The Effect Of Commitment Mediation Through The Relationship Between Confidence And Performance Supply Chain

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Abstract: The purpose of this study is to look for answers to research problems items, namely the effect of trust on supply chain performance through commitment as an intervening variable. This study uses a quantitative method with a questionnaire as a technique of data collection conducted on 70 respondents items, namely Tofu and Tempeh Craftsmen as samples in Banten Province. Data from all three variables was Analyzed using the program Structural Equation Model (SEM) in the Software Smart PLS 2.0. m3 version, The results of this study based on statistical analysis show that the trust has a significant and significant effect on supply chain performance. trust has a positive and significant effect on the commitment and the commitment has a positive and significant effect as an intervening variable on supply chain performance. The results of this study provide very important implications for the role of management to maintain the commitment in the relationship between trust and supply chain performance.

Keywords: Trust; supply chain performance; and commitment

Introduction

Supply Chain Management is the unity of the key stages of a business from the end user through the suppliers who provide products, services and information yang entering a value to consumers and other stakeholders (Sundram, Bahrin, Abdul Munir & Zolair, 2018) Some studies argue that trust and commitment as a basic dimension of build quality business relationships. In addition, trust and commitment to fully meet the essential aspects of the supplier-retailer relationship (Sun, Liu, & Yang, 2018), According to Kwon and Taewon as cited by Mukhsin (2017), the success of the company's performance in the supply chain comes from the high value of the trust, but also a strong commitment between partners in the supply chain. Likewise, the level of trust and commitment is low could be a possible factor in the failure of the relationship between supply chain partners
Cambra and Polo (2011) asserts that a long-term relationship requires a commitment of the parties involved. Commitment is an incentive to maintain the relationship and extend relationships. Commitments should be an important variable in determining the success of a relationship. The higher commitment of satisfaction and confidence built, the higher the quality of the relationship between the supplier and distributor channels. Allen and Meyer (1996) states that the higher the commitment can be built either by the supplier or distributor will strengthen the cooperative relationship that they build.

One production that uses a supply chain system that relies on trust and commitment of buyers and suppliers are craftsmen Tofu and Tempeh in Banten Indonesia. The process of making tofu and tempeh by the craftsmen and soybean coming from suppliers. For the people of Indonesia, soybean is a source of vegetable protein is the most popular. The major consumption of soy is in the form of tofu and tempeh which both the main side dishes for the people of Indonesia. Besides tofu and tempeh, other product forms that can be made from soybeans are soy sauce, tauco, as well as soy milk. From a variety of products that can be produced from soybeans, it is no wonder if the average needs of Indonesian soy per year is 2.2 million tonnes. However, more than half or exactly 67.99% fulfillment of soybeans to be imported from abroad. This is because the domestic soybean production is not able to meet the demand for tofu and tempeh producers. Indonesia itself is a country of world soybean producer and also the largest soybean markets in Asia. Based on data from the National Socioeconomic Survey (SUSENAS) 2015 released by the Central Statistics Agency (BPS), Indonesia the average person consume per year out as much as 7.51 kg and 6.99 kg of tempeh. (Riniarsi, 2016). Based on data from the National Socioeconomic Survey (SUSENAS) 2015 released by the Central Statistics Agency (BPS), Indonesia the average person consume per year out as much as 7.51 kg and 6.99 kg of tempeh. (Riniarsi, 2016). Based on data from the National Socioeconomic Survey (SUSENAS) 2015 released by the Central Statistics Agency (BPS), Indonesia the average person consume per year out as much as 7.51 kg and 6.99 kg of tempeh. (Riniarsi, 2016).

Figure 1. Indonesian Soybean Imports volume 2013-June 2018 period (Ton)

Note: *) Preliminary figures
Source: Statistics

Soybean consumption at the national level which is constantly increasing and can not be offset by growth in domestic soybean production makes the government would have to

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continue to import these foods. Based on Figure 1.1, the import soybean from year to year showed an increase. The Central Bureau of Statistics show that the volume of imports of soybeans from the year 2013-2017 has increased every year. For the period January to June 2018, imports of soybeans have reached 1.17 million tons, or 43.7% of total imports of the previous year.

Figure 2. Data Soybeans in Banten Province Period 2009-2015 (tons)

Source: Statistics

Based on the above image, soybean production in Banten province, namely during the period 2009-2015. Since then, soybean production is always decreasing each year and recently increased again in 2013 amounted to 10 326 tonnes. However, the amount of experience the scaling back production next year. Then in 2015 increased the numbers back to 7291 ton. It could be concluded that soybean production numbers 2009-2015 period that fluctuated and also coupled with production quantities arguably still low so as not to be sufficient for soybeans in Banten Province.

According to data from the Department of Agriculture (standardized) Banten, published in the online news RMOL Banten period of September 2018, in a single day needs of soybeans needed in Banten province as much as 122,500 kg, with details of the supply is given to the needs of the district / city of Serang and Cilegon 60,000 kg, 37,500 kg Tangsel, Regency / City Tangerang 25000 kg. Meanwhile, if viewed requirement soybeans as much as 44 713 tonnes per year, with details of the Regency / City and Cilegon 21,900 tonnes, 13 688 tonnes Tangsel, and Regency / City Tangerang 9,125 tons. Standardized head Banten, Agus M. Tauchid, acknowledged that the national, homeland soybean production can not meet the needs of society. So the government is still dependent on imported soybean mostly imported from the United States, including in Banten province.

Online news contained in Tangerang express the period September 2018, the impact of the weakening of the rupiah against the US dollar (US) occurred in soybean prices between Rp200-Rp300. Meanwhile, the Ministry of Commerce (Ministry of Trade) Enggartiasto also promises imported soybean prices do not rise despite the US dollar to the present value continues to strengthen. Enggartiasto said world soybean prices actually fell as a result of a trade war between the US and China. However, he was concerned the percentage decline in soybean prices is not proportional to the percentage of the weakening rupiah against the dollar (Tangeks, 2018). It will have an impact on small businesses, the main burden borne
employers tofu and tempeh. Previously, according to him, importers promise not to raise the price of soybeans on exchange rate reasons. Because, soybean suppliers are aware that most of the users of soy is tofu and tempeh entrepreneurs, where the two materials are considered as food everyday society. (Tangeks, 2018).

Imported soybean prices followed the US dollar, as the stronger US dollar against the rupiah, the importer must expend more capital. It triggers the rising price of soybeans and tofu and tempeh production cost rises. Ends could potentially also increase the price consumers currently buy. Published in the online news Tirto period of September 2018, an economist from the Institute for Development of Economics and Finance (INDEF), Bhima Yudhistira Adhinegara as cited by sicca (2018) said do not be surprised if there are craftsmen tempeh and tofu to reduce the portion of soy or reduce the size of the product tempeh. Because production costs will tend to rise (Sicca, 2018). One alternative solution is to raise the price of goods or subtract ingredients. But seeing the current macro-economic conditions, Bhima as cited by Sicca (2018) judge tempeh and tofu might not sell if the price is raised out of the ordinary. For household consumption slowed in the range of five percent. End of the craftsmen choosing a strategy to press the down sizing cost, which shrink the size of tempeh or tofu. (Sicca, 2018).

The increase in the dollar exchange rate on rupiah have also complained of by employers soy and tempeh. Because the supply of imported soybeans makes them raise the selling price to the buyer. Published in the online news detikFinance the period of September 2018, according to one of the sellers of soybeans, for Serang district must raise the price of soybeans per kilogram. The rise even up to the range of Rp1,000. Meanwhile, according to businessmen tempeh and tofu are in Serang city also complained about the same thing. High soybean prices make employers should lower quality tempeh tempeh and tofu (Riva, 2018). If a day can produce 300 pieces of tempeh size of 50 centimeters, which at this price increase should reduce production. (Riva, 2018).

Based on the review of the literature phenomena and the study aims to test and analyze the effect of mediation commitment on the relationship between trust and performance of the supply chain

**Literature Review**

**Supply Chain Management**

According to Levi as cited by Aziz & Dwiyanto (2017) supply chain management is an approach taken in order to achieve the integration of various organizations more efficient than the supplier, manufacturer, distributor, retailer, up to the final consumer. Which if interpreted more is the production of goods in the right quantity, at the right time, in the right place, and with the aim to achieve the most cost minimum of the system as a whole and also achieve the level of service desired (Aziz & Dwiyanto , 2017). Meanwhile, according to Martin Christopher as cited by Ilmiyati and Munawaroh (2016), supply chain management is the management of upstream and downstream relationship or it could be from a supplier up to consumers to provide more value to consumers and reduce overall supply chain costs (Ilmiyati & Munawaroh, 2016).
Supply Chain Performance

According to Slamet as cited by Sucipto, Widia and Utami (2016), supply chain performance is the level of the supply chain’s ability to maximize the network chain and improve the competitiveness of the supply chain actors to consider the supply chain key performance indicators (Sucipto, Widia, & Utami, 2016). Pujawan as cited by Fachrizal (2016) define supply chain performance as a performance measurement system with a measuring instrument used to observe the performance of a supply chain together between one organization to another (Fachrizal, 2016). While Vorst as cited by Munizu (2017) define supply chain performance is the level of the supply chain's ability to meet all the needs of consumers (Munizu, 2017). Levi et al., Describes the performance of the supply chain is a performance about the quality of activities associated with the flow and movement of goods, (Levi et al. 2000)

Trust

According to Moorman and Miner as cited by Xiao Zheng, Pan and Xie (2010) stated that trust is the desire to believe in trading partners, which are considered reliable. Doney and Cannon defines trust as the credibility and goodwill of cognitive targets, they also argue that confidence comes from the nature of honesty with each other (Xiao Zheng, Pan, and Xie, 2010). Currall and Inkpen as cited by Panayides & Lun showed that trust is the decision to rely on a couple in the hope that the pair will act in accordance with the agreement that has been agreed (Panayides & Lun, 2009). Andersen and Narus as cited by Uca, Civelek, Cemberci (2017) describes trust as a belief by a company that partners who exchange will move away from actions that could lead to poor results and engage in actions that create positive results for all partners involved (Uca, Civelek, Cemberci, 2017). Chang et al. as cited by Abdullah and Saleh (2017) Trust is a two-way relationship between the partners which implies a high degree of confidence in the decency to one another as well as the fulfillment of the promise (Abdullah and Saleh, 2017). Mayer et al. as cited by Xiao Zheng, Pan, & Xie (2010) Found confidence is the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action that is important for their company, regardless of the ability to monitor or control the other party (Xiao Zheng, Pan, & Xie, 2010).

Commitment

According to Ruyter et al. as cited by Shin, Thai and Yuen (2018) The commitment in the relationship refers to the desire to continue a business partnership and a willingness to make efforts to ensure the long term viability of that relationship (Shin, Thai, and Yuen, 2018). According to Morgan and Hunt as cited by Nyaga & Whipple (2011), commitment refers to the belief that the exchange partners ongoing relationships with other companies is very important to ensure the maximum effort to maintain the relationship; namely, the parties are committed to believe that the relationship deserves to be made to ensure that the relationship survive indefinitely (Nyaga & Whipple, 2011). Dwyer, Schurr, and Oh as cited by Yuan, Feng, Lai, & Collins (2018) define commitment as a pledge of relational continuity between exchange partners implicitly or explicitly (Yuan, Feng, Lai, & Collins, 2018). Barney Clark as cited by Yuan, Feng, Lai, & Collins (2018) explains the commitment can also be a strategic resource that provides a competitive advantage (Yuan, Feng, Lai, &
Collins, 2018). Ryu et al. as cited by Stefani & Sunardi (2014) explain if the commitment of supply chain partners will boost cooperation activities. Kim et al., also explained that the commitment will facilitate the transaction information, and also helps to avoid problems between partners in the supply chain (Stefani & Sunardi, 2014).

**Methods**

The Research presents causal relationship which is a determination of the level of influence that can also be used to make predictions. Researchers can identify the facts or events as variables that are affected (endogenous variables) and conduct research on the variables that influence (exogenous variables).

**Research Variables**

Variable belief adopted from the research Ahda (2009) and Xiao Zheng, Pan, & Xie (2010) are information sharing, responsibility, experience, and honesty, and commitment adapted from research Sugiarto (2012) and Xiao Zeng, Pan, Xie (2010), ie., Affective, continuant, Normative, and conviction, while the Supply Chain performance adoption of research Wahyuniardi, Syarwani, & Anggani (2017) & (Harsasi & Mashithoh, 2016), that is reliability, responsiveness, Agility, and cost.

**Population and Sample**

Population is generalization region consisting of: objects / subjects that have a certain quantity and characteristics defined by the researchers to learn and then drawn conclusions (Sugiyono, 2013). The population in this study is on Craftsmen Tofu and Tempeh in Banten as many 225. The sample in this study uses the Purposive random sampling method, researchers first determine the part used as a basis before making a random selection. In this study what is meant is the Tofu and Tempe Craftsmen in Banten. After doing the part purposively the researcher then randomly chooses the element. The sampling method used is based on Slovin's opinion. The total number of broiler egg traders (population) is 225 in the Tofu and Tempe Craftsmen in Banten Indonesia. with an alpha level of 10%. The number of samples obtained was 70 respondents. To determine the number of samples in this study, the Slovin formula (Sugiono, 2011) was used which was formulated as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Information:
n: Sample size
N: Population size
e: Error sampling rate, for example 10%

$$n = \frac{225}{3.25} = 69.3$$ rounded to 70

Based on the calculations above, the number of samples used in this study were 70 respondents.
Findings

**Validity and reliability**

Validity test
Test the construct validity in general can be measured using a score of loading parameter in the model study (Rule of Thumbs > 0.7) and using the parameters AVE (Average Variance Extracted) with a score of > 0.5, Communality > 0.5, and R² and redundancy. If the score of loading < 0.5, these indicators can be removed dari konstruknya for this indicator is not contained to construct representative. However, if the loading scores were between 0.5 to 0.7, then you should not need to be removed if the indicator has a score of such loading along the AVE and the indicator Communality > 0.5 (Abdillah & Hartono, 2015). Here is the output of which showed a score of loading.

<table>
<thead>
<tr>
<th>Table 1. Discriminant Validity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average Variance Extracted (AVE)</strong></td>
</tr>
<tr>
<td>Construct</td>
</tr>
<tr>
<td>Commitment</td>
</tr>
<tr>
<td>Supply Chain Management</td>
</tr>
<tr>
<td>Trust</td>
</tr>
</tbody>
</table>

Sources: Primary data is processed (2019)

Table above shows that the construct has a validity value is good to know Faith, Supply Chain Performance, Commitment, is said to be valid.

Test Reliability
Reliability test can be seen from the value of Cronbach's alpha and composite reliability which is a statistical technique used to measure the internal consistency reliability test psychometric instrument or data. But the reliability of composite measure the true value of a variable reliability, while Cronbach's alpha reliability measures the lowest value of a variable so that the reliability of composite value is always higher than the value of Cronbach's alpha. To be able to say a construct reliable, then the value of Cronbach's alpha and composite reliability > 0.6 and > 0.7. According Werts et al. (1974) in Salisbury et al. (2002), composite reliability is better used in the PLS technique (Abdillah & Hartono, 2015).

<table>
<thead>
<tr>
<th>Table 2. Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Composite Reliability</strong></td>
</tr>
<tr>
<td>Construct</td>
</tr>
<tr>
<td>Commitment</td>
</tr>
<tr>
<td>Supply Chain Management</td>
</tr>
<tr>
<td>Trust</td>
</tr>
</tbody>
</table>

Sources: Primary data is processed (2019)
Table 4.2 can be seen every constructs or latent variables that have a composite value reliability above 0.7 indicating that the internal consistency of the independent variables with the dependent variable has a good reliability.

**Data Analysis**

**Assessing Outer Model (Measurement Model)**

Assessing outer models in PLS there are three criteria, one of which is viewed Convergent validity, whereas for the other two criteria, namely Discriminant validity in the form of square root of average variance extracted (AVE) and the Composite Reliability been discussed earlier at the time of testing the quality of the data. For Convergent validity of the measurement model with a reflexive indicators were assessed based on the correlation between the item score / component score is estimated by software SmartPLS. The size of individual reflexive said to be high if more than 0.7 correlated with constructs (latent variables) were measured.

**Figure 3. Model Structural Partial Least Square**

Sources: Primary data is processed (2019)

Information:
Trust = Trust
Comm = Commitment
SCM = Supply Chain Management

**Outer Model Research variable**

Results of processing by using the Smart PLS shows the outer value model or correlation with the overall variable already meet Convergent validity. It can also be seen in the image above, where the value of t-statistic of all the indicators are qualified on the adequacy of the model or Discriminant validity.

**Hypothesis Testing via Inner Model**

Tests on the structural model was conducted to see the relationship between the constructs, value and R-square significance of the research model.

**Table 3. Result For Inner Weight**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Original Sample</th>
<th>Sample Mean</th>
<th>Standard Deviation</th>
<th>T Statistic</th>
<th>P Values</th>
</tr>
</thead>
</table>

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Commitment -> Supply Chain Management: 0.554, 0.588, 0.112, 4.964, 0.000

Trust -> Commitment: 0.872, 0.879, 0.039, 22.355, 0.000

Trust -> Supply Chain Management: 0.437, 0.404, 0.117, 3.749, 0.000

Sources: Primary data is processed (2019)

Based on Table 4.3 shows the trust relationship with supply chain performance on a positive and significant coefficient = 0.437 with t = 3.749 and (p value = 0.000) at t = 1.96, Commitment to supply chain performance positively and significantly to the coefficient = 0.554 with t = 4.964 and (p value = 0.000) at t = 1.96. Confidence with a positive commitment to the coefficient = 0.872 with t = 22.355 and (p value = 0.000) at t = 1.96 shows that trust and a significant positive effect on commitment.

See R-Square for each dependent showed latent variables in the table below.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Original Sample</th>
<th>Sample Mean</th>
<th>Standard Deviation</th>
<th>T Statistic</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment</td>
<td>0.758</td>
<td>0.771</td>
<td>0.006</td>
<td>152,074</td>
<td>0.000</td>
</tr>
<tr>
<td>Supply Chain Management</td>
<td>0.920</td>
<td>0.928</td>
<td>0.015</td>
<td>62,094</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Sources: Primary data is processed in 2019

The above table shows the R-square value of supply chain performance Commitment 0.920 and 0.771. The higher the R-square, the greater the independent variables can explain the dependent variable, so the better the structural equation.

Discussion of Results

Effect of Trust Through Supply Chain Performance
The research proves that the trust has a positive influence on the performance of the supply chain. This means that the better the confidence will improve supply chain performance. Confidence is felt more and more important in a relationship between organizations, without trust, a relationship between the client and the supplier never walked to maximize its potential strength. Trust is described as a willingness to take risks, and trust will arise if a group of mutual trust and integration in interacting fellow partners (Kwon and Suh, 2004). These results consistent with research (Yaqoub, 2011) which proves the trust has a positive effect on the performance of the company’s operations.

Effect of Trust Through Commitment
The research proves that the trust has a positive influence on Commitment. This means that the better the confidence will increase commitment. One of the most important things to have each company in the supply chain is a network of trust among organizations. The success of the performance of the company (operation performance) in the supply chain also comes from the high value of the trust and a strong commitment among partners in the supply chain. A good relationship with a partner is built on trust. The success of the cooperation achieved through increased company performance based on the good relationship (Munizu, 2017).
Effect of Commitment Through Supply Chain Performance

Commitment positive effect on the performance of the supply chain. This means that the commitment will improve the performance of the supply chain confirm found this study as well as supporting the findings Munizu and Hamid (2016) that the commitments are growing strongly carry on the performance of the supply chain is increasing. Morgan and Hunt (1994) explain that organizations build and maintain long-term relationship if they feel mutually beneficial results that arise from that commitment. Wilson and Vlosky (1997) as cited by Chen et.al. (2011) identify commitments as variables that distinguish between its continuing and damaged. Kwon and Suh (2005) as cited by Chen et.al. (2011) recommend that "sustainable business transaction between supply chain partners requires a commitment by the two parties to reach their destination along the supply chain". Prahinski and Benton (2004) as cited by Chen et.al. (2011) explained that the commitment which is owned by trading partners against these relationships is the key to achieving the desired results for both the company and have a direct and positive impact on the performance in (Chen, Yen, Rajkumar, and Tamochko, 2011).

Analysis of Effect

The amount of effect either directly, or indirectly, as presented below.

<table>
<thead>
<tr>
<th>Indirect Effect</th>
<th>OriginalSample</th>
<th>SampleMean</th>
<th>StandardDeviation</th>
<th>T Statistic</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust - &gt; Commitment</td>
<td>0.484</td>
<td>0.519</td>
<td>0.111</td>
<td>4.370</td>
<td>0.000</td>
</tr>
<tr>
<td>Trust &gt; Supply Chain Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: Primary data is processed (2019)

The research proves that mediate commitment confidence in the performance of the supply chain. This means that the commitment will mediate the belief in improving the performance of the supply chain. Trust between organizations can help improve supply chain performance in several respects: first share information is often implemented to help improve the performance (information sharing). Next determined commitment by the trust. In addition to improving collaboration, confidence (trust) is very important in building commitment. Companies that believe in the integrity of its partners will have a higher intention to continue working with these partners (Cambra and Polo, 2011; Wu et al. 2014). This study confirms and reinforces the findings once Munizu and Hamid (2016) that brings confidence to the formation of a strong commitment to all members of the supply chain.

Conclusion

Based on the analysis of test results showed that the commitment is able to mediate between the independent variable (trust) on the dependent variable (performance of the supply chain) that is to say the higher trust among members of the supply chain can be pushed to give better performance of the supply chain. the higher confidence can also be pushed on the stronger commitment of the members of the supply chain. Indirect effects of independent variables (trust) through a greater commitment than its direct effects in increasing the dependent variable (Supply Chain Performance).
Thank-You Note

Gratitude and appreciation profuse writer to convey to the Central Statistics Agency (BPS), Disperindagkop and Banten Provincial Agriculture Office, as well as to the leadership ranks of the faculty of Economics and Business (FEB) Universitas Sultan Ageng Tirtayasa, who has given permission, data, information, and funds in this study.

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