emerging Economies*, 4(2), 134–157. <http://doi.org/10.1108/JAEE-01-2012-0003>
- Sekaran, U. ., Bougie, R., & Ivonne, P. (2013). *Research Method for Business: A Skill-building approach*. Hoboken (6th ed.). United States: John Wiley & Sons.
- Shah, S. S. H., Aziz, J., Jaffari, A. R., Waris, S., Ejaz, W., Fatima, M., & Sherazi, S. K. (2012). The Impact of Brands on Consumer Purchase Intentions. *Asian Journal of Business Management*, 4(2), 105–110.
- Steenkamp, J. B. E. M., & van Trijp, H. C. M. (1991). The use of lisrel in validating marketing constructs. *International Journal of Research in Marketing*, 8(4), 283–299. [http://doi.org/10.1016/0167-8116\(91\)90027-5](http://doi.org/10.1016/0167-8116(91)90027-5)
- Tabachnick, B. G., & Fidell, L. . (1996). *Using Multivariate Statistics* (3rd ed.). NY: Harper Collins College Publishers.
- Tietjen, M. ., & Myers, R. . (1998). Motivation and job satisfaction. *Management Decision*, 39(4), 226–231. <http://doi.org/10.1108/00251749810211027>
- Togia, A., Koustelios, A., & Tsigilis, N. (2004). Job satisfaction among Greek academic librarians. *Library & Information Science Research*, 26(3), 373–383.
- Turkyilmaz, A., Akman, G., Ozkan, C., & Pastuszak, Z. (2011). Empirical study of public sector employee loyalty and satisfaction. *Industrial Management & Data Systems*, 111(5), 675–696. <http://doi.org/10.1108/02635571111137250>
- Wan, H. L. (2012). Employee loyalty at the workplace: The impact of Japanese style of human resource management. *International Journal of Applied HRM*, 3(1), 1–17.
- Westover, J. H., & Taylor, J. (2010). International differences in job satisfaction The effects of public service motivation, rewards and work relations. *International Journal of Productivity and Performance Management*, 59(8), 811–828. <http://doi.org/10.1108/17410401011089481>
- Yahyagil, M. . (2015). Values , feelings , job satisfaction and well-being : the Turkish case. *Management Decision*, 52(10), 2268–2286. <http://doi.org/10.1108/MD-10-2014-0609>

Consumer Preference Towards Fruit Leather Attributes of Madurese Exotic Tropical Fruits

Elys Fauziyah

Jurusan Agribisnis, Fakultas Pertanian, Universitas Trunojoyo Madura
Jl. Raya Telang, Kamal, Bangkalan, Madura 69162, Indonesia

ARTICLE INFO

Keywords:
Preference,
attributes,
fruit leather,
conjoint

ABSTRACT

Madura island has high potential for producing tropical fruits, but it still not being well managed especially concerning with the value added. Fruit leather is a product created by using various fruits and simple technology application. Fruit leather is categorized as new product on the market, therefore it is important to know consumer preference towards fruit leather attributes so that producer can design an acceptable product in the market. The research investigated attributes within the levels that become consumer preference in purchasing fruit leather product. There were 60 samples respondents taken accidentally at Bangkalan Plaza Shopping area. Method being used was conjoint analysis. Result showed that fruit leather being chosen by consumers as preference are gummy, mixed fruit taste, yellow color, small roll shape, at 100 grams and in a plastic tube package.

SARI PATI

Pulau Madura memiliki potensi yang cukup besar dalam menghasilkan buah-buahan tropika, namun belum terkelola dengan baik, terutama dalam hal pemanfaatan nilai tambahnya. Fruit leather merupakan produk yang diciptakan dengan memanfaatkan bahan baku aneka buah dengan teknologi pembuatan yang sederhana. Namun perlu diketahui preferensi konsumen terhadap atribut fruit leather supaya produsen dapat mendesain produk yang dapat diterima oleh pasar. Penelitian ini bertujuan untuk mengetahui atribut dan level atribut yang menjadi preferensi konsumen dalam pembelian fruit leather. Sample penelitian berjumlah 60 orang yang diambil secara accidental di kawasan perbelanjaan Bangkalan Plaza. Tujuan penelitian dianalisis dengan menggunakan metode konjoin. Hasil yang diperoleh menunjukkan bahwa atribut fruit leather yang dipilih konsumen adalah fruit leather yang bertekstur kenyal, memiliki rasa mixfriut, berwarna kuning, berbentuk rol pendek, ditaruh dalam kemasan 100 gram, dan dikemas dengan menggunakan tabung plastik.

Corresponding author:
fauziyah@trunojoyo.ac.id

INTRODUCTION

Indonesia that geographically located in tropical area is being known as mega-biodiversity country for having huge biological diversity, including high potential of exotic tropical fruit production such as avocado, banana, mango, starfruit, duku, durian, pineapple, cempedak, langsung, markisa, sapodilla, etc. According to Directorate General of Horticulture (2016), there have been an increase of tropical fruits harvesting area during 5 years (2010-2015) as much as 22.06 % and an increase of Indonesian tropical fruit production as much as 66.25 %. However, the increase has not corresponded with increase of fruit consumption in Indonesia that reached 12-15 % in average per year in the form of fresh and processing fruit (Krisnamurthi, 2016).

Madura island which is known as salt island actually have the potential of diverse exoctic tropical fruits production. As further description, Bangkalan Regency is known as bark producer with soft texture, crispy and sweet fruit. Bark production reaches 25,013.12 tonnes per year (BPS Bangkalan, 2015). Next, Saronggih Sub district of Sumenep Regency is known as custard apples producer by production reaches 75-100 fruits per tree for each harvesting

moment. In addition, jackfruit, manggo, juwet (Madurese grape), sapodilla, cashew nuts can be seen at any area in Madura island. Potential of tropical fruits in Madura can be seen at following table 1. Farmer household at dry land like Madura has lower income level compared to those who live in productive area (Fauziyah et al. 2014). One of effort in order to increase is by enhancing economic potential using local base raw material. In this case, it may utilize exotic tropical fruit value added with Madurese special characteristic through processing into various products such as fruit leather.

Fruit leather is one of fruit processing product in the form of sheet with sweet taste, soft, gummy texture, water content ranged between 15 up to 25%, storage capacity up to 9 months, and being favorite of consumer in international market (FAO 2016). This product is judged as health supports, practical in consumption and give pleasure due to gummy texture, transparent and strong fruit taste (Diamante et al. 2014).

Fruits leather by using Madurese potential exotic fruit is categorized as new product and not much being known by consumer. In regarding with

Table 1. Production of Tropical Fruits at Bangkalan Regency in the Year 2014

| No. | Fruits | Production (Tonne) |
|-----|-----------------|--------------------|
| 1 | Avocado | 329 |
| 2 | Star fruit | 484 |
| 3 | Guava | 19 005 |
| 4 | Palm | 406.47 |
| 5 | Pineapple | 2 178 |
| 6 | Papaya | 7 803 |
| 7 | Manggo | 54 005 |
| 8 | Banana | 103 346 |
| 9 | Bark | 34 001 |
| 10 | Jackfruit | 47 041 |
| 11 | Orange | 4 680 |
| 12 | Big size Orange | 6 750 |

Source : Bangkalan Dalam Angka (2016)

this, producer should find out the attributes of product that suppose to be consumer preference. Thus, success of marketing activity has been becoming necessity so that product industrial will be developed more into expected direction (Kotler, 2000). According to assauri (1992), product creation should pay attention on factors contained in the product namely quality, features, options, brand names, packaging, sizes, product lines, product items, warranties, services. Meanwhile based on Roesipah (2013), Mohebalion (2013) and Andriyani (2014), the attributes mostly being considered by consumer in purchasing food products are price, color, texture and packaging. Understanding consumer preference and their judgment about the products may help the company in determining strategy to increase customer satisfaction and loyalty to be further being used in reinforcing the position among competitors (Pullman, Moore, and Wardell 2002). The research aimed to analyze attributes within the levels on Madurese exotic tropical fruit leather to determine most preferred product by consumers.

Literature Review

Recently, business environment is close to tight competition and rapid change. Therefore, in order to achieve the objective, the company should conduct consumer behavior observation as well as consumer preferences. Consumer preference is defined as consumer's taste or choice towards the product being consumed. According to Dwiastutik (2012), consumer perception is resulted from consumer knowledge that gained from various informations about the product. These are 1) awareness on product category and brand, 2) product terminology, 3) product attributes or features such as class, shape, brand, model, benefit, and value that will be achieved by consuming the product, 4) trust on the general product category and specific brand.

Consumer perception towards the product quality can be affected by intrinsic or extrinsic attributes (Caswell et al. 2002). Food is as a product that

can be categorized as search product, experience product and credence product. It is resulted based on the attributes that can be found by consumer at various different stages. A thing can be categorized as search product when consumer can evaluate information of relevant product attributes before purchasing the product such as price, dimension, size, color. Meanwhile, things can be classified as experience product when the information of relevant attributes can be determined after consuming the product such as quality and taste. Things is categorized as credence product when the attributes is difficult to be determined by the consumers either before or after the consumption such as healthiness, free pesticide, organic product, certified product, etc. These attributes are usually determined by authorized institution (Moser et al, 2011).

The research is conducted to understand consumer preferences towards product attributes that have been done by various analysis methods. One of analysis tool oftentimes being used to identify consumer preferences is conjoint. Conjoint Analysis is multivariate technique that can be used to understand the choice taken by individuals. In specific, the technique is used to gain signals how the consumer judge various attributes based on their evaluation (Green dan Srinivasan, 1978). According to Reddy et al (1995) product characteristic is described as attributes. Variation of attributes is drawn as attributes level. Next, Ryan (1999) assumed that conjoint analysis enables product attributes to be considered simultaneously, and enable consumers to put options on the attributes. Relatives interest of each attribute is counted by using range utility (Green dan Krieger, 1996). Biggest attributes level value shows that the attribute level is most preferred by consumer, and conversely smallest value means that the level is un preferred by consumer (Myung, 2003).

Basic model of conjoint is estimated by using regression ordinary least square (OLS), with variabel dummy (Fox, 1997). Dependent variable is

preference rank meanwhile independent variables consist of dummy variable for each attributes level. Conjoint analysis model mathematically can be shown as follows (Haaijer, Kamakura, and Wedel 2000; Carroll and Green 1995;):

$$u(x) = \sum_{i=1}^m \sum_{j=1}^{k_i} \alpha_{ij} X_{ij}$$

In which $U(x)$ is level of attributes interest, α_{ij} is utility coefficient, X_{ij} is valued 1 if there is level j from attribute i , and valued 0 if others. There are stages to arrange conjoint analysis namely:

1. Identify attribute and attributes level
2. Design combination of attributes or stimulant
3. Determine method of data collection.
4. Determine analysis method
5. Data Analysis within interpretation.

Conjoint analysis has been widely used in various researches. It is used in marketing studies to evaluate

consumer preference to the product, services or price (Kuzmanovic, 2010; Kuzmanovic 2012). The method has been applied in order to understand preference in various markets such as retail (Wilson 2006; Kuzmanovic 2011), transportation (Hensher 2001), education (Sohn, 2010), labor in the context of decision election, telecommunication (Popović et al., 2012; Nakamura, 2010; Head 2010), tourism (Triphati, 2010) and food industrial (Ozayan, 1998;; Munandar et al., 2012; Oyatoye, 2013; Cheng, 2014; Ashraf, 2015; Imami et al., 2016).

The research scheme of consumer preference towards Madurese exoctic tropical fruit leather attributes can be seen in figure 1.

METHODS

The research was held at Bangkalan Plaza. Location determination was by purpose based on consideration that fruit leather is included as expensive product and targeted on both middle and upper economic class that use to be found in surrounded area of supermarket.

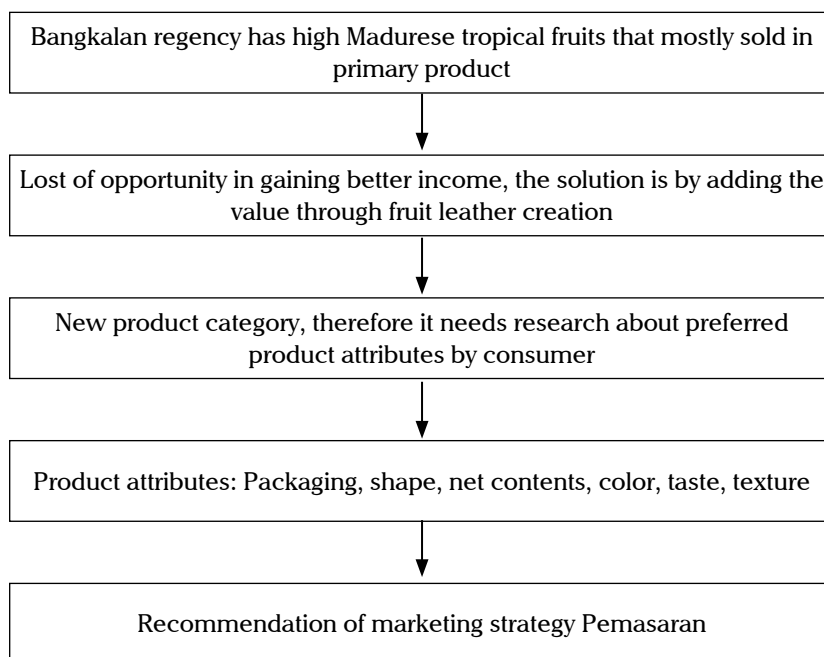


Figure 1. Research scheme of Consumer Preference towards Fruit Leather Attributes

Type of data being used in the research is primary data collected from interview process combined with questionnaire filled by respondents. The data to be gained is respondent's judgement towards stimulants (combination of several attributes level). Sample determination was by purposive using accidental sampling. There were 60 respondents taken as samples.

Research purpose was analyzed by using following conjoint method stages:

- a. *Determining attributes and attributes level*
Attributes and attributes level in the research can be seen in table 2.
- b. *Determining stimulant*
There are 18 stimulants served in table 3
- c. *Respondents judged 18 stimulants by using Lickert scale on the following criteria*
 1. : showing very non preferred stimulants
 2. : showing non preferred stimulants

3. : showing preferred stimulants
4. : showing very preferred stimulants

d. *Analyzing data by using conjoint model through SPSS 16 software.*

Testing of result precision in conjoint analysis can be done by seeing Kendall's value correlation or between conjoint analysis result and actual respondent's opinion (using qualitative scale namely nominal and ordinal). High correlation result reflects the results of conjoint analysis that can describe real expectation.

RESULTS AND DISCUSSION

Process of decision making in purchasing of product is affected by various factors, including attributes attached on the product. Product attributes oftentimes considered to be identically with the characteristic attached on the product such as packaging, shape, net contents (weight of product in each package), color, taste and texture. According to several researches, attributes in

Table 2. Attributes and Attributes level to Judge Madurese Exotic Tropical Fruit Leather Product

| Attributes | Attributes level |
|---------------|---|
| Packaging | 1. Small glass tube 2. Aluvo baskets 3. Plastic tube + wrap |
| Product shape | 1. Sheet 2. Long roll 3. Short Roll / candy |
| Net contents | 1. 50 gr 2. 75 gr 3. 1 ounce / 100 gr |
| Color | 1. Red 2. Yellow 3. Brown |
| Taste | 1. Original 2. Mixed fruit |
| Texture | 1. Gummy 2. Soft 3. Hard |

Source : Primary Data Processed, 2017

Table 3. Combination of Fruit Leather Product Attributes (Stimulants)

| No | Packaging | Shape | Net | Color | Taste | Texture |
|----|---------------|------------|-----|--------|-------------|---------|
| 1 | Aluvo baskets | Long Roll | 50 | Yellow | Mixed Fruit | Hard |
| 2 | Aluvo baskets | Sheet | 75 | Brown | Original | Soft |
| 3 | Aluvo baskets | Sheet | 100 | Brown | Mixed Fruit | Gummy |
| 4 | Aluvo baskets | Short Roll | 50 | Red | Original | Soft |
| 5 | Aluvo baskets | Long Roll | 75 | Yellow | Original | Gummy |
| 6 | Aluvo baskets | Short Roll | 100 | Red | Original | Hard |
| 7 | Glass Tube | Short Roll | 100 | Yellow | Mixed Fruit | Soft |
| 8 | Glass Tube | Long Roll | 50 | Brown | Original | Soft |
| 9 | Glass Tube | Sheet | 75 | Red | Mixed fruit | Hard |
| 10 | Glass Tube | Long Roll | 100 | Brown | Original | Hard |
| 11 | Glass Tube | Sheet | 50 | Red | Original | Gummy |
| 12 | Glass Tube | Short Roll | 75 | Yellow | Original | Gummy |
| 13 | Plastic tube | Sheet | 50 | Yellow | Original | Hard |
| 14 | Plastic tube | Sheet | 100 | Yellow | Original | Soft |
| 15 | Plastic tube | Short Roll | 75 | Brown | Original | Hard |
| 16 | Plastic tube | Long Roll | 100 | Brown | Original | Gummy |
| 17 | Plastic tube | Short Roll | 50 | Red | Mixed fruit | Gummy |
| 18 | Plastic tube | Long Roll | 75 | Yellow | Mixed fruit | Soft |

Source : Primary Data Processed, 2017

the product will affect consumer preference in selecting product. Result of consumer preference analysis to the fruit leather product of Madurese exotic tropical fruits is shown in table 4.

1. Packaging attribute

Based on Kotler and Armstrong (2012), packaging has function as product cover to maintain the quality. Meanwhile, Wijayanti (2012) says that packaging has several functions such as product cover during distribution process, beautify the product, and also can be used as information media concerning with the product. Fruit leather that produced in Madura is packed by using 3 packaging materials, namely; small glass tube, aluvo basket and plastic tube. Each packaging material has an advantage and weaknesses. Small glass tube gives more exclusive impression, but it takes high price and fragile during distribution process. Aluvo basket packaging is made of siwalan tree woven that has an exotic shape but perishable. Meanwhile, plastic tube is long

lasting material and not easily broken. The price is relatively cheap as well. Based on the analysis, consumers put preference on fruit leather packed by plastic tube. This packaging adds higher utility to the consumer compared to two other packaging materials. This condition describes that producer suppose to choose plastic tube as packaging material. Nevertheless, product that packed by using both aluvo basket or glass tube is still being interested by consumers. This can be seen at the positive sign of utility estimation value although it is not as much as utility value of plastic tube. The result is similar to the research of Kalsum et al. (2013), on Rengginang product in Madura.

2. Product Shape Attribute

Fruit leather is type of food made from juicing pulp and then dried. It is not truly made from rind, but juicing pulp of tropical fruits that next being processed into slight sheet and an elastic texture. Fruit leather products generally have paper shape. But actually the product can be modified into

Table 4. Result of Conjoint Analysis of Consumer Preference Towards Madurese Exotic Tropical Fruit Leather Product

| Attributes | Attributes Level | Utility Estimate | Importance Value |
|--------------|------------------|------------------|------------------|
| Packaging | Small Glass Tube | .045 | 14.101 |
| | Aluvo basket | .090 | |
| | Plastic tube | .136 | |
| Shape | Sheet | -.006 | 15.595 |
| | Long Roll | -.011 | |
| | Short Roll | .017 | |
| Net contents | 50 gr | .085 | 14.742 |
| | 75 gr | .169 | |
| | 100 gr | .254 | |
| Color | Red | -.137 | 19.743 |
| | Brown | .274 | |
| | Yellow | .411 | |
| Taste | Original | .138 | 15.938 |
| | Mixed Fruit | .277 | |
| Texture | Hard | -.136 | 19.882 |
| | Soft | .271 | |
| | Gummy | .407 | |
| (Constant) | | 3.723 | |

Correlation Pearson's R and Kendall's Sig 0.024

other shape such as long roll, short roll or other as preference. There are three shapes of fruit leather namely sheets, long roll and short roll. Analysis result has shown that consumer prefer fruit leather attributes in a short roll shape. According to consumer opinion, this shape increased their satisfaction meanwhile two others are not being chosen as preference. Short roll of fruit leather has an advantage in practical of consumption. Consumer can enjoy the product like candy. Based on the research, there is drawing of 45 peoples or about 75% respondents choosing short roll fruit leather.

3. Net Contents/Weight of Packaging Attributes

Net contents or weight of packaging is one of most considerable attributes in purchasing product by consumer. Similar attributes were considered in the research of Mulyadi (2014). Generally, preference level of consumer about the net

contents is based on financial capacity, practical in carrying the product and estimation of consuming sufficiency. Fruit leather is categorized as snack. Consumer needs in product consumption usually only takes small portion and enjoy it during break moment of lunch or dinner. Based on this, attribute level included in the research were 50, 75, and 100 grams. The result had shown that most of consumer prefers fruit leather by 100 grams package. As the matter of fact, there were 52 respondents choose to buy fruit leather by 100 grams package.

4. Color Attribute

Next attribute oftentimes to be consideration in purchasing product is color. Rahayu (2012) also put color as one of attributes in the research of consumer preference towards imported apple product. There are red, yellow and brown used as color attributes in this research. It is based on

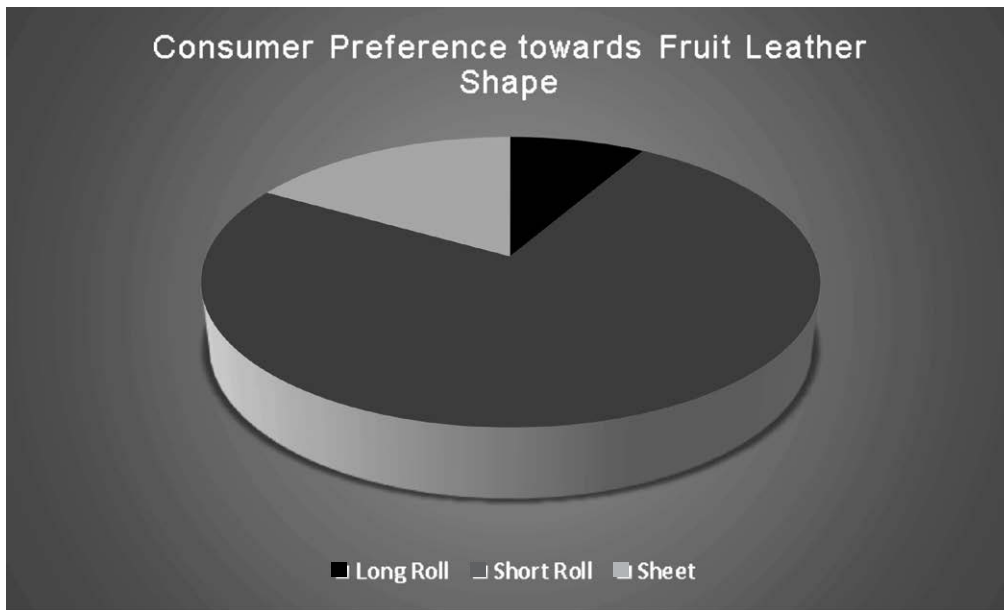


Figure 2. Level of Consumer Preference Towards Fruits leather Product

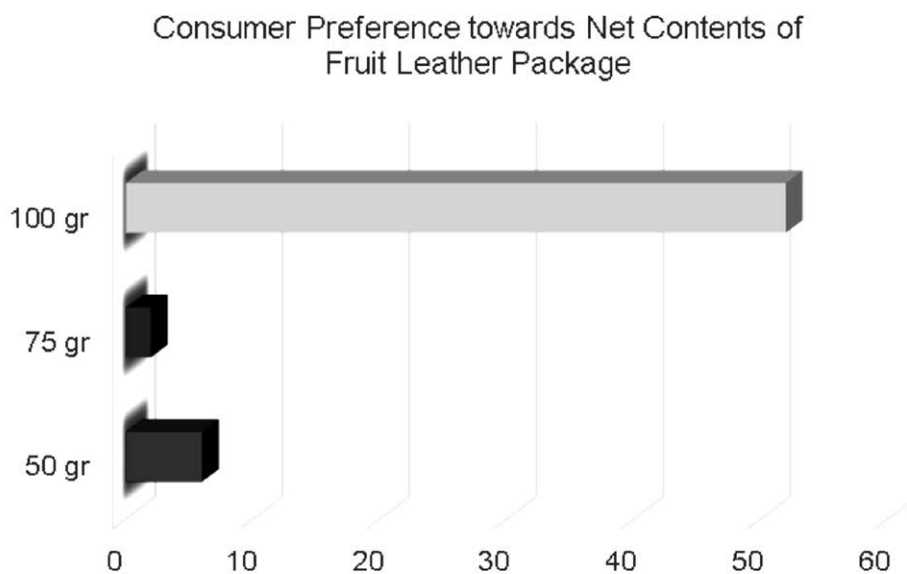


Figure 3. Consumer Preference Level towards Net Contents of Fruit Leather

color of tropical fruits in Madura that dominated by those three colors.

Research analysis result had drawn that yellow fruit leather is most preferable by consumers, besides brown color. Red color is not taken as an option of preference by consumers. Spread of

consumer preference level for color data is shown in above diagram. Implication of the research can be used by producer in selecting yellow local fruits and brown as well to be used as material of fruit leather. Field identification in Bangkalan Regency had shown that there are huge productions of yellow fruits such as mangoes and jackfruit (Table

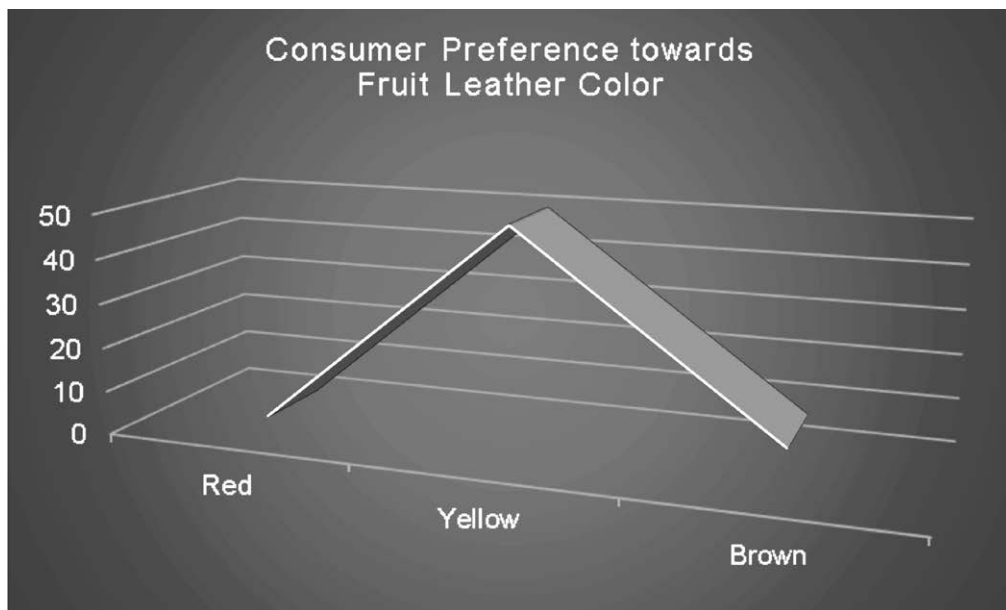


Figure 4. Consumer Preference Level towards Fruit Leather Color

1), therefore an opportunity to fulfill consumer preference towards color attributes is highly possible to be done.

5. Taste Attribute

Generally, taste attribute is being prioritized in producing food product. Fruit leather brings out taste as the material being used. Sweet, sour or mixed of both tastes inside the fruit that being used to determine fruit leather taste. This can be made by mixing various materials to bring out sensation of kind taste. The research served an original and mixed fruit taste. Result of analysis showed that mixed fruit is preferred to be taken by consumers and increase their utilities. Original taste had also increase their utilities although not as much as the mixed fruit. This is shown by field fact that there were 87 % consumers chose mixed fruit product. Based on this, producer may consider to produces fruits combination as fruit leather material.

6. Texture Attribute

Texture attribute in consumer preference towards food product had also conducted by Rosipah (2013). Fruit leather product has various textures namely hard, soft and gummy.

Material composition and pectin inside the fruits affects texture of fruit leather. According to Valenzuela and Aguilera (2015), fruit leather has sticky characteristic. This is caused by material, humidity, compression, and fineness. Research result had shown that consumer prefers gummy texture better than hard texture. This is supported by data spread of respondents in regarding with texture attributes, shown in Figure 5.

MANAGERIAL IMPLICATIONS

Based on several attributes within the levels judged by consumers, there are three most considered attributes in making decision to purchase fruit leather in respectively texture, color and taste. Meanwhile combination of attributes level chosen by consumer are gummy, mixed fruit, yellow, 100 grams and plastic tube package. This can be used as consideration of producer in designing the product.

CONCLUSION

Fruit leather attributes to be taken as preference by consumer in purchasing decisions in respectively are texture, color, shape, net contents, and package. Meanwhile attributes level of fruit

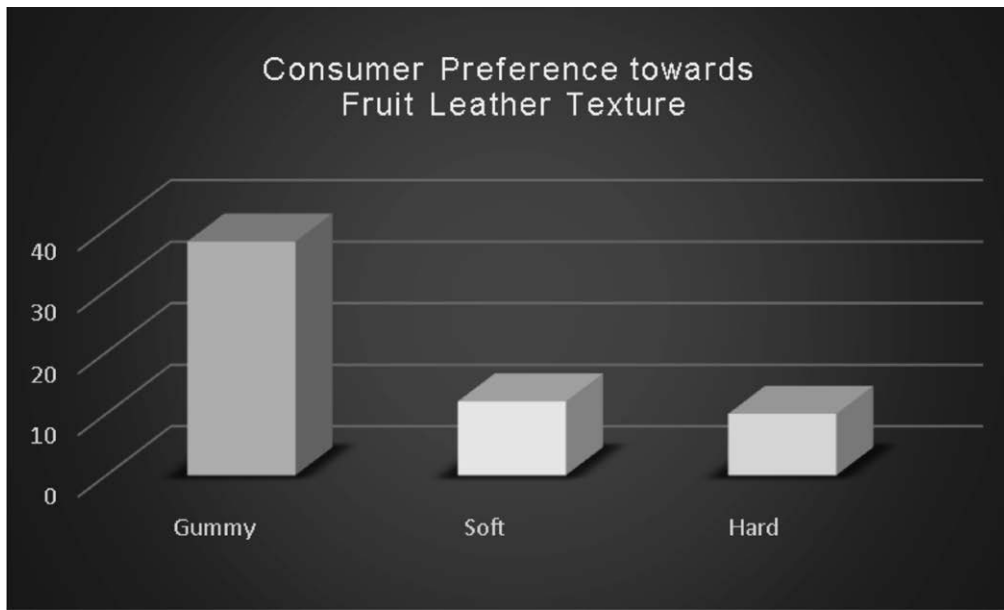


Figure 5. Consumer Preference Level towards Fruit Leather Texture

leather to increase utilities are gummy, yellow color, mixed fruit taste, short roll, 100 grams and plastic tube package. ■

REFERENCES

- Andriyani, F., Astuti, R., & Effendi, M. (2014). Preferensi Konsumen Terhadap Produk Kripik Buah So Kressh Menggunakan Analisis Konjoin. Tesis. Program Pasca Sarjana Universitas Brawijaya. Malang.
- Assauri S. (1992). Manajemen Pemasaran Dasar, Konsep dan Strategi. Rajawali. Jakarta.
- Ashraf, S. & Zaheer Abbas, (2015). Conjoint Analysis: A Study on Gourmet Bakery Items and Services. *International Journal of Multidisciplinary Consortium*, 2, 9-15.
- Badan Pusat Statistik. 2016. Bangkalan Dalam Angka.
- Carroll, J. D. & Green, P. E. (1995). Psychometric Methods in Marketing Research: Part I, Conjoint Analysis. *Journal of Marketing Research*, 32, 385-391.
- Cheng, C.-H., Lin, S.-Y., & Tsai, C.-C. (2014). Investigating Consumer Preferences in Choosing Vegetarian Restaurants Using Conjoint Analysis. *Current Urban Studies*, 2, 279-290.
- Diamante, L.D.M., Li, S., Xu, Q., & Busch, J. (2013). Effects of apple juice concentrate, black currant concentrate and pectin levels on selected wualities of apple-black currant fruit leather. *Foods* 2, 430-440.
- FAO. Fruit Leather. www.fao.org. Accessed March 1, 2016.
- Fauziyah, E., Umi Purwandari, Iffan Maflahah, & Eko Murniyanto. (2014). Agribisnis Mie Sehat Berbahan Baku Umbi Lahan Kering. UTM Press. Bangkalan.
- Fox, J. (1997). Applied Regression Analysis, Linear Models, and Related Methods. Thousand Oaks, CA: Sage
- Green, P. E., & Srinivasan, V. (1978). Conjoint Analysis in Consumer Research: Issues and Outlook. *Journal of Consumer Research*, 5, 103-123.
- Green, P. E., & Krieger, A.M. (1996). Individualized Hybrid Models for Conjoint Analysis. *Management Science*, 42, 850- 867.
- Haaijer, R., Kamakura, W. & Wedel, M. (2000). Response Latencies in the Analysis of Conjoint Choice Experiment. *Journal of Marketing Research*, Vol. 37, No.3, pp. 376-382.
- Head, M., & Ziolkowski, N. (2010). Understanding Student Attitudes of Mobile Phone Applications and Tools: A Study Using Conjoint, Cluster and SEM Analyses. Proceedings of the 18th European Conference on Information Systems (ECIS 2010) Pretoria, South Africa, 2010
- Hensher, D. (2001) The Valuation of Commuter Travel Time Savings for Car Drivers: Evaluating Alternative Model Specifications. *Transportation*, 28, 101 -118.
- Imami, D., Engjell, S., Edvin, Z., Maurizio C., Catherine C., & Alban C. (2016). Analysis of consumers' preferences for typical local cheese in Albania applying conjoint analysis. *New Medit*, 15, 49-55.
- Kalsum, U., Elys F., & Taufik R. (2013). Preferensi Konsumen dalam Membeli Rengginang Lorjuk di Kecamatan Kamal Bangkalan. *Agriekonomika*, 2, 153-162.
- Kuzmanovic, M., & Martic, M. An Approach to Competitive Product Line Design Using Conjoint Data. (2012). *Expert Systems with Application*, 39, 7262-7269.
- Kuzmanovic, M., & Martic, M. (2010). Using Conjoint Analysis to Create Superior Value to Customers. *Metallurgia International*, 17, 93-99.
- Kuzmanović, M., & Obradović, T. (2010). The Role of Conjoint Analysis in the New Product Price Sensibility Research. *Management Journal for Theory and Practice Management*, 15, 51 -58.
- Kotler P. 2000. Marketing Management. Prentice Hall. New Jersey.
- Mohebalian, P. M. & Aguilar, F. X., (2013). Conjoint Analysis of U.S. Consumers' Preference for Elderberry Jelly and Juice Products. *HortScience* 48, 338-346.
- Mulyadi, A., & Elys F., (2014). Preferensi Konsumen dalam Pembelian Mi Instan di Kabupaten Bangkalan, *Agriekonomika*, 3, 65-80.
- Munandar, J. M. Udin, F., & Amelia, M. (2012). Analisis Faktor yang Mempengaruhi Preferensi Konsumen Produk Air Minum dalam Kemasan di Bogor. *Jurnal Teknologi Industri Pertanian IPB*, 13, 97-107.
- Myung, R. (2003). Conjoint Analysis as a New Methodology for Korean Typography Guideline in Web Environment. *International Journal of Industrial Ergonomics*, 32, 341-348.
- Nakamura, A. (2010). Estimating Switching Costs Involved in Changing Mobile Phone Carriers in Japan: Evaluation of Lock-In Factors Related to Japan's SIM Card Locks. *Telecommunications Policy*, 34, 736-746.
- Oyatoye, E.O., Adebisi, S.O., & Amole, B.B. (2013). An Application Of Conjoint Analysis to Consumer Preference For Beverage Products in Nigeria. *AUDCE* 9, 43-46.
- Ozayan, A., Harrison, R.W., & Meyers, S.P., (1998). An Analysis of Buyer Preferences for New Food Products Derived From Louisiana's Crawfish. Louisiana Agricultural Experiment Station, Juni 1998
- Pullman, M. E., Moore, W. L. & Wardell, D. G. (2002). A comparison of quality function deployment and conjoint analysis in new product design. *Journal of Product Innovation Management*, 19, 354-364.

- Popović M., Kuzmanović M., & Martić, M. (2012). Using Conjoint Analysis to Elicit Employers' Preferences toward Key Competencies for a Business Manager Position. *Management-Journal for Theory and Practice Management*, 17, 17-26.
- Rahayu, JM., Elys F., & Aminah HM. (2012). Preferensi Konsumen Terhadap Buah Apel Impor di Toko Buah Hokky dan Pasar Tradisional Ampel Surabaya. *Agriekonomika*, 1, 52-66.
- Reddy, V. S., Bush, R. J., & Rudik, R. (1995). A Market-Oriented Approach to Maximizing Product Benefits: Cases in U.S. Forest Products Industries. *US Forest Service*, 4, 19-38.
- Rosipah, s., Burhan, & Purwandari, U. (2013) . Preferensi Konsumen Terhadap Pancake Dari Tepung Sukun. *Jurnal Agroiitek*, 7, 53-57.
- Ryan, M. (1999). Using Conjoint Analysis to Take Account of Patient Preferences and Go Beyond Health Outcomes: An Application to in Vitro Fertilization. *Social Science and Medicine*, 48, 535-546.
- Sohn, S. Y., & Ju, Y. H. (2010). Conjoint Analysis for Recruiting High Quality Students for College Education. *Expert Systems with Applications*, 37 3777-3783.
- Tripathi Shalini N. (2010). An empirical study of tourist preferences using conjoint analysis Int. *Journal of Business Science and Applied Management*, 5, 2-16.
- Valenzuela, C., & Aguilera, J.M. (2015). Effects of different factors on stickiness of apple leather. *Journal of Food Engineering* 149, 51-60
- Wilson-Jeanselme, M., & Reynolds, J. (2006). The Advantages of Preference-based Segmentation: An Investigation of Online Grocery Retailing. *Journal of Targeting, Measurement and Analysis for Marketing*, 14, 297-308.

Competitiveness of Small and Medium Firms (SMEs) in Facing ASEAN Economic Community

Leonardus Ricky Rengkung, Lyndon Reinhardt J. Pangemanan,
and Lorraine W. Sondak

Fakultas Pertanian, Universitas Sam Ratulangi, Jl. Kampus, Bahu, Malalayang, Kota Manado, Sulawesi Utara 95115, Indonesia

ARTICLE INFO

Keywords:
Competitiveness,
Resource-based View,
Valuable,
Rare,
Inimitable and Non- Substituable

ABSTRACT

The purpose of this study is to develop a model of Resource-based View (RBV) and to analyze the competitiveness of Manado Small and Medium firms (SMEs) in facing the ASEAN Economic Community (AEC), based on valuable, rare, inimitable and non-substituable (VRIN) resources of Resource-based View (RBV). To answer these purposes, the proportional stratified random sampling was conducted by taking 180 small and medium firms (SMEs) in Manado consist of 90 small firms and 90 medium firms. The data were analyzed using qualitative systems dynamic analysis. The results indicated that holistically, systemic behavior of VRIN resources makes contribution on Manado SMEs competitiveness in facing the implementation of ASEAN Economic Community (AEC), both before and after intervention. Before intervention, decline of VRIN resources makes contribution on decline of the competitiveness of Manado SMEs. On the contrary, after intervention, increase of VRIN resources makes contribution on increase of the competitiveness of Manado SMEs. Partially, rare (R) resources make more contribution than non substitutable (N), imperfectly imitable (I) and valuable (V) resources on competitiveness. It can be concluded that these systemic behavior of VRIN resources make contribution both negatively in declining and positively on increasing competitiveness of Manado SMEs.

SARI PATI

Penelitian ini bertujuan untuk membuat model Resource-based View (RBV) dan menganalisis daya saing Usaha Kecil dan Menengah (UKM) Kota Manado dalam menghadapi Masyarakat Ekonomi ASEAN (MEA) berdasarkan sumberdaya yang bersifat valuable, rare, inimitable and non-substituable (VRIN) dari Resource-based View (RBV). Untuk menjawab tujuan penelitian ini, maka dilakukan pengambilan sampel berstrata dengan alokasi sebanding sebanyak 180 UKM di Manado yang terdiri dari 90 usaha kecil dan 90 usaha menengah. Data

Corresponding author:
lrengkung@unsrat.ac.id

yang diambil dianalisis menggunakan analisis qualitative systems dynamic. Hasil menunjukkan bahwa secara keseluruhan, perilaku sistemik sumberdaya VRIN berkontribusi terhadap daya saing UKM Manado dalam menghadapi Masyarakat Ekonomi ASEAN (MEA) baik sebelum dan sesudah intervensi. Sebelum intervensi, penurunan sumberdaya VRIN berkontribusi terhadap penurunan daya saing UKM Kota Manado sedangkan setelah intervensi menunjukkan kontribusi terhadap peningkatan daya saing UKM. Sebaliknya, setelah intervensi, peningkatan sumberdaya VRIN berkontribusi pada peningkatan daya saing UKM di Manado. Secara parsial, rare (R) resources memiliki kontribusi yang lebih besar terhadap daya saing UKM dibandingkan dengan non substitutable (N), imperfectly imitable (I) resources dan valuable (V) resources. Disimpulkan bahwa perilaku sistemik sumberdaya VRIN berkontribusi secara negatif berupa penurunan daya saing dan secara positif berupa kenaikan daya saing UKM Kota Manado..

© 2017 IRJBS, All rights reserved.

INTRODUCTION

The Association of Southeast Asian Nations (ASEAN) has made extraordinary progress since it was founded in 1967. It has been transformed into an increasingly well-regulated, dynamic and creative platform for trade and commerce across what many regard as the world's fastest-developing economic region. One of the objectives of the evolving ASEAN Economic Community (AEC) is to promote free investment flows and freer capital flows (Aldaba and Yap, 2009). Every individual ASEAN country is currently preparing for the opportunities and assessing risks in the AEC integrating process (KPMG Asia Pacific Tax Center).

The realization of the ASEAN Economic Community has become opportunities as well as major challenges for Indonesia, especially in improving its competitiveness. One of the objectives of AEC is to increase ASEAN competitiveness. Globally, Indonesia competitiveness is on the 41st of 138 countries, compared to Singapore in the 2nd, Malaysia in the 25th place, Thailand in the 34th

place, Vietnam in the 60th and Philippines in the 57th (Schwab, 2016). The fact shows that Indonesia still farther below some ASEAN countries.

That phenomenon of the implementation of AEC will be faced by any industries of ASEAN, as well as by the SMEs in Indonesia. The current environment faced by SMEs is more competitive than before. Common problems in SMEs in Indonesia are lack of capital, unprofessional management, lack of raw material, and resources problem. Many studies showed that the performance of SMES in Indonesia still relatively not good and not capable to compete causing less of competitiveness.

As part of Indonesia and the capital of North Sulawesi, Manado is trying to support the Indonesian government in dealing with the AEC. This is about how to increase the competitive region of ASEAN by improving learning capability of Manado SMEs in creating and developing knowledge continuously as a strategy in facing such competitive region.

Organizational learning is described as a routine organizational activity to create, develop and manage knowledge. The success of organizational learning will depend on the four leverage factors e.i, knowledge acquisition, knowledge assimilation, knowledge transformation, and knowledge exploitation (Zahra and George, 2002). Process of learning can be applied by SMEs in Manado, because it generates new value of knowledge to create sustained competitive advantage and to achieve strategic fit by allocating or matching resources to opportunities. Aspect of learning today for Manado SMEs is how to match their internal resources and skills with the opportunities and risks created by environmental change of AEC in ways that will be both effective and efficient over the time such resources will be deployed. Furthermore, within the framework of the organization's strategy, learning capability of Manado SMEs will be regarded as a source of high potential knowledge creation in generating resources-based strategy and a best practice model of knowledge management for SMEs in dealing with competitiveness, both locally, regionally and globally.

Competitiveness as a comparative measure between companies within an industry is closely related to the presence of a competitive advantage and a major contribution to enlighten competitive advantage has come from studies done by Michael Porter (Bredrup, 1995). Porter (1985) defines competitive advantage grows out of value a firm is able to create for its buyers that exceed the firm's cost of creating it. There are several paradigms associated with how a business creates and maintains its competitive advantage, such as the industrial organization paradigm of Porter (Porter, 1980), strategic conflict of Shapiro and resource-based view (RBV) of Wernerfelt (Barney and Clark, 2007), dynamic capabilities of Teece (Teece, et al., 1997), as well as, learning paradigm of Senge (Gilley and Maycunich, 2000).

Resource-based View (RBV) is the one that related to how organizations exploit their resources in

facing the dynamic environment. Barney and Clark (2007) said that organization is bundles of resources which consists of as human, asset, capability, information, and knowledge. Barney (1991) develops the so-called VRIN (valuable, rare, inimitable and non substitutable) resources framework which defines characteristics resources need to possess in order to enable competitive advantage to be achieved. According to VRIN framework, valuable, rare, imperfectly imitable and not substitutable resources have the potential for creating sustainable competitive advantage (Talaja, 2012).

Under the condition of dynamic environment of AEC, RBV can be applied by SMEs in Manado in achieving and maintaining their competitiveness. How SMEs in Manado should achieve and maintain their competitiveness, becomes the problem that is figured out and being studied in this research, by developing a model of RBV and analyzing the competitiveness of SMEs in Manado based on VRIN resources of RBV related to dynamic environment of ASEAN Economic Community (AEC). Hopefully, this research will provide a framework for understanding how VRIN resources of RBV might appropriately viewed as a strategy to SMEs in Manado.

METHODS

The object of this research is Small and Medium firms (SMEs) in Manado. The term of SMEs was defined according to Central Bureau Statistics of Indonesia: a business, which had 5 to 19 employees, is called as small firms, whereas a business, which had 20 to 99 employee, is called as medium firms. The sample being taken was 180 SMEs, consisted of 90 small firms and 90 medium firms. The variable consisted of four main variables, i.e. valuable, rare, inimitable, and not substitutable (VRIN) resources of RBV (Barney and Clark, 2007). There are 28 question items that are divided into 9 questions for valuable, 6 questions for rare, 7 questions for inimitable, and 6 questions for nonsubstitutable.

Those are measured on Likert-type scales (Geoff, 2010), coded between 1 (unfavorable) until 5 (favorable). This research used qualitative systems dynamics approach (Coyle, 1999) that aims to develop a model of VRIN resources of RBV and correlation analysis (Walpole, 1993) that aims to measure the validity and reliability of the questionnaire.

RESULTS AND DISCUSSION

The indicator of questionnaire is valid if the correlation coefficient is equal or greater than 0.30 (Friedenberg in Anwar, 2009), while the indicator of questionnaire is reliable if the correlation coefficient between the even number of items and the odd number of items is greater than 60% (Portes, 1986 in Rantung, 1992). Result showed that both $\alpha = 1\%$ and $\alpha = 5\%$, the correlation coefficient is above 0.4, while the correlation coefficient between the odd number of items and the even number of items is 0.92. This can be concluded that all the question items are valid and reliable to measure the valuable, rare, inimitable and non substitutable (VRIN) resources of RBV towards the competitiveness of SMEs in Manado.

The Causal Loop Diagram (CLD) of SMEs Resource-based View (RBV)

The modelling of RBV based on systems dynamics which is an approach to understanding the behavior of complex systems overtime (Sterman, 2000).

Two model types are offered in system dynamics i.e Causal Loop Diagrams (CLDs) and Stock Flow Diagrams (SFDs) (Homer and Olivia, 2001). The goal of CLDs is to provide a macroscopic view on causalities of the elements in a system and to enable a simulation of SFDs. The CLDs of RBV model is shown in figure 1. It explains the systemic causalities of VRIN resources of RBV, competitiveness of SMEs and environment of AEC.

Homer and Olivia (2001) explain that there are two model types offered in system dynamics i.e

Causal Loop Diagrams (CLDs) and Stock Flow Diagrams (SFDs). The goal of CLDs is to provide a macroscopic view on causalities of the elements in a system and to enable a simulation of SFDs. The CLDs of RBV model is shown in figure 1. It explains the systemic causalities of VRIN resources of RBV, competitiveness of SMEs and environment of AEC.

There are seven reinforcing loops (R1, R2, R3, R4, R5, R6 dan R7) and seven balancing loops (B1, B2, B3, B4, B5, B6 and B7). The reinforcing loops of R1, R2, R3, and R4 explain ability of SMEs to create VRIN resources whereas the balancing loops of B1, B2, B3, B4 explain inability of SMEs in maintaining VRIN resources. Those four reinforcing and balancing loops are expected to generate competitiveness of Manado SMEs in dealing with the implementation of AEC. The reinforcing loop of R5 explains ability of SMEs to create RBV and the balancing loop of R6 explains inability of SMEs to create RBV. These two causalities are expected to generate RBV of Manado SMEs.

The implementation of AEC increases the environmental dynamic (reinforcing loop of R6). The ability of SMEs in generating RBV decrease the environment dynamic (balancing loop of B6). These two loops will generate environmental dynamic that can affect the competitiveness of SMEs. Reinforcing of R7 explains the ability of SMEs in implementing the RBV strategy by exploring and exploiting the VRIN resources so that affects the increase of competitiveness of SMEs, while balancing loop of B7 is about inability of SMEs in maintaining competitiveness caused by AEC implementation. This causality will generate competitiveness of Manado SMEs.

Behavior of VRIN resources of RBV

Behavior of VRIN resources of Manado SMEs is simulated by using Powersim Constructor 2.5d. Simulation was conducted in two forms, i.e. before intervention and after intervention. Outputs of this simulation are behavior of AEC competitive environment and behavior of VRIN resources to

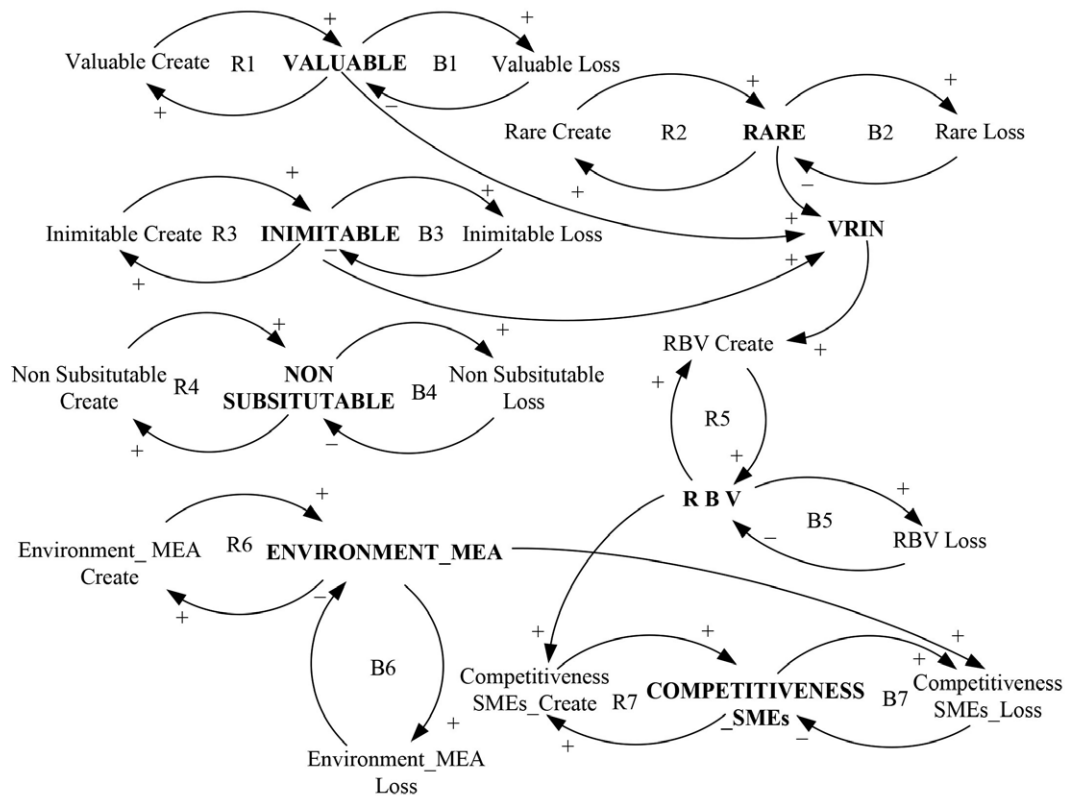


Figure 1 : Causal Loop Diagram (CLDs) of Resource-based View

the competitiveness of Manado SMEs in dealing with the dynamic environment of AEC.

Before intervention, it is to explain about the existing behavior of VRIN resources, while after intervention it is to explain about the behavior of VRIN resources after being intervened to VRIN resources. The intervention is a scenario such as policies that can be taken both by SMEs and government by stimulating all valuable, rare, imperfectly imitable and non substitutable (VRIN) resources.

SMEs need to upgrade their management skills and capabilities, human resource competence, working capital, management and technological skills. On the other side, governments need to improve SMEs access to financing, information

infrastructures and international markets. Providing regulatory, legal and financial frameworks conducive to entrepreneurship and small firm start-up and growth is a priority (OECD, 2000).

Dynamic Environment of AEC

Business environment refers to all external forces includes factors outside the firm which can lead to opportunities for or threats to the firm competitiveness. Organizational competitiveness and competitive environment are the two elements that affect each other. Understanding the business environment is very important for running a business unit successfully. Differences in competitiveness today are significantly different compared to past period.

The implementation of AEC causes the more competitive environment of ASEAN region. This is implied in the first AEC Blueprint (2008-2015). Under this Blueprint, the AEC is built on four interrelated and mutually-reinforcing characteristics: (a) a single market and production base; (b) a highly competitive economic region; (c) a region of equitable economic development, and (d) a region fully integrated into the global economy. Moreover, the new Blueprint 2025, a stronger AEC is envisaged by 2025 with the following characteristics: (a) a highly integrated and cohesive economy; (b) a competitive, innovative, and dynamic ASEAN; (c) enhanced connectivity and sectoral cooperation; (d) a resilient, inclusive and people-oriented, people-centred ASEAN; and (e) a global ASEAN (The ASEAN Secretariat, 2015). These characteristics cause the present day of AEC environment is regarded as hyper-competitive (figure 2).

The Effect of VRIN Resources to SMES

Competitiveness

In term of microeconomic, competitiveness identifies operating practices and strategies of firms as well as business inputs, infrastructure,

institutions and policies that constitute the environment in which firms compete (Wong, *et al.*, 2011). Presently, only a small part of the SMEs is able to identify and exploit this competition and deal with the dynamic environment. SMEs, due to their size, are particularly constrained by non-competitive resources, as well as Manado SMEs.

Result of simulation showed that systemical behavior of VRIN resources of SMEs affects and makes contribution on competitiveness negatively in decreasing and positively in increasing, both before and after intervention. Before intervention, the behavior of VRIN resources of SMEs showed a decline resulting in decrease in SMES competitiveness. The decline of rare (R) resources followed by valuable (V), non-substitable (N) and imperfectly imitable resources (I) caused in decreasing competitiveness (figure 3). This indicated that VRIN resources of SMEs are not potential resources in dealing with complex environment of AEC.

Rostek (2012) argues that SMEs needs to improve competitiveness to survive in a changing environment and strong business competition. Improving the competitiveness of Manado SMEs

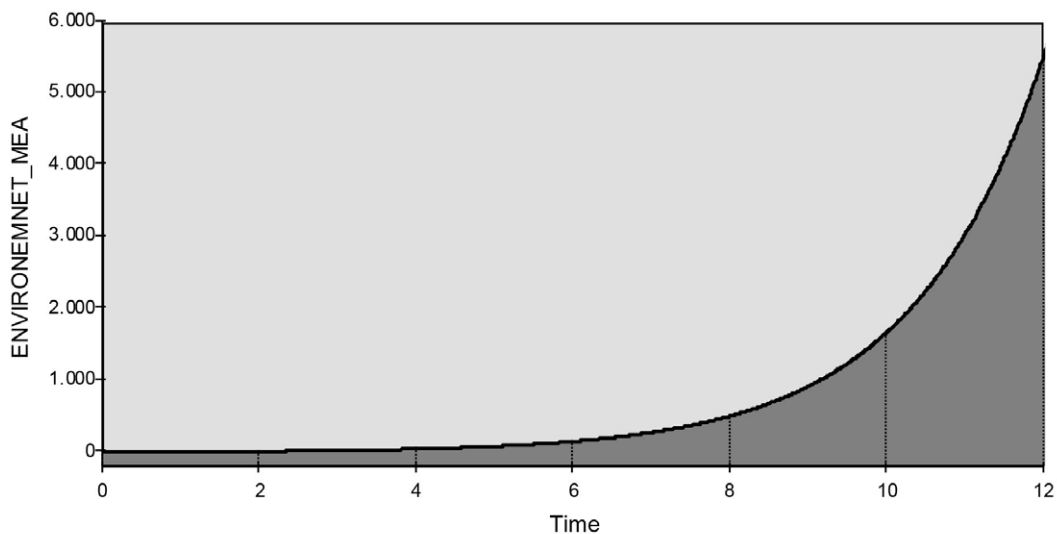


Figure 2 : Dynamic Environment of AEC
Source: Based on Powersim Constructor 2.5 d

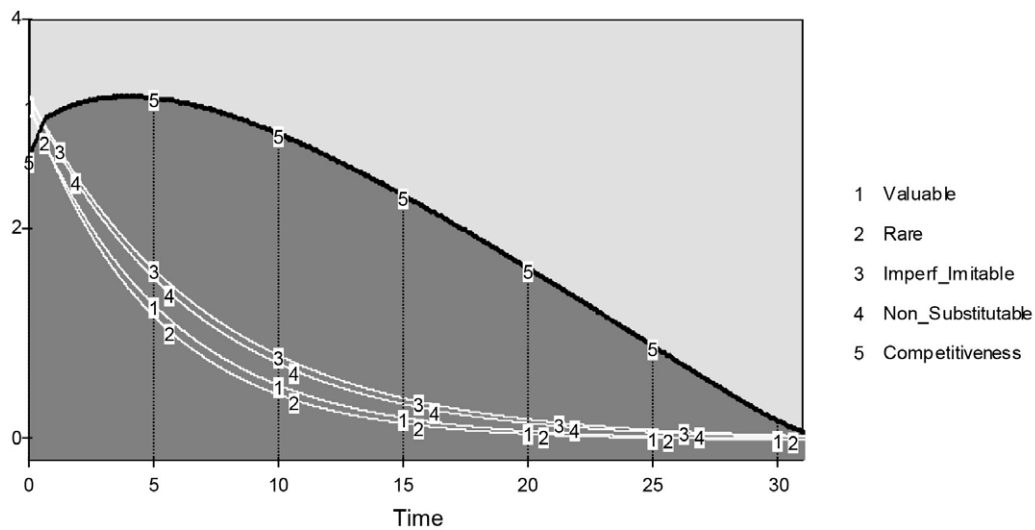


Figure 3: Behavior of VRIN Resources of Manado SMEs to Competitiveness Before Intervention
Source: Based on Powersim Constructor 2.5 d

can be pursued by intervening to their resources. The intervention can be applied by considering to Barney (1991) of RBV that firm resources must have four attributes: (a) it must be available, in the sense that it exploit opportunities and/or neutralizes threats in firm's environment (b) it must be rare among a firm's current and potential competition, (c) it must be imperfectly imitable, and (d) there cannot be strategically equivalent substitutes for this resources that are valuable but neither rare or imperfectly imitable. This original framework was called VRIN. These attributes of firm resources can be thought of as empirical indicators of how heterogeneous an immobile a firm's resources are and thus how useful these resources are for generating sustained competitive advantage (Barney, 1991).

In the condition of after intervention to VRIN resources (figure 4), holistically, result showed that the combination of VRIN resources contributes significantly on competitiveness than before intervention.

Partially (figure 5), rare (R) resources have strong contribution, followed by non substitutable (N), imperfectly imitable (I) resources and

valuable (V) resources. The fast increasing of valuable (V) resources is not able to improve the competitiveness of SMEs.

Barney (1991) argued that firm resources can only be a source of competitive advantage or sustained competitive advantage when they are valuable and Talaja (2012) said that valuable resources that are not rare cannot be the sources of the competitive advantage and to achieve the competitive advantage, resource must be valuable and rare. These are stressed that the value and rarity of resources are necessary conditions for achieving competitive advantage.

On the contrary to those arguments of valuable (V) resources of Barney (1991) dan Talaja (2010), this study showed that valuable (R) resources of SMEs is more potential than valuable (V) resources. Valuable (V) resources, as a source of competitive advantage or sustained competitive (Barney, 1991), are not potential because the emphasis on valuable (V) resources tends to the level of corporate. This reason is supported by statement of Talaja (2012), it is important to emphasize that the value of resources has to be estimated in the context of corporate strategy and the specific

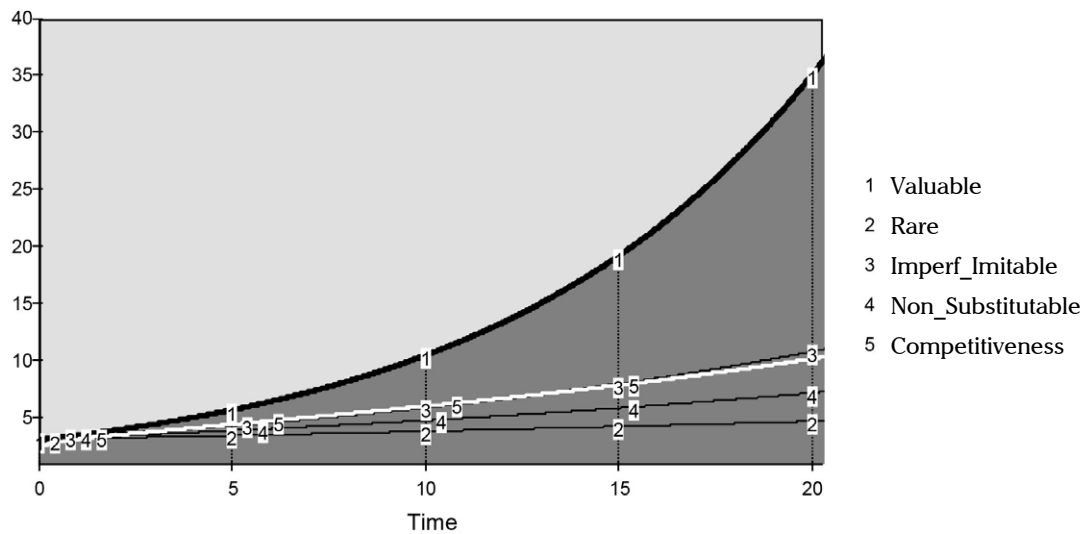


Figure 4: Behavior of VRIN Resources of Manado SMEs to Competitiveness After Intervention (Holistically)
 Source: Based on Powersim Constructor 2.5 d

environment in which the company operates. The strong contribution of rare (R) resources of SMEs of this research is similar with research of Miraza dan Hafas (2015), which found that rare (R) resources have significant impact on SMEs competitiveness. The prominent resources are rare (R) resources can be shown by utilizing unique resources such as local based resources, agricultural based resources, creative resources and labor-intensive resources (Bank Indonesia, 2015).

This result also showed that these imperfectly imitable (I) resources and non substitutable (N) resources contribute to Manado competitiveness. Following to Barney (1991) that valuable (V) and rare (R) organizational resources can only be sources of sustained competitive advantage if firms that do not possess these resources cannot obtain them. Talaja (2012) said that if there is no other resource that could be used as an adequate and worthy replacement for the existing resource, existing resources are not substitutable. These firm resources are called imperfectly imitable (I) resources and non substitutable (N) resources. It is stressed that the value and rarity of resources are necessary conditions for achieving competitive advantage. Therefore, a firm resource must,

in addition, be valuable, rare, and imperfectly imitable and substitutable in order to be source of a sustained competitive advantage (Barney, 1991). Because, on the context of VRIN resources, Pina (2011) stated that VRIN resources of the company are affect significantly to the competitive advantage and organization performance.

MANAGERIAL IMPLICATIONS

According to the VRIN framework, if a firm possesses and exploits valuable, rare, inimitable and non-substitutable resources and capabilities, it will achieve sustainable competitive advantage (Talaja, 2012). To improve competitiveness, an intervention on VRIN resources is required. From the result of simulation, it indicates that holistically, combination of these resources shows positively make contribution on competitiveness of Manado SMEs in dealing with complex environment of AEC.

Although, partially, rare (R) resources of SMEs have significant contribution on improving competitiveness of Manado SMEs, it can not ignore the role of valuable (V) resources, imperfectly imitable (I) resources and non-substitutable (N) resources. Therefore, VRIN resources of

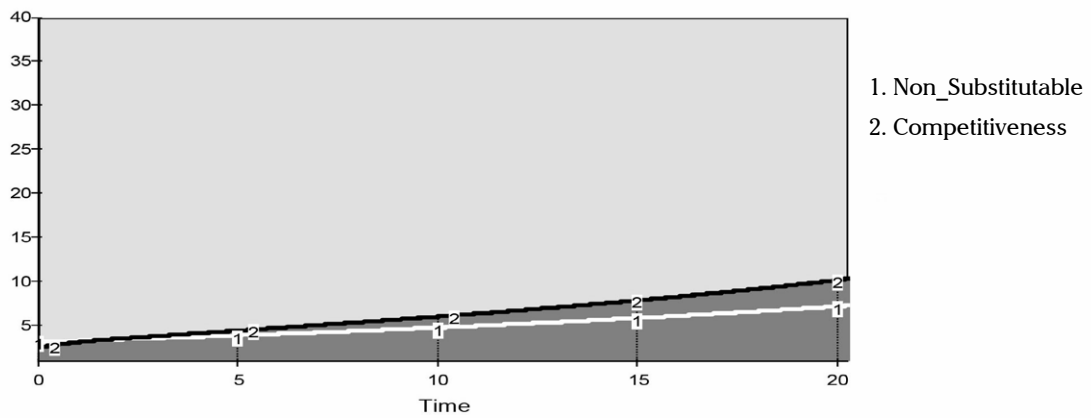
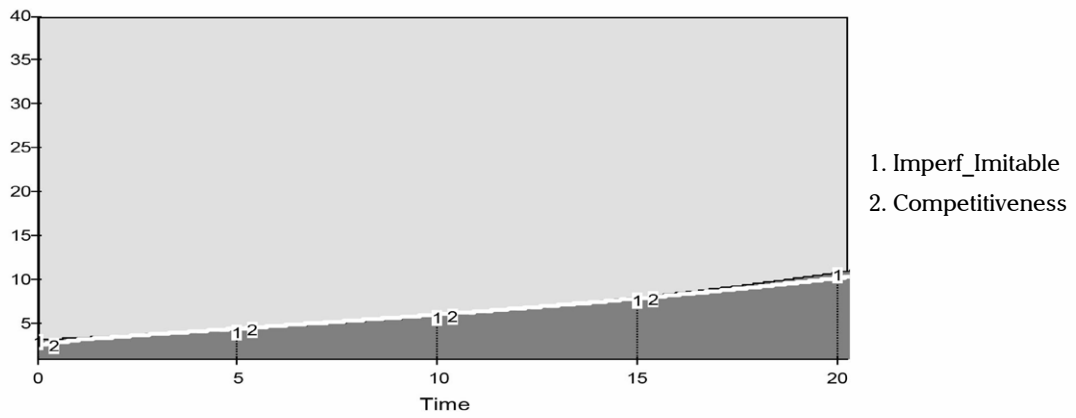
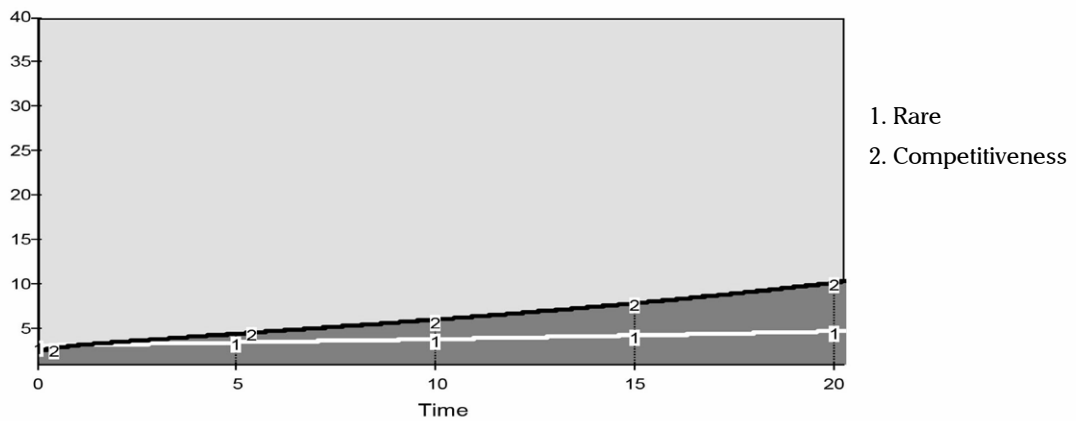
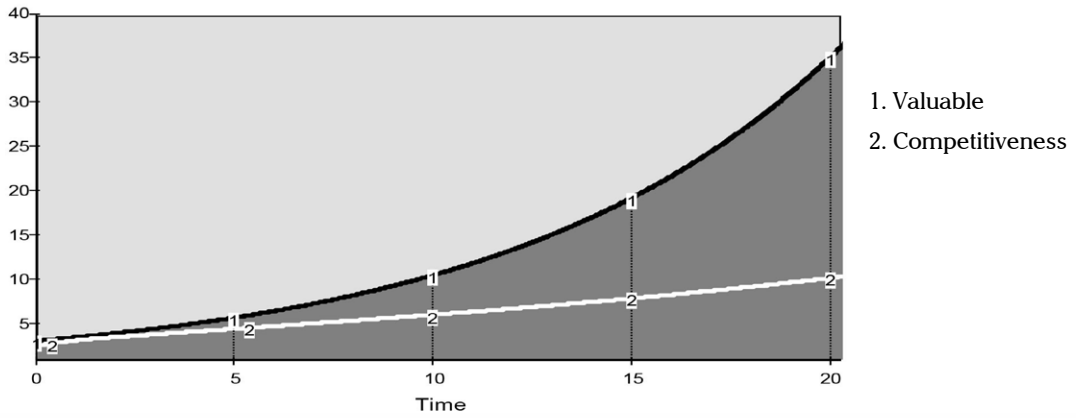


Figure 5: Behavior of VRIN Resources of SMEs to Competitiveness After Intervention (Partially)
Source: Based on Powersim Constructor 2.5 d

Manado SMEs have to be combined, organized, and deployed appropriately and systemically to be source of competitive advantage. Indeed, if the firm's strategy does not set up the correct structure, control systems and reward systems to support these resources, it seems highly improbable that the resource will contribute to the firm's competitive advantage (Bridoux, 2004).

Manado SMEs should decide and examine their environment for opportunities and threats in order to establish where they can gain their competitiveness and where their resources might most usefully be concentrated in dealing with complex environment like AEC environment. For support this decision, SMEs should create dynamic resource management (Wernefelt, 1984) and effective management of resources based on input quality of organization resources in the form of physical resources, organizational resources and human resources. Human resources are the most crucial resources for small firms (Sulaimiah, 2017) in exploring and exploiting firm's resources to be VRIN resources. This process must be done continually as a part of organizational routines (Nelson and Winter, 1982) and a mechanism for prevent sustained competitive advantage, and reflect a response to some managerial goal or environmental pressure (Cohen *et al.*, 1996).

CONCLUSION

In order to analyze contribution of SMEs resources on competitiveness of Manado SMEs in dealing

with AEC, this study proposed a model of Resource-based View (RBV) which explains the role of causality and systematic behavior of valuable (V) resources, rare (R) resources, imperfectly imitable (I) resources and non-substitutable (N) resources to competitiveness of Manado SMEs.

Holistically, systematic behavior of VRIN resources of Manado SMEs affects and makes contribution on their competitiveness both negatively in decreasing and positively in increasing. Before intervention, the behavior of VRIN resources shows a decline that causes decreasing to competitiveness of Manado SMEs. The fast decline is rare (R) resources followed by valuable (V), non-substitutable (N) and inimitable resources (I). In term of this condition, these VRIN resources of SMEs are not potential resources in dealing with dynamic environment of AEC. After intervention, the VRIN resources of Manado SMEs are potential in making contribution on increase of competitiveness of Manado SMEs.

Partially, rare (R) resources of SMEs have a strong contribution on improving competitiveness of Manado SMEs, followed by non substitutable (N), imperfectly imitable (I) resources and valuable (V) resources. The fast increase of valuable (V) resources is not able to improve the competitiveness of SMEs. ■

REFERENCES

- Barney J.B, Delwyn N.C. (2007). *Resource-based Theory, Creating and Sustaining Competitive Advantage*. Oxford University Press.
- Barney J.B. (1991). *Firm Resources and Sustained Competitive Advantage*. Journal of Management, Vol. 17, No 1, 99-120.
- Bank Indonesia. (2015). *Profil Bisnis Usaha Mikro, Kecil dan Menengah (UMKM)*. Kerja sama YPPI, Quality ISO 9001 dan Bank Indonesia.
- Bredrup H. (1995). *Competitiveness and Competitive Advantage*. In: Rolstadas A. (eds) Performance Management. Springer, Dordrecht.
- Bridoux F. (2004). *A Resource-Based Approach to Performance and Competition: An Overview of The Connections Between Resources and Competition*. IAG Working Paper; 2004/110.
- Cohen M.D, R. Burkhart, G. Dosi, M Egidi, L. Marengo, M. Warglien, and S. Winter. (1996). *Routines and Other Recurring Action Patterns of Organizations: Contemporary Research Issues*. Industrial and Corporate Change, 5: 653–698.
- Coyle G. (1999). *Qualitative Modelling in System Dynamics or What are the Wise Limits of Qualification?*. 8 Cleycourt Road, Chrivenham, Swindon SN6 8EN, UK.
- Gilley J.W, Maycunich, A. (2000). *Organizational Learning Performance and Change, an Introduction to Strategic Human Resources Development*. Publishing, Cambridge, Massachusetts.
- Homer J, Olivia, R. (2001). *Maps and Models in System Dynamics: A Response to Coyle*. System Dynamics Review, 17(4), 347–355.
- KPMG Asia Pacific Tax Center. (2016). *The ASEAN Economic Community, The Way Forward*. KPMG International Corporate, a Swiss Entity.
- Miraza Z, Hafas, H.R. (2015). *Dampak Sumberdaya VRIN terhadap Keunggulan Bersaing dan Kinerja Studi pada UKM di Medan*. Jurnal Manajemen dan Organisasi, Vol. VI, No. 2, Agustus 2015.
- Nelson R, Winter, S. (1982). *An Evolutionary Theory of Economic Change*. Belknap Press of Harvard University Press: Cambridge, MA.
- Norman G. (2010). *Likert Scale, Levels of Measurement and the "Laws" of Statistics*. Springer Science Business Media B.V.
- OECD. (2000). *Small and Medium-sized Enterprises: Local Strength, Global Reach*. The OECD Policy Brief. www.oecd.org/publications/Pol_brief/
- Pina M. (2011). *Obtaining Competitive Advantages Based on Specific Resources and Capabilities. The Case of Corticeira Amorim*. Doctoral dissertation, Universidade Católica Portuguesa.
- Porter M.E. (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. The Free Press.
- Porter M.E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance: with A New Introduction*. The Free Press. New York, USA.
- Rostek K. (2012). *The Reference Model of Competitiveness Factors for SME medical Sector*. Economic Modelling, 29(5), 2039–2048.
- Schwab K., Xavier SM. (2016). *The Global Competitiveness Report 2016-2017*. World Economic Forum, Geneva.
- Sterman JD. (2000). *Business Dynamics Systems Thinking and Modeling For a Complex World*. The McGraw-Hill Companies, Inc.
- Sulaimiah S. (2017). *How do Entrepreneurial Human Resource Practices Determine Small Firms' Performance?*. International Research Journal Of Business Studies, ISSN: 2089-6271, e-: 2338-4565, Vol. 9, No.3.
- Talaja A. (2012). *Testing VRIN Framework: Resources Value and Rareness as a Source of Competitive Advantage and Above*. Management, Vol. 17, 2012, 2, pp. 51-64
- Teece D.J, Gary P, and Amy S. (1997). *Dynamic Capabilities and Strategic Management*. Strategic Management Journal. Vol 18:7, 509-533, John Wiley & Sons, Ltd, 1997.
- The ASEAN Secretariat. (2015). *ASEAN Economic Community Blueprint 2025*. ASEAN Secretariat, November 2015.
- Wernerfelt B. (1984). *A Resource-based View of the Firm*. Strategic Management Journal, Vol. 5, No. 2. (Apr. - Jun., 1984), pp. 171-180.
- Wong MH, Rakhi, S and Ruby, T. (2011). *ASEAN Competitiveness Report*. Asia Competitiveness Institute, Lee Kuan Yew School of Public Policy, Singapore.
- Zahra S.A and George, G. (2002). *Absorptive Capacity: a Review, Reconceptualisation, and Extension*. Academic of Management Review, Vol. 27, No. 2, pp 185-203